Utilizing Technology to Promote Active Learning: A Systematic Literature Review

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Abstract
This paper presents a systematic review of relevant published studies which was conducted in utilizing technology to promote active learning among ESL pupils. These studies analysed are from 2008 to 2021, which compromises a total of 16 studies. This systematic review attempts to highlight multiple technologies used to promote active learning in the classroom. This systematic study highlights the current findings in various technologies used to promote active leaning as well as the methods used by researchers to evaluate the aim of this study. The limitations of past related studies and future directions for research were being further discussed.
Keywords: Technologies, Active Learning, Teaching English

Introduction
As the technological develops in the recent days many online learning platforms are being developed to magnify the teaching and learning process to be more satisfactory and organized. In line with the rapid technological development, the Ministry of Education has developed the Education Blueprint 2013-2025 as an initiative to improve the education standard in Malaysia. The importance of Information and Communication Technology (ICT) in increasing the quality of learning among Malaysian pupils is clearly stated on the 7th shift proposed in the blueprint (Ministry of Education, 2012). It emphasizes on taking full advantage of ICT to teach pupils using virtual learning platforms to enable them towards active learning in gaining knowledge to meet the global demand. There are a variety of technology which have been integrated in the teaching and learning process such as flipped classroom, Moodle, Kahoot, Google Classroom You Tube Edu and a whole variety of other technologies. According to Stephanie (2011), the usage of technology in the classroom brings many advantages which can enrich the learning experiences of the students. Unlike other aspects which have come and go in the education system, the technology is here to stay and the usage would probably increase dramatically over time. This systematic review aims to highlight a synthesis of empirical evidence from related studies found over the years on the theory, advantages and challenges found in the studies reviewed. This data will provide further insights that can be carried out in this field of study for future research.

Statement of the Problem

Our education sector had to face one of the major education obstacle when the Covid eruption was first announced by World Health Organisation (WHO) as a pandemic in 2020, as teachers struggled to provide sufficient and suitable education to every student who are in isolation. Due to the situation, teachers and students around the nation were forced into using "emergency remote teaching" (Kawasaki et al., 2021). All around the world, teachers had to adapt to new norms in teaching and learning through online platforms instead of the conventional method of teaching in physical classrooms. Unfortunately, because everything had occurred so fast, everyone, including the education system, schools, teachers, students and their parents were unprepared for online education after countries implemented lockdowns and mass school closure. It was less burdensome for more developed nations as teachers were able to use technology and Internet access to impart education to their students using e-meetings, online classes as well as online assignments. However, developing and less developed countries, this option was not always available. Many middle to lower-income households in these third world nations have limited access to the Internet and/or digital tools for learning, thus are not able to access online platforms commonly used for education. There is also the issue of varying levels of digital competency. For instance, younger students in kindergarten and primary school levels may not be as competent as their older counterparts, which include students of secondary school and tertiary levels of education, in using ICT for educational purposes. Lau and Lee (2020) found that younger students lacked digital mastery and depended heavily on external assistance, especially from parents, to use online platforms for learning during the pandemic. Meanwhile, older teachers who have not been exposed to ICT use were also found to be struggling with online education during the pandemic. Amhag, Hellstrom and Stigmar (2019) stated that teachers often struggle with using online tools for education because digital competence among teachers for education is not prioritised enough in teacher education in the past.

It is agreed by all that technology, in this day and age is omnipresent as it has become part and parcel of everyone's life (Bhat, Raju & Bikramjit & D' Souza,2018). Thus, it is not surprising to see it planting its flag on the education system. In fact, classroom teaching is seen as doing wonders since the use of implementation and use of technology and adoption of teaching approaches such as active learning. Knowledge and information are distributed mostly by direct teaching and lecturing and teachers are considered to be the traditional teaching process which has several weaknesses such as students being inactive and consistently relying on their teachers as the main referential source of information (Balliu 2017). Online learning, when used correctly and to its full potential, can be more engaging for students and teachers. This, in turn, can help eradicate the issue of students being distant and less active during class. Modern technology enabled classroom on the other hand create active learning platform and allow pupils to acquire knowledge intensively and independently by exploring a plethora of options such as Google Classroom, Moodle and others. This promotes the desire of learner-centred learning environment. Not only that, in a technology enabled classroom, a concept can be presented in many different ways that suits pupils of different needs and varied pace.

Research Objective and Research Questions

The main objective of this systematic review is to provide a synthesis of empirical data on the theory, benefits and challenges identified in the studies reviewed relating to the usage of technology in promoting active learning which are found in previous related studies. These figures will provide vital information that will be made accessible to more researchers in this field of study. With that, the research question below will be the emphasis of this paper:

a) What types of technology are used to promote active learning among ESL students?
b) How does the use of technology promote active learning among ESL students?

Literature Review

Technology in Education

Online education has grown popular over the 21st century, which has contributed to a tremendous leap in the use of ICT in education, especially in tertiary levels. In Germany, for instance, online teaching and learning was already used in tertiary education for over two decades (Cicha et al., 2021). In fact, several studies have shown that online education has the potential to remodel and revolutionise global education. According to Gargano and Throop (2017), swift advancements in technology and innovation make the possibilities for authentic learning experiences endless, and therefore should be developed further. In other words, the technology used in our daily lives has the potential to recognize and fix some of the education sector's biggest obstacles. The use of ICT in education enables students to learn independently, develop problem-solving skills and allows educators to enhance the conventional face-to-face learning experience.

Types of Technology

Even though online education has a long way to go in progressing in developing nations like Malaysia, it presents schools, teachers and students with opportunities to engage students in lessons no matter where they are. As this pandemic shows no signs of slowing down, authorities should consider online classes as a long-term alternative to physical lessons. Online education allows lessons and learning materials to be accessible to students regardless of where they are in the world.

Online learning involves the combination of face-to-face lessons with appropriate utilization of technology. As such, education approaches such as blended learning and flip classrooms can be used to increase the learning development of students. This includes the use of Moodle, Kahoot, BigBlueButton, Google Classroom, YouTube Edu, Zoom and a whole variety of other technologies for pedagogical purposes. Despite the various challenges of online learning, its ability to enable a work-home balance and accessibility play a crucial part in making online education truly advantageous to modern society. After all, although it has been around for years, online education has not been used to its full potential.

Technology in ESL Classroom

In this ICT-centric era, the use of technology has become significant for pedagogical purposes, including the ESL classroom. Technology continues to be an integral part of the language-learning process, especially with the popularity of social media, which binds people of different cultures, backgrounds and practices together. According to Amin (2019), writing technology has contributed to the development of communicative power in language, which bridged communication among individuals around the world.

Due to the predominance of ICT use in the world today, it is only natural that the education system evolves with the times and integrate technology into the education syllabus and classroom environment. In order to ensure authenticity in ESL lesson tasks, teachers must use technology in the classroom to fulfil the learner needs and learning objectives. Amin (2019) also asserts that technology significantly influences the teaching and learning of language. Digital tools such as computers, phones, tablets and laptops can be utilised for ESL education, whereas online platforms commonly used for ESL lessons include Kahoot, Google Classroom, Youtube Edu. Students are given the chance to reflect on, discuss, and process course information. By working in pairs or groups, students may practise key skills like cooperation and teamwork. Conversations with other pupils help build self-esteem and confidence which increases student-student and instructor-student engagement in the classroom. Modern technology-enabled classrooms, on the other hand, create a kind of active learning platform and allow pupils to acquire knowledge intensively and independently by exploring a plethora of options actually such as Google Suite for Education that includes Google Classroom in a big way. This promotes the desired learner-centred learning environment. Not only that, in a technology-enabled classroom, a concept can essentially be presented in many different ways that suit pupils of different needs and varied pace, which is fairly significant. Overall, students feel motivated when technology is integrated in active learning.
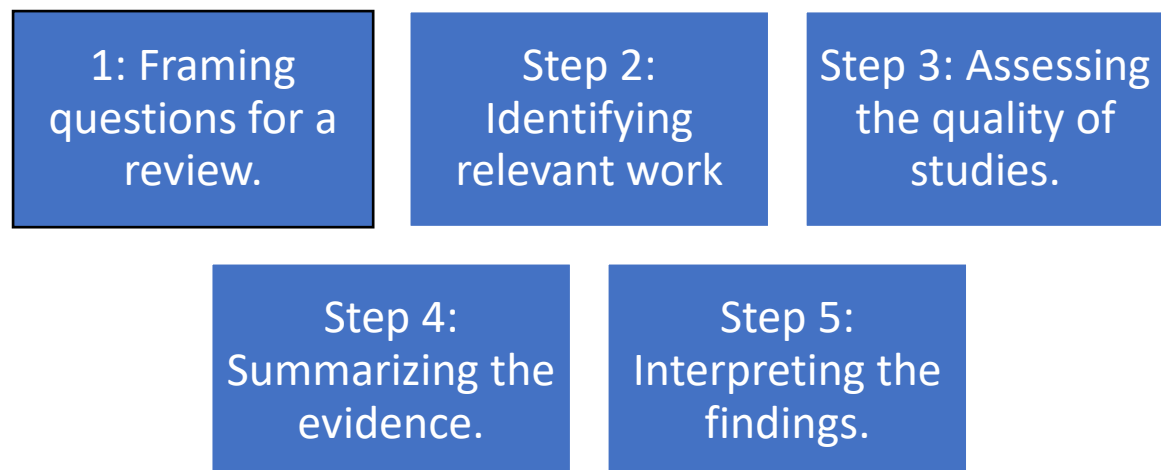
Active Learning
Living in this 21ˢᵗ century changes in the educational system, acquisition of new skills and knowledge, keeping updated with various technologies and fundamental shifts in teaching methodologies are necessary for sustainable development, environmental protection, improvement in lifestyle, child health and more. These changes are necessary in all levels of education beginning from primary to tertiary level. Teachers must no longer be the main information disseminators but facilitators that focuses on scaffolding to achieve a shift in the pedagogy. For instance, from a teacher-centered to a learner- centered environment that prepares students for a meaningful learning. (Hoic-Bozic, Mornar & Boticki, 2008).

Being a revolutionary change from and an alternative to longstanding traditional instructional methods, active learning has attracted strong advocates from all over the world. The theoretical basic approach behind this approach is constructivism. Active learning in the ESL classroom involves students engaging in activities related to the 4 skills of language learning, which include reading, writing, speaking and listening. Instead of passively listening to instruction and regurgitating the information, in active learning, students are able to discuss, analyse, synthesise and evaluate knowledge they have acquired through teacher instruction (Agbatogun, 2014).

Methodology
A systematic review differs from the traditional reviews. It is a review if it has clearly formulated question, identifies familiar studies, evaluates the quality of the studies and summarizes the evidences by using explicit methodology (Khan et al., 2003). In this review, the five-step approach as shown in Figure 1, recommended by Khan et al. (2003) was implemented to perform this review.

1: Framing questions for a review.	**Step 2: Identifying relevant work**	**Step 3: Assessing the quality of studies.**
	Step 4: Summarizing the evidence.	**Step 5: Interpreting the findings.**

Phase 1: Framing Questions for a View

In this current era, most study highlights on technology which emphasizes, mainly on different kinds of technologies used to teach in an ESL classroom. A number of surveys have shown that technologies aid students in becoming better learners in the classroom and facilitate more productive production of the mastery of English language after leaving school (Wong and Nunan, 2011). Hence, this addresses the research questions: What types of technology are used to promote active learning among ESL students?

Phase 2: Identifying Relevant Work

In this phase, a detailed search for studies was conducted based on the review questions. The study selection criteria which were extracted from the review questions were various kinds of technologies which helps in active leaning and also the students' perception in using it in the ESL classroom. The two databases used to search for reviewed research studies or articles written in English published in the year 1995 to 2021 were Google Scholar and Google search engine. Then, in order to narrow down the articles to relevant articles, the year of publication was set to 2011-2021 which enables the search of articles that are published within the recent years (2011 to 2021) after that, under the search criteria 'with the exact phase' under the 'advanced search' function, the phrase 'The usage of technologies in promoting active learning' was entered to avoid the articles which were related to technology but without the term technology in promoting active learning' appearing in the search results. Articles were also narrowed down to technology usage in the ESL Classroom to stay relevant to the research objectives and questions of this study.

Phase 3: Assessing the Quality of Studies

It is essential for the researcher to evaluate the importance of the studies to see if certain static criteria are met. To authorize if the designated articles are necessary in answering the research questions, the researcher can choose to work out the measures that needs to be comprised and removed to be tabularized if needed.

Phase 4: Summarizing the Evidence

The articles that appeared in the search results were removed based on the addition and

omission criteria. Finally, 16 articles were selected to be included in this review.

Phase 5: Interpreting the Findings

Lastly, the articles were interpreted and analyzed using content analysis in which specific characteristics of the articles were decided as the basis of comparing and contrasting the information gathered from all the articles: research design, participants, findings, theories used and findings. The information from the articles was tabulated based on the characteristics determined above to ease the process of comparing and contrasting the information in order to answer the
review question set for this review

Results and Discussion

Fourteen studies or articles from the year 2008 to 2021 were seeded based on the review question. All the articles or studies chosen are associated to the usage of technologies. The results have been tabulated and presented in the table below.

Article		No. of Participants	Research Design	Aim of the study	Strategies	Results
1	Using Technology as a Tool for Learning and Developing 21st Century Citizenship skills: An Examination of the NETS and Technology Use by Preservice Teachers with their K-12 Students **Authors:** Gayle Y. Thieman	223 pre-service teachers from graduate teacher education programmes	Qualitative study – textual analysis by examining 344 preservice teacher work samples and 151 preservice teacher reflections	a. Investigate to what extent pre-service teachers integrate technology into their lessons b. Find out how much technologies were used by K-12 students in regards to their teachers' lesson designs	Presentation slides, graphic organizers, desktop publishing softwares, Web tools, digital photos, videos, computers and video projection devices	• Results showed that 85% of teachers employed technological tools in instructional practice • K-12 students also actively used different technology for class tasks for their personal learning due to the teacher's use of technology for education
2	Promoting Middle School Students' Engagement Through Incorporating iPad Apps in EFL/ESL Classes	20 middle school female students from Saudi Arabia	Mixed method study using Likert-scale surveys and observational data	a. Investigate to what extent the use of iPad applications, when used as an	Various applications found in the iPad that can be used for educational purposes	• Students showed positive attitudes towards using different iPad apps in their classes

				educational tool, impact students' engagement and learning in an EFL/ESL environment		• The digital apps were able to boost engagement and active learning among students more than traditional teaching methods
3	Engaging English Language Learners Through the Use of Google Classroom **Authors:** Noor Idayu Abu Bakar& Nooreen Noordin	25 Malay male students between 21 and 26 years old who are pursuing a diploma in an electrical course	Mixed method which consists of teacher's/researcher's teaching documents, students' responses and activities in Google Classroom, and a questionnaire	1) How are learners engaged in the Google Classroom activities in the Communicative English course? 2)What are students' perceptions in using Google Classroom in the Communicative English course?	Blended Learning	Google Classroom has the ability to get the students from the lower English proficiency level involved in the lesson due to its user-friendly aspects which make it easier , accessible, flexible and interactive to use. Moreover, teachers can manage their class better and also able to track students' progress more conveniently and conduct classes anywhere and anytime.
4	Using Game-Based Kahoot! For Classroom Engagement	29 students from first year English Classes	Qualitative study: observation and	1) Study engagement levels among	Using Kahoot! for game-based learning	• Game-based technology was found to be effective in

		from a Malaysian university	interviews were conducted	students while using Kahoot! in the ESL classroom 2) Look into the student's knowledge acquisition towards lesson content while using game-based technology for learning		enhancing language skills and encouraging classroom engagement among students • Students were able to meet lesson objectives when lessons are enhanced through games as they actively participated in lesson activities
	Author: Nur Hazwani Mohd Muhridza, Nur Afifrah Mohd Rosli, Azura Sirri & Adlina Abdul Samad					
5	Spelling Mastery via Google Classroom among Year 4 Elementary School Students during the Covid-19 Pandemic **Authors:** Emily Lay Yen Yen & Maslawati Mohamad	30 mixed proficiency Year 4 ESL students from a primary school in sub-urban Selangor	Qualitative case study was used: pre- and post- test results, field notes and semi-structured interviews	The study the effectiveness of using Google Classroom to teach spelling among primary school students during the pandemic and the perception of these students towards their spelling mastery via Google Clasroom	Google Classroom	• Integrating Google Classroom in education promotes student-centred learning, which enables students to experience active learning and engagement • Students showed significant improvement in their learning and demonstrated positive views on Google Classroom as

						a result of its use
6	Overcoming the Challenges of Remote Instructions: Using Mobile Technology to Promote Active Learning **Author:** Brandi L. Baldock, Anthony L. Fernandez, Jimmy Franco, Brian A. Provencher, Mark R. McCoy	15 students from Merimmack College	Quantitative method - Open-ended questions and survey	To highlight the special obstacles in the remote teaching and learning modality	Instructional strategies	The findings shows that to create a positive environment for the students certain aspects such as getting international access to technology, creating a community using video conferencing software, and intentional pedagogical choices to integrate active learning
7	Effectiveness of Google's Classroom: Teacher's Perceptions **Author:** Kaukab Abid Azhar & Nayab Iqbal	12 higher education teachers who have used Google Classroom for at least one semester in their classroom.	Qualitative research design. The sample of the study, uses semi-structured interview method,	To assess teachers' perception on the effectiveness of Google Classroom	Virtual Classroom	Findings shows that the teachers view Google Classroom as a management tool that is used for document organization and basic classroom management. They feel there isn't any major effect on teaching methodologies. The way how the teacher responded shows that the main cause for its inefficiency is the lack of user-

						friendly interface.
8	The Effectiveness of English Learning media through Google Classroom in Higher Education **Author:** Abd Syakor & Sugirin Widiarni	60 students from the English Language department in an Indonesian university	Quantitative study: using surveys from participants	To determine the efficacy of using different educational methods during the COVID-19 pandemic, which include blended learning and digital tools	Blended learning through the use of Google Classrooom	• The achievements of students who enrolled in the English language department was enhanced through the usage of Google Classroom. • Google Classroom is able to operate , effectively and also guiding students and lecturers in carrying out the learning process
9	Teaching and Learning with Technology: Effectiveness of ICT Integration in Schools **Author:** Ghavifekr, Simin; Rosdy, Wan Athirah Wan	101 teachers from public primary and secondary schools	Quantitative Study - survey questionnaire	Analyze teachers perceptions on effectiveness of ICT integration to support teaching and learning process in classroom	ICT tools and equipment	• Integration of ICT is effective for both teachers and students • Preparation is well equipped and ICT tools and facilities is one of the major reasons which led to success of technology-based teaching and learning

						• Professional development training program for teachers is important in improving students' quality learning
10	The Effects of Integrating Mobile Devices with Teaching and Learning on Students' Learning Performance: A Meta-Analysis and Research Synthesis **Author:** Yao-Ting-Sung,Kuo En-Chang,Tzu-Chien Liu	AT framework and coded by their learning stages which includes pre school, elementary school, middle school, high school, university, teachers and adults	Meta analysis and research synthesis upon quasi experimental journal articles	To find out the effects of integrated mobile devices in teaching and learning	Mobile devices: laptops, personal digital assistants, and mobile phones Software applied: Word processors, spreadsheets and web browsers	• learning via mobile is notably more effective compared to traditional teaching methods • mobile assisted learning/instructions were considered not to be effective for groups with a mixed-age group of students
11	The Effects of Technology on Student Motivation and Engagement in Classroom-Based Learning **Author:** James Francis	348 students and 65 staffs	Descriptive data gained from students' survey results, student records and direct classroom observation	To identify the reasons of students' motivation to learn and the consequences technology has on inclusionary education	Google Chromebooks, SMART boards, proximity cards and cloud printing	Any particular usage of technology in the classroom such as for the intention of pedagogical purposes or for accommodations as required in the Individual

			s of classroom			Education Plan (IEP) or 504 plan encouraged the students better.
12	The Effectiveness of Google Classroom for Online Discussions Authors: Mujad Didien Afandi & Tiyas Saputri	39 students of English Education program in an Indonesian University	Qualitative study :observation and textual analysis	To investigate the effectiveness of Google Classroom for classroom discussions online	Google Classroom	• Google Classroom was considered to be effective in increasing active learning and students' participation among students • Certain aspects in Google Classroom enhanced students to develop enthusiasm, encouragement and support during online discussions
13	The effectiveness of digital storytelling in the classrooms: a comprehensive study **Author:** Najat Smeda,Eva Dakich.& Nalin Sharda	Students and teachers who were involved in a Australian school at primary and secondary level were selected	a. Qualitative method- (collect data via interviews and observations) b. Quantitative method- (collect data via	To create a constructivist learning environment with digital storytelling	Digital story-telling	Findings showed that digital story-telling is a major and influential tool to integrate instructional messages with learning activities to organize and create a more fun and stimulated

			evaluati on rubric c. Data collectio n method was guided by mixed-methods research design			learning environment
14	Teaching and Learning with Mobile Technology: A Qualitative Explorative Study about the Introduction of Tablet Devices in Secondary Education **Authors:** Hannelore Montrieux, Ruben Vanderlinde, Tammy Schellens& Lieven De Marez	60 participants : Six focus groups with ten participants in each	Qualitative focused group study was conducted	To investigate the teachers' and students' perceptions relating the effect of using tablet devices for teaching and learning purposes	Tablet devices	• The findings highlight that tablet devices being used in a classroom setting has an effect on both teaching and learning. • The findings also suggests that teachers can be categorized into two categories: the innovative teachers and the instrument al teachers. • The results also shows that technical and pedagogica

					l support in order to facilitate both teachers and students should be introduced by policy makers.
15	Rethinkin English Language Teaching Through Telegram, Whatsapp, Google Classroom and Zoom **Authors:** Singh, C. K. S., Singh, T. S. M., Abdullah, N. Y., Moneyam, S., Ismail, M. R., Tek, E., Karupayah, T., Chenderan, K., Singh, M.K.R. & Singh, J. K. S	8 ESL teachers from secondary schools of different states in Malaysia	Qualitative case study-(open ended question interviews and thematic analysis of teacher feedback on WhatsApp)	To investigate the strategies employed by ESL teachers for teaching English using digital tools to cope with school closure during the Movement Control Order in Malaysia	Various online education or digital applications such as Google Classroom, Zoom, Quizzizz, Padlet and Kahoot as well as social networking apps like WhatsApp and Telegram,	• The findings shows that certain platforms and apps such as Telegram, Whatsapp, Google Classroom and Zoom were used by teachers to stimulate active learning and student involvement during the pandemic • Apps such as Quizziz, Padlet and Kahoot! were also used to conduct online learning • Digital tools for instruction were able to be used

						well by the teachers. • Findings revealed that English language teaching should utilize more technology or digital tools
16	The Effects of Technology-Integrated Classroom Instruction on K-12 English Language Learners' Literacy Development: A Meta-Analysis **Author:** Sungyoon-Lee,Li-Jen Kuo,Zhihong Zhu & Xueyan Hu	4352 participants were chosen for this study	A meta-analysis study using comprehensive search of existing literature was conducted	To identify the effectiveness of technology integrated literacy instruction in the classroom contexts for ELL's in Grade K-12		Findings shows that technology integrated instruction had a positive medium effect size on literacy outcome compared to traditional methods where no technology was involved

Review Questions

a) **Types of technology used to promote active learning among ESL learners**

Sixteen studies shortlisted in this review (see Table above) presented the various technologies used by ESL Learners. The first study focuses on using various technology sources such as presentation slides, graphic organisers, desktop applications, softwarres, web tools and digital media to engage students in learning. Similarly, the second article focuses on the use of iPads and its applications to promote active learning and student engagement in middle school. Meanwhile, several articles used Google Classroom to study how it could contribute to active learning among students, which includes the third, fifth, seventh eighth and twelfth article. The third article selected Google Classroom through a blended learning and flipped classroom approach to engage students in lessons and promote learning. The fifth article investigates how student-centred strategies using Google Classroom can impact the spelling mastery of Year 4 school students and increase student engagement in lessons, even though they were conducted online. Meanwhile, the seventh article utilized Google Classroom as a digital tool to enhance active online learning. Similar to the fifth article, the eighth article

looked into the efficacy of blended learning using Google classroom and other digital educational tools to engage learners in their lessons during the COVID-19 pandemic. As for the twelfth article, the study used observational methods to investigate how Google Classroom could be used for online discussions and produce student engagement through the use of student-centered activities such as online discussions and collaborations. The fourth article looks into engagement levels of students using the popular application known as Kahoot!, which is a game-based platform used for educational purposes. Among the sixteen articles, three utilized mobile learning to encourage active learning among students, including the sixth, tenth and fourteenth article. While the sixth article looked into instructional strategies using mobile devices, the tenth and fourteenth articles employed mobile-device learning such as laptops, personal digital assistants, mobile phones and tablet devices to encourage active learning among students to address the challenges of remote learning. Additionally, four articles shortlisted in this review utilized technology-integrated education to promote active learning among learners. Among them is the ninth article investigated the use of ICT in for pedagogy among primary and secondary school students. Similarly, the eleventh article focused on using technology such as Google Chromebook, SMART boards, proximity cards and cloud printing to enable active learning. Apart from that, the fifteenth article looks into the use of various digital technology tools and applications for English language learning. It investigates how teachers used different digital tools to enhance student participation and active learning using tools such as WhatsApp, Telegram, Google Classroom, Zoom, Kahoot!, Quizziz and Padlet to engage learners despite being separated due to the pandemic. Last but not least, the sixteenth article looked into the effects of technology-integrated learning for K-12 English language students' engagement.

b) The use of technology promotes active learning among ESL students
According to the first study, a majority of teachers employed technology in instructional practice such as Presentation slides, desktop, web tools and digital media such as videos and photos to engage their students in the lessons. This also influences the students' personal learning, as it was found that students were more likely to use technology to learn on their own when their teachers employed technology in the classroom or lesson. Meanwhile, the second article students developed a more positive attitude towards learning when they used digital tools for enhancing their learning. Results of this study showed that using different apps in the iPad fostered active learning among students, which contributed to positive student engagement. For Google Classroom use, four articles showed a positive impact on student engagement while one article revealed the opposite. Results found that the use-friendly, accessibility and flexibility of Google Classroom features enabled students to engage in lessons better, especially students of lower English proficiency. The fifth, eighth and twelfth studies also showed positive effects of the use of Google Classroom in lessons. For instance, the fifth article found that integrating Google Classroom in the lesson promotes a more student-centered environment, which enables student engagement and active learning. Google Classroom was found to positively impact students' perceptions and motivations of learning. The eighth study found that Google Classroom was able to improve achievements of students and promote active learning due to its operating efficiency and ease of use. The twelfth article had results similar to this, in which it found that the features in Google Classroom contributed to students' increased motivation and enthusiasm to learn as well as encouraged peer support during lessons, especially during online discussions. However, the

seventh study found that Google Classroom was not significantly different from traditional lessons, as users found that the platform lacked a user-friendly interface. The fourth study found that game-based technology such as Kahoot was found to be very effective in enhancing language skills and developing active learning among students. It also found that because students become more engaged through gamification methods, the were able to acquire information relevant to the lesson objectives, which allowed teachers to meet lesson outcomes. For mobile learning, the sixth article found that access provided by mobile devices for online video conferencing and the Internet network enabled active student engagement for students to cope with remote education. The tenth article, on the other hand, found that mobile devices such as laptops, personal digital assistants and mobile phones for learning were significantly more effective compared to traditional lessons. However, results also found that mobile learning was not as effective for groups of mixed-age students. Additionally, the fourteenth study showed that different digital devices can impact the teaching and learning process, and has the ability to facilitate meaningful learning. Aside from that, the results of the thirteenth study suggested that digital story-telling proved to be a powerful tool to encourage engagement among students and promote active learning. At the same time, findings derived from the ninth article found that ICT-integrated learning was effective for both teachers and students, as long as they were well-equipped for online learning. It also proved that ICT enabled teachers to enhance the quality of education, which in turn allows students to develop knowledge effectively. The eleventh article found that students were motivated to learn when technology was incorporated in their education. The fifteenth article proved that various digital or online platforms can be used to increase student engagement and active learning among students. Findings of this article also revealed that even though students are separated from each other, such as during the pandemic, active learning can still occur with the help of digital and online educational tools. Finally, the sixteenth article states that education which integrates ICT allowed independent idea-creation, motivates students to learn better, enhances self-confidence and language skills are improved among students.

Discussion

From the sixteen articles, it can be derived that the most popular technological tool for pedagogical purposes is Google Classroom. Most studies have found this online platform to be easily accessible, flexible and user-friendly for all users, which are all contributing factors as to why this platform is the most commonly used tool for promoting active learning among ESL Students. Findings have revealed that Google Classroom is highly effective in engagement in the lesson, enhancing understanding among students and development of independent idea formation.

Despite its popularity among educators for ESL education, there are also some drawbacks of this platform. Findings from one of the articles revealed that teachers found no significant difference between the effectiveness of traditional classroom lessons and online lessons using Google classroom. This study linked the lack of user-friendly features on the platform to this issue. However, this can be compensated with the fact the teachers viewed Google Classroom as a good facilitation tool for document management and basic classroom management.

However, technology in education also has its boundaries. Despite the effectiveness of games, social media and video-sharing platform such as Kahoot, YouTube Edu, Facebook, Twitter, Zoom and Google for educational purposes, they must also be used in moderation.

Without proper supervision, students, especially younger learners, can easily access inappropriate and improper information on the Internet. Therefore, it is important for parents, teachers and schools to carry out their roles to ensure that students are not misusing technology to access materials that are unsuitable and detrimental to their learning progress and health.

Online learning, when used correctly and to its full potential, can be more engaging for students and teachers. Technology has been present in the education sector for many years, however, it has not been used to its full potential. There is still a lot we can learn about using technology in teaching and learning, not only to enhance the quality of education, but to increase student engagement and motivation to learn. Technology has been, is and will continue to be a vital part of the education process, including language-learning, especially with the rise of ICT use in the 21st century.

Conclusion

Based on the systematic review, it can be concluded that there has been numerous research which highlights on the usage of different technology in promoting active learning and also the perspective by the by the learner`s in adapting themselves to the particular technology. It is significant that language teachers should be made aware of the various kinds of technologies which promotes active learning that are important for students' language learning, and thus students should be visible to various types of technology that can be practically used in promoting active learning. As suggested by Noridayu (2014), there are some basic principles that can be incorporated in teaching and learning strategies to boost learner's acceptance in using the different technologies Henceforth, learner`s should be able to see the reason and use various kinds of technology efficiently to boost their aptitude in the language. A major shift has taken place in education where a technology plays an important role in transformation from the traditional method of teaching and learning to a student-centered approach. Constructivism learning theory is used in certain studies which strongly encourage active learning where a subject matter is constructed based on the students' understanding. Holmes (2015) suggests that pupils learn better through technology as it would have a vast impact on their knowledge retention rate. Besides that, technology helps in further enhancing a classroom instruction by encouraging a shared community learning, active collaboration work, crossing the gap between classroom and the teachers and also allowing students to have an equal learning via technology. Hence, technology plays a very important role in contributing to this study.

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