

Research Article

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The Use of Online Games for English Vocabulary Learning Media in Teacher Working Group: Some Advantages and Barriers

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Abstract: This study aims to measure the extent of the Kahoot! Effectiveness in improving the professional competence of English teachers in terms of memorizing vocabulary. The study was conducted in the teacher working group (KKG or MGMP) by taking 30 English teachers at random. The system that will be carried out is by control and experiment class then compares the scores both of them. In addition, an in-depth exploration (mix method) was conducted by interviewing the teacher whether the Kahoot! may be used in the next forum. The results of the study showed that control group only could memorize 5,33 in average however experiment class got 8,6 in average so it means that there is 33% distinction between both of them. Then, this result is strengthened by calculation on Wilcoxon Signed Rank that showed that the sig value 0,002 is greater than 0.05 so it also means like aforementioned. Kahoot app! found it very helpful in memorizing vocabulary because of its flexibility that it can be accessed from anywhere (e-class) but there are still many senior teachers, who are technology savvy, cannot access kahoot! especially if it will be implemented in the KKG or MGMP of English teachers.

Keywords: Online games, Kahoot, English Teacher Competence, Vocabulary.

Introduction

These days, there are many experts exhibiting that vocabulary is the most important thing is English teaching and learning. Hammer, as cited in Tuan (2012), makes an analogy that vocabulary plays a role as meat that covers bones (Tuan, 2012). Vocabulary is so important that it is believed to be determinant factor of someone's English skill development. Someone will experience amazing enhancement if they have many vocabularies in comparison with only focusing the grammar (Masduqi & Fatimah, 2021). People see that memorizing vocabularies is very easy but on the other hand it is also very easy to forget.

The problem often occurs when non-native English speakers find the words that they are unfamiliar with. They probably find the words they don't know at all or are used in a way that it is new for them or unclear. They even probably find complicated concept that is hard to be

explained with the words in their L1. Finding the appropriate words to correspond the meaning aimed is very hard when you have limited vocabularies. Therefore, mastering vocabularies is a priority when you learn L2 (Bavi, 2018).

Actually, there are many media that can help us to improve our vocabularies but the trend running nowadays is with using games. Using games probably gives positive effect for students cognitively, emotionally, motivationally, or even socially (Mohd Muhridza et al., 2018). Games can be media for teachers to make the class atmosphere fun in social context in which focus, entertainment and reflection are balanced (Bavi, 2018). Learning vocabularies is not only done with focus, reading pile of papers and consequently boring, but it can also be combined with kinds of interesting games (Bani, 2015).

Teachers are free in determining which game is used. There are many games that can be chosen online or not. The development of

technology that becomes massive gives advantages to teachers especially in integrating teaching and learning with games. It feels like people nowadays are not unfamiliar with technology, most people even have smartphones (Putera et al., 2022) This advantage has to be utilized as maximum as possible in which there is no longer ancient and boring teaching and learning for students. Unlimited resources offered by technology become the best way in teaching and learning L2 (Ahmadi, 2018) and give new breath for learning from outside classroom (Ta'amneh, 2017).

Besides teaching students, teachers also need to learn how to improve their competencies. Teachers are both subject and object in education. They are called subjects because they give their knowledge to the students, in the other hand, they are also objects that continuously learn in order to give recent knowledge to the students. One of the forums for the teachers in order to be able to continuously learn is called *kelompok kerja guru or Musyawarah Guru Mata Pelajaran* (KKG or MGMP). KKG or MGMP is given as facilitation to the teachers to discuss to each other and solve their problems together (Al Rasyid, 2015). KKG activity is held regularly in a place in a way it takes turns (some have centre place), and most members of this forum are akin teachers. For example, KKG or MGMP for Math teachers will be participated by only Math teachers, KKG or MGMP for English teachers will be participated by only English teachers, etc. All activities held in KKG or MGMP will be directed to teachers' quality improvement in professionalism or competencies (Sukirman, 2020)

Rosebbusch, as cited in Zulhermindra (2016), mentioned that there are 4 things that become basic problems for foreign language teachers, namely; 1) inadequate language competence (not mastering materials), 2) inadequate knowledge in teaching methods and strategies, 3) old materials, and 4) unknowing right evaluation technique in evaluating language

teaching and learning (Zulhermindra, 2016). Susmiatun et al (2021), in her study, found that English teachers feel bored in participating KKG or MGMP because of its boring and monotone activity (Susmiatun et al., 2021). In this case, it is important for the researcher to think how to make KKG or MGMP forum for English teachers become interesting without forgetting its essence namely improving teachers' professional competence. One of the alternatives that can be used is implementing games considering that the game can accommodate both of them.

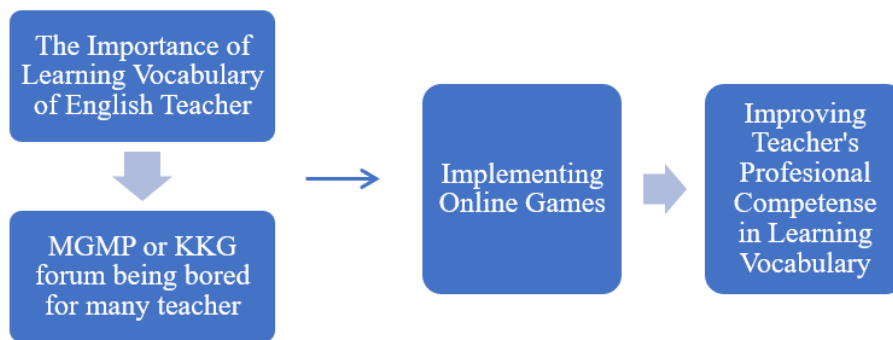
In this study, *Kahoot!* Is chosen as the game used in English teaching. There are no fee in using *kahoot!*. Teachers, instructors, students, and everybody can access this application free and use it at all courses and in various teaching and learning levels. 3 things that become focus in *kahoot!* application in handling language teaching and learning are involvement, focus, motivation and fun (Rochimah & Muslim, 2021). *Kahoot!* changes the class atmosphere that before is serious, stressful, and passive into fun and game basis (Marbun & Harpain, 2016).

Actually, using *kahoot!* to improve vocabularies is not a new thing. In the past, many people assume that online game is not suitable for vocabularies teaching and learning especially *kahoot!* that is more identic with grammar teaching and learning, but nothing is impossible. Online game like *kahoot!* makes students more enthusiastic to participate the class. The process of learning vocabularies with using online game become a fun process (Kayaalti, 2018), more meaningful (Derakhshan & Khatir, 2015) improving teamwork skill (Tuan, 2012) and there are more chances given to the students to apply new vocabularies gained (Bavi, 2018). Empirical research is done to find out whether *kahoot!* can accommodate vocabularies teaching and learning in equal with other teaching and learning, and surprisingly *kahoot!* can improve students' competence is mastering English vocabularies (Flores Quiroz et al., 2021; Mawarni et al., 2021)

There are many experts that gaze online game contribution (including *kahoot!*) in English vocabularies teaching and learning towards the students but not towards the teachers. It is very unfortunate that there are only a few are aware that online game (including *kahoot!*) also has the same potential in English vocabularies teaching and learning towards the teachers when they are in KKG or MGMP forum. Of course, teachers have to be more enthusiastic in improving their vocabularies since day-by-day materials

continuously change and the demands of the curriculum increase. That aim can be realized in KKG or MGMP forum in which English teachers assemble routinely. Therefore, this study is driven by the hypothesis “is there positive effect between *kahoot!* implementation and English teachers’ vocabularies memory ability in KKG or MGMP forum?”. In order to understand the research framework, it can be seen on the diagram below:

Figure I. Frame of Mind



Literature Review

Literature review is a comprehensive investigation of the available theoretical background including from books and scholarly articles related to your research areas and theories. In this section, you should provide a description, summary, and critical evaluation of your works concerning the research problem being investigated. Literature reviews are aimed at providing an overview of sources you have explored while researching a particular topic to notify your readers how your research fits within a larger field of study.

Researchers say that vocabulary must be encountered at least seven times before it is truly learnt. They also advise that words are most easily learnt when students manipulate them and make them their own in some memorable way. For both these reasons, games have a particularly important role to play in vocabulary learning: they

provide an enjoyable way of revisiting words and they give students the opportunity to use them in a memorable context (O’Dell & Head, 2003)

A Brief History of Technology and Language Learning

Virtually every type of language teaching has had its own technologies to support it. Language teachers who followed the grammar-translation method (in which the teacher explained grammatical rules and students performed translations) relied on one of the most ubiquitous technologies in U.S. education, the blackboard a perfect vehicle for the one-way transmission of information that method implied. The blackboard was later supplemented by the overhead projector, another excellent medium for the teacher-dominated classroom, as well as by early computer software programs that provided what were known as "drilland-practice" (or, more

pejoratively, "drill-and-kill") grammatical exercises.

In contrast, the audiotape was the perfect medium for the audiolingual method (which emphasized learning through oral repetition). University language classes in the 1970s and 1980s usually included obligatory sessions at the audio lab where students would perform the dreaded repetition drills.

By the late 1970s, the audiolingual method fell into disrepute, at least in part due to poor results achieved from expensive language laboratories. Whether in the lab or in the classroom, repetitive drills that focused only on language form and ignored communicative meaning achieved poor results.

The 1980s and 1990s have seen a shift toward communicative language teaching, which emphasizes student engagement in authentic, meaningful interaction. Within this general communicative trend, we can note two distinct perspectives, both of which have their implications in terms of how to best integrate technology into the classroom. These can roughly be divided into cognitive approaches and sociocognitive approaches (Warschauer & Meskill, 2000).

Cognitive Approaches

Cognitive approaches to communicative language teaching are based on the view that learning a language is an individual psycholinguistic act. From this perspective, language learners construct a mental model of a language system, based not on habit formation but rather on innate cognitive knowledge in interaction with comprehensible, meaningful language (see, e.g., Chomsky, 1986). Errors are seen in a new light not as bad habits to be avoided but as natural by-products of a creative learning process that involves rule simplification, generalization, transfer, and other cognitive strategies (see (Chaudron, 1986) Learners' output (i.e., what they say or write) is beneficial

principally to the extent that it helps make input (i.e., what they hear or read) more comprehensible or salient so that the learners can construct their own cognitive models of the language.

Technologies that support a cognitive approach to language learning are those that allow learners maximum opportunity to be engaged with language in meaningful contexts and to construct their own understanding of the system. Examples of these types of technologies include text-reconstruction software, concordancing software, and multimedia simulation software.

Text reconstruction software (e.g., *NewReader* from Hyperbole or *TextTanagers* from Research Design Associates) allows teachers to provide students various texts in which letters or words are either missing or scrambled. Students work alone or in groups to complete or rearrange the texts, thus supporting a process of mental construction of the linguistic system. Though such activity could in theory be carried out with paper and pencil, the computer facilitates the process for both teachers and students. Teachers can quickly and easily create rearranged texts or cloze exercises (i.e., texts with deleted words) from any original word-processed passage. Students can use hints provided by the computer to assist their learning process.

Concordancing software (e.g., *Monoconc* from Athelstan) allows teachers or students to search through small or large texts to look for instances of the actual use of particular words. Concordancers are thus supplements to dictionaries in that they help illustrate the use of a word, rather than just its definition. Concordancers are also useful for investigating collocational meanings (e.g., "large box" vs. "big box," or "think about" vs. "think over") or grammatical features (e.g., "was going" vs. "used to go").

Multimedia simulation software allows learners to enter into computerized microworlds with exposure to language and culture in a meaningful audio visual context. The best of these

programs allows learners a good deal of control and interactivity so they can better manipulate their linguistic input. One excellent example of this is the multimedia videodisc program *A la rencontre de Philippe* developed by the Athena Language Learning Project at the MIT Laboratory for Advanced Technology in the Humanities. *Philippe* is a game for intermediate and advanced French learners that incorporates full motion video, sound, graphics, and text, allowing learners to "walk around" and explore simulated environments by following street signs or floor plans. To help language learners understand the sometimes-challenging French, the program provides optional comprehension tools, such as a glossary and transcriptions of audio segments, as well as a video album that includes samples of language functions. Students can also create their own custom video albums, which they store on their own computer diskettes. Whereas text-reconstruction programs, concordancers, and multimedia simulations are often used in pairs or groups, the software programs by themselves do not require human-to-human interaction (Warschauer & Meskill, 2000).

Sociocognitive Approaches

Sociocognitive approaches, in contrast to cognitive approaches, emphasize the social aspect of language acquisition; learning a language is viewed as a process of apprenticeship or socialization into particular discourse communities (Schieffelin & Ochs, 1986). Based on this perspective, students need to be given maximum opportunity for authentic social interaction, not only to provide comprehensible input but also to give students practice in the kinds of communication in which they will later engage outside the classroom. This can be achieved through student collaboration on authentic tasks and projects (see, e.g., Breen, 1987; Candlin, C. N., & Murphy, n.d.; Long, M. H., & Crookes, 1992) while simultaneously learning both content

and language (see, e.g., (Flowerdew, 1993; Meskill, 1999; Snow, 1991).

The Internet is a powerful tool for assisting a sociocognitive approach to language teaching, and it is in fact this fit of the Internet with a sociocognitive approach that largely accounts for the new-found enthusiasm for using computers in the language classroom. The Internet is a vast interactive medium that can be used in a myriad of ways, one of them is illustrated next (Warschauer & Meskill, 2000).

Accessing Resources and Publishing on the World Wide Web

The World Wide Web offers a vast array of resources from throughout the world. Although the majority of web pages are in English, increasing numbers exist in other commonly taught (and some uncommonly taught) languages, including Spanish, French, German, Japanese, and Chinese. Accessing and using these pages in language education supports a sociocognitive approach by helping immerse students in discourses that extend well beyond the classroom, their immediate communities, and their language textbook. This is particularly critical for foreign language students who otherwise experience the target culture only through their instructor and select curricula. Students can use web pages as authentic materials for conducting research on culture and current events or for gathering material for class projects and simulations. Students can also publish their own work on the WWW, thus enabling writing for a real audience. In some cases, teachers have created in-class online newsletters or magazines that their classes have produced. In other cases, teachers help their students contribute to international web magazines, which include articles from many students around the world. And in other situations, students work together in collaborative teams internationally and then publish the results of their projects on the WWW (Warschauer & Meskill, 2000).

The advantages of using new technology in language classroom

The advantages of using new technologies in the language classroom can only be interpreted in light of the changing goals of language education and the changing conditions in post-industrial society. Language educators now seek not only (or even principally) to teach students the rules of grammar, but rather to help them gain apprenticeship into new discourse communities. This is accomplished through creating opportunities for authentic and meaningful interaction both within and outside the classroom, and providing students the tools for their own social, cultural, and linguistic exploration. The computer is a powerful tool for this process as it allows students access to online environments of international communication. By using new technologies in the language classroom, we can better prepare students for the kinds of international cross-cultural interactions that are increasingly required for success in academic, vocational, or personal life (Warschauer & Meskill, 2000)

The disadvantages of using new technology in language classroom

What then are the potential disadvantages of using new technologies for language teaching? We focus on three aspects: investment of money, investment of time, and uncertainty of results.

Investment of Money

Uses of new technologies in the long run tend to result in higher productivity, at least in the economic sphere (see discussion in (Castells, 2009). Productivity in education is certainly harder to measure, but it is not unreasonable to assume that over time new technologies will help create more effective education (bearing in mind the earlier point that the goals and nature of education are changing in the information age, thus making direct comparisons difficult). In any case, whatever results may be achieved over the

long term, there are definite start-up expenses related to implementing new technologies in education. For college language learning programs, such expenses usually entail hardware, software, staffing, and training for at least one networked computer laboratory where students can drop in and use assigned software and one or more networked computer laboratories where teachers can bring whole classes on an occasional or regular basis. Intelligent use of new technologies usually involves allocations of about one third for hardware, one third for software, and one third for staff support and training. It is often the case in poorly funded language programs that the hardware itself comes in via a one-time grant (or through hand-me-downs from science departments), with little funding left over for staff training, maintenance, or software (Warschauer & Meskill, 2000)

Investment of Time

Just as technologies may save money over the long term, they also may save time. But, potential long-term benefits to an institution are little consolation to an individual teacher who is spending enormous amounts of time learning constantly changing software programs and trying to figure out the best way to use them in the classroom.

Increased demands on time are due in part to the difficulty of using new online multimedia technologies in their still-early stages (comparable, perhaps, to the early days of tuning a radio or starting a car when those machines were first invented). However, time demands are caused not only from learning how to master the technology, but also from the changing dynamics of the online classroom. As indicated earlier, new technologies create excellent opportunities for long-distance exchanges, but such exchanges can be extremely complicated in terms of coordinating goals, schedules, and plans especially when involving teachers from different countries or educational systems. Also, another

benefit of electronic communication that it provides opportunities for student-initiated communication can also create a time burden, as a teacher's e-mail box becomes flooded with messages from previously reticent students (Warschauer & Meskill, 2000).

Uncertainty of results

As indicated earlier, there is no single predictable outcome for using computers, any more than there is for using books or libraries. Thus, teachers and institutions are expected to invest large amounts of time and money without any guarantee of achieving particular results.

Research in both the business sphere (e.g., (Kling, R., & Zmuidzinas, 1994; Zuboff, 1988) and in education (e.g., (Sandholtz, 1997; Warschauer, 1998) indicates that simply bringing new machines into an institution does little to bring about the kinds of social transformation needed to make effective use of those machines. Whether in workplaces or in schools, the natural tendency is to use new technologies in ways consistent with previous methods of organization and practice. This can often result in inefficient or even demotivating uses of computers, in which workers or students see their interpersonal connections and personal power reduced (e.g., through highly automated uses of technology such as computer-based drills) rather than increased.

As discussed earlier, new online technologies match well with newer approaches to language teaching, in which students are viewed not as empty vessels to be filled but rather as active agents collaborating in their own learning process. Yet even in situations where instructors already adhere to such a perspective, teaching in an online environment can challenge teachers' epistemologies and practices. The online world presents important new challenges, and learning how to integrate new online technologies into the classroom will likely be as long and complicated a process as doing the same has been in the

business world but made even more difficult in education by lack of dependable funding for equipment and support.

Having said all of this, we still believe that integrating new technologies should be an important goal of language programs, but a goal of which the cost and complexity should not be underestimated. The most effective technology-enhanced language programs take many years to develop and are based on much trial and error, administrative support for teacher experimentation and collaboration, and sustained, careful attention to the forms of social organization and pedagogy that accompany the use of new machines (Warschauer & Meskill, 2000).

Method

This research is quantitative research especially called Quasi-Experimental Study. Quasi-Experimental divided the research subjects into 2 groups, namely the Experimental Group and the Control Group. Each group contains 15 teachers who are members of the MGMP English teachers in the City of Banjarmasin and are given material in the form of 10 vocabularies of English words C1. The control group was instructed to memorize the word using the traditional method (paper-based) and given 20 minutes, while the experimental class used a combination of traditional methods and the *kahoot!* with the same time allocation. After the two classes received treatment, the next step was to test the results of measuring how many teachers managed to memorize vocabulary per item. The scores of the two groups were compared with each other. When it was showed that the control class's score was higher than the experiment class, it could be concluded that online games were not effective to be implemented in the teachers' forum, but when the experiment class's scores were higher per item, it could be concluded that the use of online games in the teachers' forum was effective and

had possibility to be implemented further in the next forums. Then, the scores were calculated with Wilcoxon Signed Rank to investigate based on its sig value. When the value of sig was upper than 0,05 so it meant hypothes was ignored, but in case, the value of sig was under than 0,05, it meant hypothesis were accepted.

Afterward, the researcher selected several teachers to be interviewed. The interview questions focused on their opinion on the implementation of *kahoot!* in the future KKG or MGMP forums, such as the disadvantages and advantages in the future. The data obtained from the interviews were only used as secondary data to complete and explore the data from the results of the *kahoot!* treatment test. The following are the vocabulary words that are used in this study:

Tabel I. Vocabularies Giving to Teacher

VOCABULARIES	MEANING	TEACHER CAN MEMORIZE
Chatter	Obrolan	20
Devastated	Dihancurkan	16
Embarrassment	Rasa Malu	21
Evidently	Terbukti	20
Fundamental	Mendasar	26
Goods	Barang-barang	19
Initiative	Inisiasi	30
Landline	Telepon Rumah	21
Landslide	Tanah Longsor	19
Mock	Mengejek	20
TOTAL MAXIMUM		150

Result and Discussion

The following is the data gained from the assessment result from control class and experiment class:

Figure II. Raw Data of Comparison from Control Class and Experiment Class

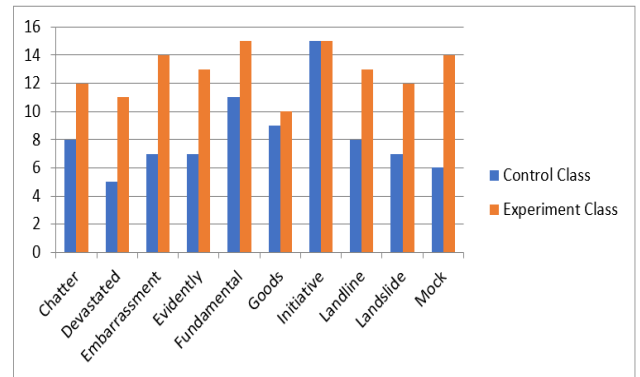


Figure II showed that there is score distinction between class control and class experiment. In class control, the most memorized word by teachers is “Initiative” in both of classes, whereas the hardest word memorized by teachers are “Devastated” in class control and “goods” in class experiment. The reason why the word “Devastated” and “Good” are mentioned as the hardest word to memorize by teacher is because those vocabularies have the least amount. They who can memorize “Devastated” in control class is only 5 teachers and someone who can memorize “Goods” in experiment class is only 10 teachers. Based on raw data above, it is seen that the online game, especially *kahoot!*, has a significant influence than just using traditional model on teacher’s memorization. To display the whole data, let’s take a look the data based on every single person below:

Tabel II. Frequency Distribution

Name (C-Class)	Score	Name (Exp-Class)	Score
AA	6	AB	10
BA	7	BB	10
CA	4	CB	9
DA	10	DB	8
EA	3	EB	9

FA	8	FB	10
GA	9	GB	9
HA	5	HB	7
IA	6	IB	8
JA	3	JB	6
KA	4	KB	10
LA	6	LB	8
MA	3	MB	8
NA	7	NB	10
OA	2	OB	7
Total	83	Total	129
Average	5,533333	Average	8,6
Min	2	Min	6
Max	10	Max	10
Low (less 5)	6	Low (less 5)	0
Mid (5 to 8)	7	Mid (5 to 8)	7
High (9 & 10)	2	High (9 & 10)	8
Completeness (At least 7)	33,3%	Completeness (At least 7)	93,3%

According to tabel II, there is a significant difference between class control and class experiment. Control class has 83/150 point whereas experiment class has 129/150 point with average 5,54 in CC and average 8,6 in EC. There are 6 teachers which are classified as low, 7 teachers are classified as middle, and only 2 teachers are classified as high; only 33,3% from

all of them have been classified complete. Nevertheless, in experiment class, 7 teachers are classified as middle, 8 teachers are classified as high and no one is classified as low. The data showed that 93,3% teachers in experiment class finished their memorization well with the help of online games, especially kahoot!

Tabel III. Interpretation Data

VOCABULARIES	C-CLASS	EXP-CLASS	RANGE	INTER
Chatter	8	12	4	Improved
Devastated	5	11	6	Improved
Embarrassment	7	14	7	Improved
Evidently	7	13	6	Improved
Fundamental	11	15	4	Improved
Goods	9	10	1	Improved
Initiative	15	15	0	Stable
Landline	8	13	5	Improved
Landslide	7	12	5	Improved
Mock	6	14	8	Improved
TOTAL	83	129	46	

It was known that the maximum score if all teacher could memorize all vocabularies is 150. We can notice from tabel II that memorizing vocabulary which is helped by *kahoot!* has a 30,67% of teacher’s memorizing skill distinction. In control class, the score is 83 or around 55,33% from total score. In experiment class which memorizing process is helped by *kahoot!*, the score is 129 or around 86% from total score. Based on tabel II, teachers in experiment class can memorize more than teachers in control class. All vocabularies have quite significant range except “Initiative”. That vocabulary has no range because all teachers completely memorized it.

For the next step, data will be analysed with Wicoxon Signed Rank Test. The primary function of this test is for getting the next value which is used as a reference to verify the hypothesis. This test will totally be done in SPSS app version 22. The formula of Wicoxon Signed Rank Test is:

$$Z = \frac{T - [\frac{1}{4N(N+1)}]}{\sqrt{\frac{1}{24N(N+1)(2N+1)}}$$

Note:

N = The number of data which change after getting treatment

T = The number of rankings from the value of negative and positive differences

The result of Wilcoxon Signed Rank Test with SPSS version 22 is below:

Tabel IV. Descriptive Analysis

		Ranks		
		N	Mean Rank	Sum of Ranks
ExperimentClass - ControlClass	Negative Ranks	1 ^a	3.00	3.00
	Positive Ranks	13 ^b	7.85	102.00
	Ties	1 ^c		
	Total	15		

- a. ExperimentClass < ControlClass
- b. ExperimentClass > ControlClass
- c. ExperimentClass = ControlClass

According to table IV, the data have far gap between control class and experiment class.

Negative rank means the number of experiment class fewer than control class. Positive class means the number of experiment class higher than control class, but when it comes equal is called ties. That table showed that N have 1 negative rank, 13 positive rank, and 1 tie. Negative rank is identified as the fourth person. The fourth person in control class can memorize 10 vocabularies but in experiment class can memorize just 8 vocabularies. It also has a tie. It is identified as the seventh person. Both of them can memorize 9 vocabularies in each of their group. And the others are dominated by experiment class with 13 people higher than control class with their mean rank 7,85 and sum of rank 102. For the next step, let’s take a look the value of alpha (α) in comparing control class and experiment class:

Tabel V. Wilcoxon Signed Rank Test

		Test Statistics ^a
		ExperimentClass - ControlClass
Z		-3.130 ^b
Asymp. Sig. (2-tailed)		.002

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.

Wicoxon model has its own rule to examine the hypothesis. 0,05 is used as a benchmark for the interpretation to be accepted or ignored hypothesis. If the value of sig is upper than 0,05 so it means hypothesis ignored, but in case, the value of sig is under than 0,05, it means hypothesis will be accepted. Based on the result of the calculation of Wilcoxon Signed Rank test above, the Z value gained is -3,130 with p value (Asymp sig 2 tailed) of 0,002 which is less than the critical research limit 0,05 so the hypothesis decision is to accept H1 or which means there is a significant distinction between control class and experiment class.

MPGP or KKG is an essential forum which is joined by teachers to increase their

professionalism (Nurlaeli & Saryono, 2018). Generally, the existence of KKG or MGMP is very helpful for teachers in solving their problem either related to students or related to learning process. Quality Assurance and Quality Control are played together here. Teacher having problem can find the best solution by discussing and sharing with other teachers. Meanwhile, the others can get same knowledge despite the problem is not theirs. They get irreplaceable opportunity every month to meet with teachers who have same background with them and also sharing knowledge each other. According to Al-Kurdi et al., (2018), there are 3 factors which will determine the success of educational institutions namely resources among academic, expertise, and knowledge sharing. Because of the importance of MGMP or KKG, we have to make sure that it is still effective and on track so that there is no redundancy in the program especially in budget.

The test proved that online games especially *kahoot!* can afford a distinction in learning vocabulary in MGMP or KKG's English teachers. This is new invention because actually *kahoot!* had been familiar in learning languages so many teachers doubtless implemented it as model for their student (Oktaria et al., 2021). The reason why *kahoot!* is suitable in learning languages is because of its features. Furthermore, if we explored more about *kahoot!* in learning vocabulary, we could find that it is excessively valuable thing for other forums such as MGMP and KKG. While they are recognized as a bit rigid forum but might become comfy forum if they are open to implement new media based on technology like *kahoot!*.

This research gives new evidence that *kahoot!* cannot implement not only in student class but also in teacher's classes. Nevertheless, online games and its impact to learning vocabulary have been researched by many experts which conclude that it affects on student ability in memorizing vocabularies (Kayaalti, 2018; Tuan, 2012). It brings out happy atmosphere among the

students. Online Games may be extremely powerful vehicle to stimulate student memorizing something. Student can reach all vocabularies effectively and fast by actively doing and contributing during the lesson (Bavi, 2018) And all of these look obviously during the research.

When the research was carried out, control class and experiment class exhibited different responses. The face of teacher in experiment class is shiny and confident. There is no fright, clumsy, pessimistic, or denial displayed. Happiness created by *kahoot!* encourage teacher to expend their vitality more. They still enjoy joining all process of research although their efforts are forced out. Many teachers said that memorizing process becomes imperceptible and it is like having unseen power which is through their soul. *Kahoot!* allows users to receive and interact each other to avoid boredom and annoying learning (Flores Quiroz et al., 2021). This is one of benefit which *kahoot!* has that happiness and supportive environment is key of learning vocabulary. Human brain will react and produce dopamine neurons when faced something favourable. This hormone is one of factors that play a role in motivation and mood (Ikemoto et al., 2015). Then at the end, numerous teachers willingly attend to MGMP or KKG and make those forums fascinating.

Beside of that, others showed the opposite of experiment class. Exhausted, unrelated, and stressed are clearly observed in their face. One of teachers in control class said that C1 vocabularies used is unfamiliar for her. C1 vocabulary was deliberately chosen considering that it is suitable for the level of an English teacher. In order to teach student, teacher needs more knowledge at least 1 level higher than his students. The future teacher must have comprehensive knowledge not only learning of material but also educational foundation such as philosophy, psychological, sociology, and etc. (Dudung, 2018). To become a teacher is certainly quite hard but our government give many chances to them to increase their

professional competence, one of them is KKG or MGMP forum (Sukirman, 2020).

Kahoot! may have good future to be implemented in the future of KKG or MGMP forum, it must consider many things. It probably cannot be used by an old teacher. At the initial research, it was hard to get teacher who wanted to contribute. Most of them said they were not confident implementing game online. It was quite natural because game online had never been used in those forums before. So, teacher contributing in this research is just around 26 – 40 years old and the others (senior teacher) were unwilling. While they knew about the benefit of implementation technology including game online in learning process is necessary but they still exhibited less positive attitude toward technology and lacked of Technological Pedagogical Content Knowledge (TPCK) (Tsai, 2015). Moreover, (Aflalo, 2014) said that education is about belief thus, teacher's belief and their perception probably affect readiness to implement game online in all learning and teaching method. In the future, implementing all thing based on technology like game online will be important. Technology has already inevitable affects to all aspects in our live. Teacher must be getting used to it as far as possible and tried to integrate it rather in school or in teachers' forum like KKG and MGMP.

Integrating technology like game online is not about teaching teacher how to operate but also to help them mastering technology as a tool for learning process (Kayalar, 2016). Person who will lead the MGMP or KKG forum are required to have more knowledge about technology. The reason why the leader of MGMP or KKG forum must have knowledge more than his members is because it will be inherited for continuity of KKG or MPGP forum itself. According to Hampel and Stickle in (Compton, 2009), they said that skills needed to teach language through technology are disparate than teaching in traditional ways. The qualified leader surely predisposes because he plays in selecting, operating, understanding and

also evaluating educational game in forum (Papadakis, 2018). In addition, (Sánchez-Mena & Martí-Parreño, 2017) found 3 other barriers which will perhaps be faced in gamification. Those are lacked of resources, subject fit, student's apathy, and classroom dynamic. It will be good investment if KKG or MGMP cooperate with technology and do gamification in every activity. Nevertheless, it should keep its signification and does not get caught up in temporary pleasures. This is being challenges for us to find prepare person who can lead that forum properly and to make teachers' forum along with the times.

Conclusion

After testing the hypothesis, the result shows that there is a distinction between control class and experiment class so it means that online games especially *kahoot!* is effective to increase vocabulary memorization skill for teachers in MGMP or KKG forums. The distinction is not only seen in final result ($0,002 < 0,05$) but also in each item of vocabularies that gained by teachers. Whereas game online has an advantageous side like bringing happiness, joyful atmosphere and making teachers feel comfortable but it still has barriers like lacking ability to operate technology, difficulty finding qualified tutor leading the forum, lacking of resources, subject fit, student's apathy, and classroom dynamic.

References

- Aflalo, E. (2014). The Invisible Barrier to Integrating Computer Technology in Education. *Journal of Education and Learning*, 3(2).
<https://doi.org/10.5539/jel.v3n2p120>
- Ahmadi, M. R. (2018). The Use of Technology in English Language Learning: A Literature Review. *International Journal of Research in English Education*, 3(2), 115–125.
<https://doi.org/10.29252/ijree.3.2.115>
- Al-Kurdi, O., El-Haddadeh, R., & Eldabi, T.

- (2018). Knowledge sharing in higher education institutions: a systematic review. *Journal of Enterprise Information Management*, 31(2), 226–246. <https://doi.org/10.1108/JEIM-09-2017-0129>
- Al Rasyid, H. (2015). Fungsi Kelompok Kerja Guru Bagi Pengembangan Keprofesionalan Guru Sekolah Dasar. *Sekolah Dasar*, 24(2), 143–150.
- Bani, A. Al. (2015). *Implementasi Quality Assurance Dalam Pengembangan Mutu Sumber Daya Manusia di Fakultas Agama Islam Universitas Muhammadiyah Malang*, Tesis [UIN Maulana Malik Ibrahim Malang]. <http://etheses.uin-malang.ac.id/3226/>
- Bavi, F. (2018). The Effect of Using Fun Activities on Learning Vocabulary at the Elementary Level. *Journal of Language Teaching and Research*, 9(3), 629–639. <https://doi.org/http://dx.doi.org/10.17507/jltr.0903.24>
- Breen, M. (1987). Learner contributions to task design. In *Language Learning Tasks*. <https://doi.org/https://doi.org/10.1075/tblt.1.18lea>
- Candlin, C. N., & Murphy, D. (n.d.). *Language learning tasks*. Prentice-Hall international.
- Castells, M. (2009). The Information Age: Economy, Society and Culture. In *The rise of the network society* (Vol. 1, Issue 96). <https://doi.org/10.1002/9781444319514>
- Chaudron, C. (1986). *The Role of Error Correction in Second Language Teaching*.
- Chomsky, N. (1986). *Knowledge of Language: Its Nature, Origin, and Use*. Praeger. <https://books.google.co.id/books?id=b0VZPtZDL8kC>
- Compton, L. K. L. (2009). Preparing language teachers to teach language online: A look at skills, roles, and responsibilities. *Computer Assisted Language Learning*, 22(1), 73–99. <https://doi.org/10.1080/09588220802613831>
- Derakhshan, A., & Khatir, E. D. (2015). The Effects of Using Games on English Vocabulary Learning. *Journal of Applied Linguistics and Language Research*, 2(3), 39–47.
- Dudung, A. (2018). Kompetensi Profesional Guru. *JKKP (Jurnal Kesejahteraan Keluarga Dan Pendidikan)*, 5(1), 9–19. <https://doi.org/10.21009/jkkp.051.02>
- Flores Quiroz, M., Gutiérrez, R., Rocha, F., Valenzuela, P., & Vilches, C. (2021). IMPROVING ENGLISH VOCABULARY LEARNING THROUGH KAHOOT!: A QUASI-EXPERIMENTAL HIGH SCHOOL EXPERIENCE. *Teaching English with Technology*, 21(2), 3–13. <http://www.tewtjournal.org>
- Flowerdew, J. (1993). Content-based language instruction in a tertiary setting. *English for Specific Purposes*, 2(12), 121–138. [https://doi.org/https://doi.org/10.1016/0889-4906\(93\)90014-F](https://doi.org/https://doi.org/10.1016/0889-4906(93)90014-F)
- Ikemoto, S., Yang, C., & Tan, A. (2015). Basal ganglia circuit loops, dopamine and motivation: A review and enquiry. *Behavioural Brain Research*, 290, 17–31. <https://doi.org/10.1016/j.bbr.2015.04.018>
- Kayaalti, M. (2018). A Literature Review on the Impact of Online Games in Learning Vocabulary. *International Journal of Scientific and Research Publications*, 8(2), 312. www.ijsrp.org
- Kayalar, F. (2016). Cross-cultural comparison of teachers' views upon integration and use of technology in classroom. *Turkish Online Journal of Educational Technology*, 15(2), 11–19.
- Kling, R., & Zmuidzinas, M. (1994). Technology, ideology and social transformation: The case of computerization and work organization. *International Review of Sociology*, 5(23), 28–56.
- Long, M. H., & Crookes, G. (1992). *Three*

- Approaches to Task-Based Syllabus Design*. (26th ed.). TESOL Quarterly.
- Marbun, T. M., & Harpain. (2016). The Application of Kahoot! to Improve Classroom Dynamics and Learning Process in English Process in English Structure Class. *Jurnal Linguistika*, 7(2), 15–21.
- Masduqi, H., & Fatimah, F. (2021). LEARNING VOCABULARY THROUGH GAMES: A CRITICAL REVIEW. *Education of English as Foreign Language*, 4(2), 66–70. <https://doi.org/10.21776/ub.educafl.2021.04.02.02>
- Mawarni, A. M., Suwandi, & Susanto, D. A. (2021). The Effectiveness of Fun Game Kahoot as A Media in the Teaching of Vocabulary. *JELTIS: Journal of English Language Teaching, Linguistics and Literature Studies*, 1(2), 133–146.
- Meskill, C. (1999). *Computers as Tools for Sociocollaborative Language Learning*.
- Mohd Muhridza, N. H., Mohd Rosli, N. A., Sirri, A., & Abdul Samad, A. (2018). Using Game-based Technology, KAHOOT! for Classroom Engagement. *LSP International Journal*, 5(2), 37–48. <https://doi.org/10.11113/lspi.v5n2.77>
- Nurlaeli, Y., & Saryono, O. (2018). Efektivitas Musyawarah Guru Mata Pelajaran (MGMP) Dalam Meningkatkan Kinerja Mengajar Guru Bahasa Inggris. *Indonesian Journal of Education Management and Administration Review*, 2(2), 308–317.
- O'Dell, F., & Head, F. (2003). *Games for Vocabulary Practice: Interactive Vocabulary Activities for All Levels*. Cambridge University. https://books.google.co.id/books?id=0PrOn_gEACAAJ
- Oktaria, A. A., Rohmayadevi, L., & Murwantono, D. (2021). ONLINE GAME QUIZ “KAHOOT” IN TEACHING ENGLISH FOR STUDENTS OF SMP MUHAMMADIYAH YOGYAKARTA. *PROJECT (Professional Journal of English Education)*, 4(2), 290. <https://doi.org/10.22460/project.v4i2.p290-296>
- Papadakis, S. (2018). The use of computer games in classroom environment. *International Journal of Teaching and Case Studies*, 9(1), 1–25. <https://doi.org/10.1504/ijtcs.2018.10011113>
- Putera, A. R., Aisyah, L., Misnasanti, Mahfuzah, A., & Shaddiq, S. (2022). Manajemen Pembiayaan Pendidikan Lembaga Kursus Bahasa Inggris: Antara Profit dan Pemenuhan Kebutuhan Siswa. *Jurnal Bahana Manajemen Pendidikan*, 11(1), 48–54. <https://doi.org/https://doi.org/10.24036/jbmp.v11i1.116590>
- Rochimah, H., & Muslim, S. (2021). Students' Perceptions in Using the Kahoot! Game on Reading Comprehension Learning. *AL-ISHLAH: Jurnal Pendidikan*, 13(3), 2213–2222. <https://doi.org/10.35445/alishlah.v13i3.1115>
- Sánchez-Mena, A., & Martí-Parreño, J. (2017). Drivers and barriers to adopting gamification: Teachers' perspectives. *Electronic Journal of E-Learning*, 15(5), 434–443.
- Sandholtz, J. H. (1997). *Teaching with technology: Creating student-centered classrooms*. ERIC.
- Schieffelin, B. B., & Ochs, E. (1986). Language Socialization. *Annual Review of Anthropology*, 15(1), 163–191. <https://doi.org/https://doi.org/10.1146/annurev.an.15.100186.001115>
- Snow, M. A. (1991). Teaching language through content. *Teaching English as a Second or Foreign Language*, 2, 315–328.
- Sukirman, S. (2020). Efektivitas Kelompok Kerja Guru (KKG) dalam Peningkatan

- Kompetensi Guru. *Indonesian Journal of Education Management & ...*, 4(1), 1–8.
- Susmiatun, A., Yuliejantiningasih, Y., & Abdullah, G. (2021). Pengaruh Motivasi Berprestasi Dan Partisipasi Guru Dalam Mgmp Terhadap Kompetensi Profesional Guru Bahasa Inggris Smp Di Kabupaten Kendal. *Jurnal Manajemen Pendidikan (JMP)*, 9(3), 284–293.
<https://doi.org/10.26877/jmp.v9i3.8120>
- Ta'amneh, M. A. A. A. (2017). The Effect of Using WhatsApp Messenger in Learning English Language among University Students. *International Research in Education*, 5(1), 143.
<https://doi.org/10.5296/ire.v5i1.10801>
- Tsai, H. C. (2015). A senior teacher's implementation of technology integration. *International Education Studies*, 8(6), 151–161. <https://doi.org/10.5539/ies.v8n6p151>
- Tuan, L. T. (2012). Vocabulary Recollection through Games. *Theory and Practice in Language Studies*, 2(2), 257–264.
<https://doi.org/10.4304/tpls.2.2.257-264>
- Warschauer, M. (1998). *Electronic literacies: Language, culture, and power in online education*. Routledge.
- Warschauer, M., & Meskill, C. (2000). Technology and second language teaching. In *Handbook of Undergraduate Second Language Education* (Vol. 15, pp. 303–318).
- Zuboff, S. (1988). *In the age of the smart machine: The future of work and power*. Basic Books, Inc.
- Zulhermindra. (2016). Meningkatkan Kompetensi Pengelolaan Pembelajaran Guru Bahasa Inggris Sekolah Dasar Melalui Kegiatan Kelompok Kerja Guru. *Ta'dib*, 17(2), 102.
<https://doi.org/10.31958/jt.v17i2.265>

