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## The Use of Digital Tools to Improve Vocabulary Acquisition

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#### **Abstract**

Digital tools is widely used in language teaching around the world. Pandemic Covid-19 had pushed the education to opt for hybrid system which enable the lecture session to be done in online and also face to face interaction. Vocabulary is important in improving the four main skills such as reading, writing, speaking and listening. Limited vocabulary make the students to depend too much to translation. Hence, this paper presents a systematic review of relevant published studies on the use of digital tools to improve Vocabulary Acquisition from the year 2011 until 2021. This systematic review strives to focus on how digital tools aid the learners in vocabulary acquisition and what are the advantages of using digital tools. The result shows that the use of digital tools will improve vocabulary acquisition. This paper report the limitation and recommendations that focus on vocabulary acquisition through the use of digital tools.

Keywords: Vocabulary Acquisition, Digital Tools, English

#### Introduction

Technology plays a crucial part in these modern days. Almost all of the lessons in class were postponed due to the Covid-19 pandemic. It is impossible to gather in class for educational purposes. Employing technology in education due to several factors which can stimulate the students' learning process in class better. Investing in digital tools enables the teachers to produce a very productive classroom activity. Time and resources should be invested in digital tools. Teachers should spend their time comprehending the use of digital tools for educational purposes. This will save time use while employing digital tools in a lesson. Information and communication (ICT) resources such as a good internet connection should be provided to the schools. Ample of resources provided will enable the teachers to optimize digital tools in every lesson thoroughly. Digital tools are open source that available on the internet.

Advancements in technologies in globalization enable digital tools to aid students in language learning. Technology in digital tools has aided the English language acquisition through internet communication (Hismanoglu, 2012). Digital tools are often known as programs, websites, or online resources that will simplify the task given. It will make the process of completing the task easier. Variety of usage for digital tools often utilizes in the classroom such as Powerpoint

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presentation. The use of Powerpoint presentations in class will make the lesson interactive for the students. Interactive lessons will improve the students' participation in the classroom. Students will try their best to complete the task given to them. The educational process developed through digital learning, which offers advantages to the students. A wide variety of technology-enhanced educational strategies is used during the learning process. Teachers do not have to rely on traditional teaching as the usage of technology-enhanced education will make the learning process more accessible and interactive.

The common purpose of introducing digital tools in education is to optimize each student's potential, which will gain insight that will develop during a lesson. Technology for education will instigate students' curiosity, improving their attention and eventually leading them to better comprehension during the learning process. These aspects are essential for every effective teacher as it can be easily implemented in the classroom by using digital tools. Students are very familiar with the technology in modern life as they are avid users. This is one of the reasons for the use of digital tools is crucial. Digital tools can promote adaptive teaching as it is a helpful resource to accommodate instruction to the students. Social inclusion and good learning outcomes are achievable as digital tools are used responsibly.

English is vital as it is the language for instruction and curriculum in a variety of countries. Teachers must implement new teaching methods to ensure the effectiveness of the teaching process. Practical teachings in a lesson will result in a good comprehension by the students. Students will feel it is easier to learn the English language through digital tools in a lesson. The excitement that comes from the use of digital tools in a lesson will engage the students more. This is due that students will feel motivated to complete the task during the lesson.

New language skills are easily acquired by the students through the use of digital tools. All of the lessons are projected in digital tools which makes the learning process much interesting. Digital tools such as the Quizziz application enable the students to experience a game-based quiz. Students will engage more in the game-based quiz as the graphic is very interactive. Technology that is correctly implemented in a lesson will produce a fast outcome in learning results as it improves the students' engagement in a lesson. Advanced technologies are transforming the lesson which changes how the students view learning in the classroom. Technology will enhance the quality of teaching and learning in the classroom. The teacher will create a meaningful learning environment that encourages the students to participate in a lesson.

#### The Definition of Vocabulary for Language Learning

Vocabulary is the body of words used in the English language. Age often develops with vocabulary which serves as a useful and essential tool for communication and acquiring knowledge. In the context of communication has been made vocabulary as a basis. Language users use vocabulary to express their feelings, ideas, and opinions, which enable them to produce a good language sentence. Coherent messages will improve the message's quantity. Depth of conversation and vocabulary size will lead to the correlation of good interaction that meets communication principles. The principles of communication consist of a maxim of quantity, quality, relevance and manner. The maxim of quality often derives speaker that often speaks truthfully.

Vocabulary knowledge is a vital tool for second language learning. Learners that possess a limited vocabulary will not make any good interaction with others. New items of vocabulary often

consist of more than just one word. A meaningful conversation will include a vast vocabulary that will promote a quality argument. The total number of words included in the communication of ideas and expresses the speaker's reasoning. This is why it is important to learn vocabulary. Learning vocabulary is like building blocks that consist of a list of words. It will get easier to learn an advanced language after the learners understand the basics.

#### The Importance of Vocabulary in Language Learning

Vocabulary learning is vital in learning the English language as the meaning of new words is often highlighted in books or classrooms. Language teaching emphasizes vocabulary acquisition which is crucial to language learners' success. Vocabulary is very significant because it is the foundation of the basis of all languages. Raw materials which often utilize in communication to express ideas and share ideas. It will make the communicators comprehend with each other, which also strengthens personal bonds. Acquiring a good vocabulary will enable students to improve their capability to converse effectively. Communication will be improved as students are able to communicate effectively. Vocabulary is the key to good communication.

Meaningful communication will often lead to a better opportunity. A well-developed vocabulary will gain all aspects of communication. The level of vocabulary development is crucial to a student's success. Good vocabulary will often enable the students to have good reading skills. Vast vocabulary will enable the students to be more sophisticated thinkers, better communicators, and avid readers. Improved language and literacy abilities in the students will enable them to achieve more significant academic and successful communicators.

Adequate vocabulary enables students to develop skills. Learners empowered by rich vocabulary will perform well in listening, speaking, reading, and writing skills. All the skills in the given tasks will make it easier for the learners to perform as they possess an extensive vocabulary. This is because the students can recall the vocabulary they enable them to use the words to convey meanings in a conversation. Doubt about the exact spelling, pronunciation and context use of words will be lessened during a conversation. Higher-level aspects of language such as employing a precise sentence structure and appropriate language usage are more accessible for the students to focus.

Vocabulary is often acquired through focus and certain study. Context clues are often used to figure out the meaning of certain words. Students receive vocabulary through indirect manners through listening and reading. Acquiring vocabulary through listening and reading can be challenging for the students. This is due that the students must memorize some words while acquiring it through listening and reading. It is challenging for some students as not all of them have good listening and reading skills.

Therefore, there is the need to identify the evidence-based instructional practice which will accommodate the students' vocabulary acquisition. The literature has revealed that the use of digital tools can help to improve vocabulary acquisition.

#### **Statement of Problem**

Students' vocabulary retention is very low as they are having difficulties acquiring vocabulary due to pandemic Covid19.

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#### **Research Objectives**

The main objective of this systematic review is to present:

- A synthesis of empirical evidence found in the past related studies on the use of digital tools to improve vocabulary acquisition.
- To enable further intervention development and research in vocabulary acquisition which can be conducted.

#### **Research Questions**

This study is conducted to answer two research questions,

- a) What type of digital tools could be in use to improve students' vocabulary acquisition?
- (b) Does the use of digital tools able to improve students' vocabulary retention?

#### **Literature Review**

#### The Vocabulary Acquisition and the Challenges

Vocabulary is the words used in a language. Three different meanings for the word vocabulary which consisted of all the words in a language, the terms used in a particular context and the words a person knows. The list of words to make a sentence is to be referred to as vocabulary. Meaningful and comprehensible sentences which made up of a list of words are conveyed to other English language users. Language abilities in learning the English language have made it vital to fully master vocabulary learning. Adequate vocabulary skills will make the students produce and interpret the English sentences better, which enable them to analyse the meaning of the sentences. However, learning vocabulary in English classroom is often not taken into concern. Five important English language elements such as grammar, reading, writing, speaking, and listening are often taught in a lesson, but the vocabulary is under the lowest priority. Most of the time, teachers expected that vocabulary to be self-acquired by the students with their effort.

However, most students do not feel that mastering vocabulary will make them good English language learners. According to Alavi and Gilakajani (2019) vocabulary teaching and learning is very challenging to the teachers and students as they do not pay enough attention to the importance of vocabulary acquisition. The students rather focus more on the five important language elements as it considered as important in mastering the English language. Limited exposure to English which makes the students less motivated to learn new vocabulary. Students are not keen to read which influences their English vocabulary acquisition. Reading in English is hard for students as it is their second language. Most of the time the students worry if they are unable to understand the reading texts. It hinders the students from reading in English.

Negative perception of the English language increases in the lesson as the activity is not interesting for the students. Activities in the lesson are very dull to the students which cause them to not motivated to learn English. The students feel that English is a challenging subject to master. This is due that students often weak in vocabulary. Participation in English lessons lowered down as most of the students were unable to finish their sentences. Comprehension of the English language is limited within the students which causes them to refuse to learn English. All the negative perceptions happen because students lack of vocabulary in learning English. It is crucial for the teachers to find ways to make the vocabulary acquisition. Students who can master vocabulary will understand the English context better which will be able to promote a meaningful

conversation. Positive perception will increase as the students participate in the lesson due to understanding the English language well.

#### **Digital Literacy in Language Learning Classroom**

Digital literacy can be described as the abilities required of users to locate, assess, organize, produce and to convey information through the use of technology. Chang et. al (2019) stated that basic functional digital skills will enable the users to utilize the digital devices to make use in a meaningful way. Incorporating digital literacy activities can promote language learning and digital literacy. Students that come from a variety of different backgrounds often have distinctive levels of English language proficiency. Limited English language and literacy skills make the process of acquiring digital literacy particularly challenging for students.

Advance technology will elevate the obtaining of information which requires even more advanced levels of digital literacy. People use to obtain information frequently by navigating a complicated website by downloading a PDF or completing an online form. Fast-changing digital environments which new and updated product are released on a regular basis which make everyone is a learner. This is important for developing instructional materials and supports for teachers and students.

Numerous platforms for the students to produce a successful collaboration. An adequate digital literacy in the students enables them to utilize the digital tools to simplify collaboration. One example of digital tools that the students can use to simplify collaboration is using social media. Social media such as WhatsApp is one of the tools that almost all people can access. Virtual meetings can be assembled in WhatsApp by the students for them to discuss about specific topics. It will make language learning easier as students can revise their pronunciation with their friends. Provided recording video of words pronunciation of the teacher will make it easier for the students to do revision.

Collaborative problem solving with technology usage must be possessed by students and teachers that are digitally literate. Collaboration in education is increased in the digital context community. This collaboration leads to a new set of language and digital abilities. Teachers can improve the students' language learning acquisition and digital skills by assigning a collaboration on projects and documents. There are a lot of digital tools that can be utilized by the teachers such as Google Drive, Surveymonkey, Quizzes and etc. The use of Google Drive in language learning will make it easier for the teachers to organize students' work. Students can upload their spreadsheets, presentations, and documents based on the task given by the teacher. The files in the Google Drive can be shared with anyone that have the links provided. This will enable the students to check their friend's works or share useful information. Surveymonkey usage in the online classroom will enable the teacher to design quick surveys and quizzes. Feedback from the students can be acquired faster and be shared. Quizzes are one of a game show genres which is a quiz tool. It is more similar to Kahoot!. A set of questions are designed by teachers for the students to answer. Gamified quizzes in Quizziz is often much more interesting to the students. Interactive quizzes will increase the students' motivation to answer the questions in Quizzes.

#### **Teaching Media to Improve Students English Language Learning**

Covid-19 pandemic has put all the Malaysian citizens into self-house quarantine. The government closed down schools to avoid more Covid19 cases raising. Most of the people stay

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at home so that they will not get infected by the diseases. Teachers are urged to work from home. There is a variety of teaching media that the teachers can use to improve the students learning experience. Students are digital natives since they grow in the modern era of technologies. Gadgets that the students possess, such as tablets and smartphones, enable them to access language teaching media. Teachers can vary their teaching by using teaching media in a virtual classroom. Teaching media is one of the digital tools that can amplify students learning experience.

Students' English language learning is boosted through the use of teaching media. Online resources such as language media is often use a teaching media in virtual classroom. The right teaching media based on the digital tools will aid the students connection with an authentic audience. Students' enthusiasm to learn is stimulated through the use of language media during the learning process. Opportunities to learn more are provided through the use of digital tools. Language skills of the students increase as they are always practicing it. Language teaching media such as movies and audio applications enable the students to connect with native speakers. According to Baidawi (2016) utilizing audio media will aid the students' learning process through produced word. Experiences that students have gained from language media will provide more credibility to the importance of language learning. The value of language learning will not depend exclusively on the opinions of others.

Teaching media is an open access for authentic materials. Teacher can utilize the video clips on internet to expose the students to English language. Video clips can aid the students in visualizing an event or a person while setting the context socially. The visuals and audio as teaching media will reinforce students' reading text. Understanding of certain topic is enhanced through the use of visuals and audio. It is one of a good way to improve the students learning process of the language.

Topic can be visualized in the virtual class through the use of teaching media. Learning content is amplified through the use of video content in English class. Students learn better as their background knowledge on certain topic is built through the use of visual media such as video. Multiple modalities such as viewing visual media enable the information to be process better. Images, graphs, videos, and charts to learn will able to visualize the information to the students. This will make the students understand the topic better in learning process.

#### **Digital Tools in Education**

Technology provides empowerment and encouragement to the students. Padmini and Saravanakumar (2018) stated the interaction between the instructors and peer to be fully incorporated with digital tools. that is supported through strategic use of ICT. Opportunities are given to the students to practice their language skills at their own pace through the use of digital tools. Teacher can use digital tools such as Quizziz to teach English. It is very convenient because the teacher can set time to answer the questions in the Quizzes.

The digital classroom refers to the "technology-enabled" classroom where student learning and interaction with the instructor and peers is fully supported through strategic use of information and communication technologies (ICTs).

Engaging the students with technology will promote an active learning environment rather than using it as a reward. Rewarding the students by playing movies is one of the ways to improve student's participation in English lessons.

Teacher can use digital tools to display information about certain topics in the lesson. This will help the students to improve their comprehension of the topic. The students not only learn something but they able to gain understanding of the subject deeply as it stimulates their curiosity. There is a lot of information which provided by open sources such as Google. Google Tools such as Google drive make it easier for teachers and students to access or share new information. Curiosity will triggers the students to investigate something. Digital tool is one of the best way to teach English in class.

Aside from that, student's accessibility to the digital tools literacy is very important in educational technology. Students' ability to access and acquire online information quickly is essential for them to master digital tools. Students that foster their digital literacy will make the learning process happen. This is because the students will not waste their time trying to master the usage of digital tools. Delving in the digital tools literacies will enable the teachers and students to fully utilize digital tools for education.

#### Digital Tools for Language Teaching and Learning

Digital tools are programs, websites, or online resources that enable tasks to be completed easier. It is accessible to all people because they only need a stable internet connection. Teacher just needs a web browser to access the digital tools. A lot of digital tools that the teacher can utilize in a virtual classroom. This is due that digital tools can improve students retention in virtual classroom.

The use of technology in education is vital for the learning process in a lesson. It is known that technology such as digital tools often use in a lesson to aid and improve learning. The teachers will be able to adapt classroom activities through the use of digital tools. Thus language learning process improved in a lesson. Technology is an effective tool if it fully utilized by teachers which will facilitate the language learning process better. Integration of digital tools in language learning improves learners' understanding of certain topics during the learning process. A good quality of educational content is provided in digital tools such as slideshow presentation of environment pollutions. Learners will understand the topic better because the slideshow shows a lot of examples. Multitude of additional online educational contents are accessible to teachers. New digital content is created in slideshow through the access of online educational resources. Learners' experience of the world aligned better since the teachers deliver learning in a digital context. Minasyan (2016) stated that digital tools promote creativity and development of an entrepreneurial spirits which will prepare them for future skills. Learning can be delivered by teachers using digital tools.

Accessibility of digital tools will enable the teacher to create home based learning. The Covid-19 pandemic is slowing the economy down as not all business can operate. Schools have been shut down. It is important for the teacher and students to have access on the internet. The usability of technology is one of the crucial aspects in determining the students participation during the implementation of digital tools in learning. Interaction between the students and the content makes the learning process happen. Interactive learning which used digital tools such as Quizzes will make the learning process fun. Thus, students will be motivated to complete the task assigned by the teacher. Implementing digital tools into virtual classrooms will facilitate home-based learning as pandemic requires the teacher and students to stay at home. The curriculum will be chosen based on how tough and relevant of the topic. Method in which how it is learnt or

presented whether active or interactive forms of learning used will be taken into consideration. All the method will create an impact to the students' learning experience in virtual class.

Aside from that, the implementation of digital tools will provide an ample opportunities which varies in perspectives and opinions. All of the provided opportunities will open for disagreement, resolution and consensus building within the students. Active participation and interaction in a discussion will increase as all the students will try their best to complete the task given. Problem-solving activity can be carried out by the teacher successfully as the internet provided various of information. Students can do research through the use of internet. This enables teacher to assign responsibilities individually and groups in which improve the students participation. Digital tools will assist the students in locating themselves within a community of participants. It will also include a motivated knowledge of the forms and functions of language employed.

#### **Benefits of Using Digital Tools in Language Learning**

Digital tools in English language classroom have benefited in many ways to teachers and students. Digitalized platforms enable students and teachers to acquire the latest information related to certain lessons or some class events. It would be easier for the teachers and students to share the information without having to copy it in papers. Lesson for English class will become more appealing to students. The students will not feel bored during lesson as they feel motivated to learn. Integration of interactive digital tools in a lesson will improve the students participation. In other words, the use of digital tools will steer the students' attention during English lesson which captivate their interest in learning.

Technology such as digital tools can help to facilitate the teachers in their teaching. Teachers can integrate some applications which promote learning and also game-like experience. It will lead to the students competing with each other to get the highest mark. Digital tools such as Quizzes is often used by teachers to test the students understanding of a lesson. Testing the students understanding of a lesson enable the teacher to find out which questions are hard for the students to excel. Discussion of the vocabulary tested will happen after the finishing answering Quizzes.

Aside from that, motivations to improve the students vocabulary will increase as they need to know more vocabulary to compete with their friends. According to Ashraf et al. (2014) online game improve motivation and students' performance as they become more interested in playing and wish to have better result. Students enable to learn a new vocabulary through Quizzes. Motivation of the students increased as they feel the integrated lesson with Quizziz is fun and interesting. The Quizzes graphic makes the quiz look a bit like games. Students prefer game so much as they can enjoy better. Participation of students in Quizziz will make the learning experience meaningful. Understanding of the vocabulary tested in the Quizziz will improve the student's comprehension of the lesson. Better learning environment will enhance the students' vocabulary.

#### Method

The method adopted to conduct this systematic review is based on five steps which proposed by (Khan et al., 2003). According to Khan et al (2003), there are five steps which are framing questions for review, identifying relevant studies, assessing the quality of studies, summarizing the evidences, and interpreting the findings.

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The first stage of the procedure is framing research questions for the review. Statement of the problem should be identified carefully and clear. Structured questions will be able to avoid any ambiguity. A good research questions will resulted in a good result research process. Identification of research questions will lead to other changes. This will lead to the identification of the population and research designs. The English teachers and English second language (ESL) learners which are from primary to tertiary education level are chosen for this systematic review.

Second stage requiring the identification of relevant studies which include the objectives. The following international bibliographic databases such as Google Scholar, ScienceDirect, Springer e-journals, Ebscohost, ProQuest Education Journals, Educational Resources Information Centre (ERIC), JSTOR, SAGE and Scopus were downloaded and read extensively data analysing process.

Third stage is assessing the quality of the studies. The journal are chosen from year 2011 until 2021. Step by step review of the past studies is completed one by one. The quality of the studies will be assessed by the positive impact of digital tools to facilitate vocabulary acquisition.

The fourth stage involve the summarizing of all past studies. Evidence in each of the journals will be summarized in the table form. I have rechecked the research questions and the objectives are relevant alongside the chosen journals.

The fifth stage is the interpretation of data in the findings. Interpretation of data is based on the result of the use of digital tools in vocabulary acquisition.

#### **Result and Discussion**

After following the stages of conducting a systematic review, a total of three comprehensive reviews and twelve past related studies on the use of digital tools and digital literacies from the year 2011 to 2021 are shortlisted. Three articles are published between year 2011 to 2014 out of sixteen journals publication. There is one journal publication in year 2011, one publication in year 2012 and in year 2014 respectively.

The remaining thirteen articles are published between 2017 and 2021; with one in year 2017, five in year 2019; three in year 2020, two in year 2021. The highest number of publications is in the year 2019. The empirical evidence supporting them on how the digital tools aid the vocabulary acquisition among the students is summarised in Tables 1, 2, 3, and 4.

Article/ Study	Number of participant/s tudies	Research design	Results
	58 studies	Comprehensive review	Pooling Necessary Resources to Achieve Set Goals.  Focusing on the context of the second language learners or foreign language learners, assuming the predefine goals  by the teacher were to ensure that the learners ca eloquently,  and effectively converse with the native speakers of th language,  then it is upon teacher to identify the various opportunitie in the learning process, whereby computer-mediated communication technologies can be implemented.
Shadiev & Yang (2019)	398 studies	Comprehensive review	Learners had better outcomes when their learning was supported by technology. In addition, learners had positive perceptions towards the technology used. The shows that technology was effective in supporting language learning and learners accepted and used it.
Karacan & Akoglu (2021)	20 studies	comprehensive review	The gamers became more interested in playing and wished to achieve better results, and on the other hand, they tried to learn more new words in addition to the vocabulary prepared for the class.

Table 1: Summary of systematic reviews on technology enhanced language learning and teaching

Article/ Study	Number of participan t/studies	Research design	Types of intervention	Total hours of intervention	Instruments	Results
	12 Direct Entry Design students	Action research	Digital devices (DDs) as learning tools incorporated into classroom teaching practice.	2 period of English class. 1 hour	questionnaire, semi- structured interview, observations	The use of DDs allowed the students to individualise their language learning and permitted them to create their own vocabulary acquisition methods.
	Four teachers	Qualitative case study	The use of digital tools in English classroom	2 period of English class. 1 hour	semi- structured interview and classroom observation	It is implied that the use of teaching aids is significant to enhance students' vocabulary knowledge.
	6 teachers aged between 23 and 55 who were employed by Khazar University, Azerbaijan .	Qualitative case study	The use of digital devices in ESL classes such as Audio video recorder, Video presentations, Online dictionaries, speakers and booths with	2 period of English class. 1 hour	Interview	<ul> <li>'Smart Board' was an effective facility to teach any language, however she stresses its huge shortage in classrooms.</li> <li>PowerPoint presentation improved students' retention.</li> <li>Digital tools such as online dictionary enabled the students to practice their English</li> <li>Digital tools made the explanation process to the students better</li> </ul>

electronic						
devices, high						
speed internet						
and personal						
laptops						

• The use of technology was able to improve the learning and teaching process in class.

Table 2: Summary of the past related studies which focused on the use of digital tools and digital literacies in language learning

Article/ Study	Number of participan t/studies	Research design	Types of intervention	Total hours of intervention	Instruments	Results
	Practical classes in computer labs in groups of 25 students	Action research	Online quiz in the Moodle platform.	Each quiz was open for 4 days and the estimated time for completion is 2 hours.		Predicting that Periodic quizzes via Moodle were intended to capture students' attention which the most relevant concept of the subject and able to link concept to other activities in order to increase participation in groups tutorial and practical classes.
	24 low- intermedia te EFL learners,	Experimental one group pretest, post-test design	online computer games	15 weeks	Nelson Proficiency Test, Pre-test and Post-test,	Online games can be effective in vocabulary acquisition. The current findings indicate that online games, due to creating an interactive and motivating context where learners can easily and subconsciously share their information, and also due to the requirements and obligations encountered by them during playing, are effective in vocabulary acquisition.

Celik & Ayti (2014)	6 English teachers which are working in state-run elementar y and secondary schools in a mid-size city on the north- eastern coast of Turkey.		Turkish Ministry of National Education have introduced the innovative program known as the FAITH project, which aimed to equip classrooms with Smart Boards, computers and tablet PC's.	•	Interviews	<ul> <li>Pedagogical considerations in using digital tools indicated that 27% responses agree that technology use in the language teaching and learning was not only beneficial but important in preparing the students to deal with the requirements of modern society.</li> <li>Teachers expressed that technical resources are highly effective in increasing learners' attention.</li> </ul>
Alavi 8 Gilakjanim (2019).	students were chosen randomly. They were divided into control and experimen tal groups,	Experimental one group pretest, post-test design	Instructional Video Games (IVGs) which based on bingo vocabulary game. to learners.	2 period of English class. 1 hour	The first instrument is the Oxford Placement Test (OPT) developed by Allen (1992) to determine EFL learners' proficiency level and makes the	The findings indicated that the use of vocabulary Bingo game increases Iranians' EFL learners' motivation in vocabulary learning.

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each group consisted of 20 students.				participants homogenized. The second instrument are pre-test and post-test.	
20 students of Dynamic English Course	qualitative survey research	Quizizz	English lessons period	questionnaire.	The result of the study showed positive perspectives of the Dynamic English Course students toward the use of Quizizz as an online assessment tool for English teaching and learning, especially on a formative one.

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Table 3: Summary of the past related studies which focused on the benefits of using digital tools in language learning

Article/ Study	Number of participan t/studies	Research design	Types of intervention	Total hours of intervention	Instruments	Results
Yunus & Azman (2019)	Year 3 pupils	quasi- experimental research	Kahoot! Gamified learning	14 weeks	pre-test, post test, IBM SPSS Statistics Version 20.	The effectiveness of <i>Kahoot!</i> in retaining the participants' memory of the Irregular verbs could be related to the features embedded in the application and its relevance to the younger learners.
Halim, Hashim & Yunus (2020)	60 primary school learners	quantitative research design	Online quiz- games namely Kahoot! and Quizizz	English lessons period	survey questionnaire	A lot of them believed that learning English through online quiz-games like Kahoot! and Quizizz was able to increase their interest and communication skills in English. Most of them believed that using games to learn English made them less nervous in their learning process, which made them to be more willing to pay more attention in classroom; and to be more ready to improve themselves in English lessons.

Ann, Sze, & Yunus (2020).	40 year four pupils which were selected from the low-level category of English proficiency.	Quasi- experimental research.	In this research, the innovation developed, PowerPuzz, is an interactive tool which aims to help Year Four pupils master the sentence structures by playing a game using puzzles so that they can remember them better.	2 period of English class. 1 hour	Pre- test and post- test, observation checklist, survey questionnaire	<ul> <li>Enhancing the Sentence Construction Skills among Learners</li> <li>The results from the pre-test and post-test have clearly shown the effectiveness of the PowerPuzz Game with Quizizz in enhancing the learners' sentence construction skills.</li> <li>Motivating Learners to Learn the Correct Sentence Structures</li> <li>The results from the survey questionnaire showed that the PowerPuzz Game with Quizizz have successfully motivated learners to learn the correct sentence structures.</li> </ul>
	13 students as participant s	action research design	Quizizz	English lessons period	Pre-test and post-test, Likert Scale questionnaire, Semi- structured interview	The explanations for this result are that Quizizz is equipped with the vocabulary theory of marginal effect, and it is multimodal. Providing an immersive learning environment through recapping words is another explanation for the good correlation between Quizizz and vocabulary learning

Table 4 : Summary of the past related studies conducted in Malaysia ESL context

Three relevant systematic reviews were identified (Amin, 2019; Shadiev &Yang, 2019; Karacan & Akoglu, 2021). The findings of these systematic reviews able to explore more in the use of digital tools in vocabulary acquisition. Integration of digital tools in language learning will improve the students' retention during the lesson. Interactive lesson will make the students to be interested in learning the language. Dimensions that focus on the availability of graphics, video, audio, and text will contribute to learning goals (Amin, 2019). Students that have critical review on certain subject often have high anxiety. The Integration of digital tools in English language learning will enable students to practice at their time phase (Shadiev & Yang, 2019). Meanwhile, technology-enhanced language learning and teaching will aid the students in learning process. Immersive interface will aid the students in simulated tasks. Virtual realities are one of the digital tools that will create immersive environments using virtual reality to give a learning experience to the students (Karacan & Akoglu, 2021).

Based on some studies, the use of online quizzes as a discussion platform will give the students opportunities to improve their vocabulary with their own preferred method (Boyd, 2011). Students are able to refer to their friends instead of depending on the teacher. Some students prefer to watch video to improve their vocabulary acquisition. Thus, students are able to work independently with the assist of digital technology. Involvement in a discussion will enable the students to increase their participation in tutorial or practical classes (Salas-Morera et al., 2012). Motivation of the students to complete their task are elevated as they compete with each other. Interesting graphic of the online quiz makes the environment comfortable for the students. Less pressure will make the students to acquire the language better. It will stimulate a better learning environment for the students.

Vocabulary retention will increase as the students acquire new words. Students prefer games as educational aids compared to traditional learning lessons. Game was often seen as a pervasive element for providing simulation in educational setting. This is due that students will subconsciously acquire new vocabulary (Ashraf et al., 2014; Alavi et al., 2019; Yunus & Azman, 2019; Amalia, 2020). Students become excited to join a lesson as it is increasing their confidence. Good vocabulary enable the students to have a meaningful communication in English. Gamified learning is a good way to improve the students participation in online quiz (Halim et al., 2020; Ann et al., 2020; Huei et al., 2021). Online quiz was often seen as very difficult to answers which lead to less participation in the students.

The benefits of using digital tools in language learning will improve the quality of the lesson (Celik & Aytin 2014; Abbasova & Mammadove, 2019; Hermagustiana & Rusmawati, 2017). Vocabulary acquisition among the students improve through the use of technology aids (Hermagustiana & Rusmawati, 2017). Teacher that utilise digital tools in a lesson will aid the students in learning process. Students can understand the topic better with the aid of PowerPoint. Information of the new topic is displayed in interactive slides. A deep understanding of the subject will ignite the student's curiosity to do research. This will motivate the students to always learn more and research certain topics that they do not understand. Digital tools is very effective in increasing the learners' attention. Language learning that is supported by digital tools have better outcomes. It simplifies the learning process. Teacher can use videos from YouTube to visualization the students about the topic. Aside from that, digital tools and technology use in a lesson will prepare the students for the requirement of modern society. Modern society require students to have a good social skills. Social skill is important in delivering a good conversation.

#### Conclusion

The review's conclusions put light on the most significant impact of the use of digital tools in vocabulary acquisition. It was found that the use of digital tools will aid the teachers in their teaching. Majority of the teachers and students favouring the integration of digital tools in language learning. Technology use in language teaching and learning process have indicated positive attitude among the teachers and students (Shadiev & Yang, 2019; Amin, 2019). Students were able to be prepared to deal with the requirements of modern society. Implementation of digital tools in language learning enable the students to practice their English pronunciation independently by using an online dictionary (Abbasova & Mammadove, 2019). Students do not have to rely on their teacher to practice their English.

Aside from that, the use of digital tools was found to improve the students interest in learning the English language. Motivation of the students were improved as the digital tools varies from teaching media to online quiz. Online quiz from Quizziz will motivate the students to perform better. Students were able to compete with each other to complete the quiz. Effective educational aids such as gamified learning will lead to students' increase motivation and improved performance during the process of vocabulary learning (Ashrafa et al., 2014; Huei et al., 2021; Amalia, 2020; Halim et al., 2020). The level of students social anxiety were lessen as the gamified learning make them enjoyed the learning process (Halim et al., 2020).

The findings of the studies (Hermagustiana & Rusmawaty, 2017) also featured some considerations which need to be taken into measure when implementing digital tools in language learning. Teacher lack of digital literacy in technology will influence the outcome. Simple display in PowerPoint presentation would make the learning environment to be dull. This was due that the teacher does not know how to design the slides into an interactive PowerPoint presentation.

#### **Limitation and Recommendations for Future Research and Practice**

This systematic review indicated that the implementation of digital tools can improve vocabulary acquisition. Two primary limitations of this review will be acknowledged. The first limitation is accessibility to a good internet connection. Weak internet connection lead to students not being able to complete the task given by the teacher. Not all of the students live in suburban and rural area have a very good internet connection. Internet data is very expensive, which not all of the students and teachers can afford. Digital tools that consume so much data will make the students and teachers to spend more on the internet subscriptions.

The second limitation of this systematic review is the lack of digital literacy among the students and teachers. Lack of digital literacy will influence the vocabulary acquisition. This is because an individual have lack of digital literacy often unable to fully utilize the technology in language learning. Informative contents are often shared in the internet, which enable students to access it. Students may not be aware of plagiarising someone else work in the internet. Some of the students the copying the work of another people just to complete their own task that is given by the teachers.

It was reported and elaborated in the shortlisted studies that majority of the respondents believed that the digitals tools aid in listening and speaking practice, improve the students' retention, good explanation of the subject, improving the learning and teaching process in class, expose the students to the authentic materials and linguistic context. Therefore, there is an evident need to conduct further studies with assortments of research design and larger sample size. More studies on the use of digital tools and digital literacies in language learning

should be conducted at primary level as only two out of fifteen shortlisted studies (Yunus & Azman, 2019; Ann et al, 2020) were conducted with primary learners. This systematic review was hoped to give empirical for the teachers and researchers to explore the use of digital tools in improving the students' vocabulary acquisition.

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