

Learn English



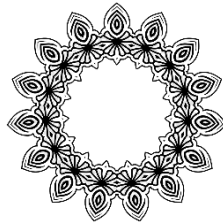
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Sanabil

Technology in English Language Teaching

Dr. Syarifudin, M.Pd.
Soni Ariawan, M.Ed.

**TECHNOLOGY IN ENGLISH
LANGUAGE TEACHING**
Connecting Theory and Practice



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**Dr. Syarifudin, M.Pd.
Soni Ariawan, M.Ed.**

TECHNOLOGY IN ENGLISH LANGUAGE TEACHING


Sanabil

Technology in English Language Teaching

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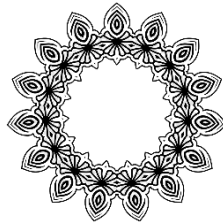
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FOREWORD

Alhamdulillah, all praises belong only to Allah SWT. Hopefully *salawat* and *salam* will always be delivered to the great Prophet Muhammad SAW, along with His family, friends and followers until the day of the resurrection. Thanks to the grace and guidance of Allah SWT, the textbook and reference writing program has been completed.

The obligation of lecturers to write and produce books, both textbooks and reference books, has actually been regulated in Law Number 12 of 2012 concerning tertiary institutions and Law Number 14 of 2005 concerning Teachers and Lecturers and some other regulations. Article 12 of Law No.12 of 2012 clearly states that lecturers individually or in groups are required to write textbooks or textbooks published by tertiary institutions as a learning resource.

The textbook and reference book writing competition (KOBAR) 2020 held by Faculty of Tarbiyah and Teacher Training (FTK) is an effort to contribute to the implementation of the law above, which quantitatively, the research charts and publications of PTKI lecturers still have to be improved. Another goal is to improve the quality of learning by creating a conducive academic atmosphere and an effective, efficient learning process with easy access to learning resources for lecturers and students. This publication is also expected to support the advancement of lecturers' careers in the context of advancement of lecturer functional positions, which in turn will have an impact on the increase of the university and study program accreditation status.

Gradually, the Faculty continues to strive to increase the quantity and quality of the published book. There were 10 books in 2019 and increased quite significantly in 2021 into 75 reference books. The efforts of the faculty do not stop at the

publication level, but continue with the registration of Intellectual Property Rights (HKI) of

the books at the Directorate General of Intellectual Property (DJKI) of the Ministry of Law and Human Rights of the Republic of Indonesia, would result 75 HKI for lecturers in 2021.

The 2021 textbook and reference competition is oriented towards the interconnection-integration between religion and science, with the spirit of UIN Mataram *Horizon Ilmu* with inter-multi-transdisciplinary science that discusses methods in conventional Islamic studies with deductive-normative-theological characteristics with contemporary humanities studies methods such as sociology, anthropology, psychology, economics, hermeneutics, phenomenology and also the natural sciences which have an inductive-rational character. Among the 100 books, there were 10 thematic titles that answer the epistemological problems of Islamic education, especially those related to the mission of the Indonesian Ministry of Religion such as Islamic moderation (Islam *washathiyah*), inclusive education, anti-corruption education, character education, multicultural education, ethno-pedagogic, and online learning, education & gender issues, various Islamic boarding schools (coastal, entrepreneurial), and the most current themes, namely independent learning and independent campuses (Kampus Merdeka).

Representing the Faculty, I am grateful for the policies and support of the Rector of UIN Mataram Prof. Dr. H Mutawali, M.Ag and his staff, to 75 writers who contributed in the 2021 book competition, and the unforgettable editors from lecturers in the same field as well as publishers without a touch of *zauq*, the books will not be as attractive as these. There is no ivory that is not cracked; indeed there is still a

shortage, both in substance and in technical writing. Through this "space", we expect critical suggestions from the readers. Hopefully this agenda will become an *amal Jariyah* and bring blessings to the academic community of UIN Mataram and the ummah in general.

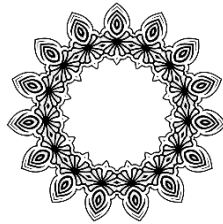
Mataram, October 25th, 2021

Dean



Dr. Jumarim, M.H.I

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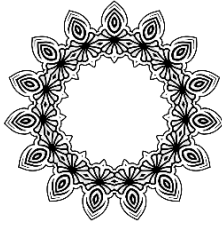
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AUTHORS' PREFACE

We would like to express my deepest and greatest gratitude to almighty God, Allah SWT, for his mercy during writing this reference book. We are conscious of “His Hand” that eases and puts our way on the track. We are also thankful to the Rector of State Islamic University of Mataram, the Dean of Faculty of Education and Teachers Training, the Vice Deans and the Head of Study Program whose encouragement and support to all lecturers are beneficial to the career and academic development. Technology cannot be separated from education especially in the context of teaching and learning. To achieve best quality of outcomes through such great learning process, the curriculum actually should be supported with a comprehensive learning resources as well as supportive learning environment and more importantly teaching media that involve technology. Covid-19 pandemic structurally and naturally has forced teachers to be agile and adaptable with technology as the class has been moved into virtual. The publication of this book is expected to be one of the theoretical and practical guides for teachers and students in order to integrate technology in their teaching and learning, especially in the context of English language teaching. We do hope that it can contribute toward effective learning that benefits both lecturers and students. Finally, it is very possible that the book has errors or lack of resources that make it far from being complete and perfect, so constructive feedback and critics are needed.

Mataram, September 2021

Authors



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CHAPTER I

INTRODUCTION

Technology has been a must-use in education especially in the context of English language teaching. Some years ago, technology was closely associated with the invention of new tools that eased human life. It was mostly related to such robot or other products as the result of those modern technology tools. However, more and more people have been talking about technology in all sectors. It has become an absolute need that human cannot escape from. It is humans who are required to adjust and follow its advancement. People who are left behind and never follow the technology utilization seems lose their opportunity to survive and to reach the goals.

In education field, teachers are forced to transform their teaching paradigm from traditional or old paradigm to new teaching methods that integrates technology. From teachers' perspective, there are no other choices. They have to get familiar with the product of technology that might help them toward effective learning. Teachers do not only face a complicated feature of technology tool, but also they have challenges in teaching millennial students with their own characteristic as a native technology.

Based on the above-mentioned background, this book entitled **Technology in English Language Teaching** is written. It aims to share theoretical ideas on the importance of technology and how students perceive the integration of technology in English language teaching context. In chapter 1, it starts with the definition and the development of technology enhanced language learning. This section is also strengthened with some review of previous studies as well as the information on technology platforms that can be utilized by the English teachers.

In chapter 2, practical alternative and practices on the incorporation in teaching speaking, writing, listening and reading is revealed. Preliminary study on the students' recommendation of technology tools is also included. This study involved EFL students in English language education study program State Islamic University of Mataram.

Chapter 3 describes students' perception on the use of technology in English language classroom. Their preferences on using certain technology platform can be one of the considerations for teachers to employ those technology tools.

Last but not least, this book is also completed with some list of recommended websites, platforms as well as other technology tools. The list is presented in form of table where description and features are explained.

CHAPTER II

THE INTEGRATION OF TECHNOLOGY IN ENGLISH LANGUAGE TEACHING

A. Introduction

Technology plays very crucial role in the entire humans' life dimensions, especially in the field of education where technology advancement has emerged in endless stream. White (2003) indicated that there were more than 1300 distance language courses from the 55,000 distant courses registered in 130 countries. She also revealed that there was a common perception of online courses as a cost- and time-effective. This learning characteristic seems suitable in learning a language at a distance and it is supported with the rapid emergence of communication technology that might connect learners both asynchronously and synchronously as well as autonomous learning.¹

In teaching and learning context, technology helps teachers to effectively deliver materials, design assessment, provide supplementary resources as well as engage the students. The activities will be more effective, efficient and attractive to increase students' motivation in learning. Technology in this context does not only mean such complicated and high-tech technology tools, but it could be seen from simple but daily needed-tool such as projector, laptop, power point and other daily-used software and applications. It becomes teachers' habit to start the lesson by giving a gist displayed through the power point in the class, music in listening lesson for instance, or video etc. It is also such an interesting activity to trigger and attract students' attention through movies, audio or other multimodal resources. The teaching and learning seems more interactive and communicative rather than just talk and transfer the

¹ C. White, *Language Learning in Distance Education* (Cambridge: Cambridge University Press, 2003).

knowledge without any supporting technology tools. The class is possibly boring for the students.

The author's experience in one-year learning during Covid-19 pandemic has emphasized the importance of technology integration in teaching. It is almost impossible to conduct online learning if the teachers do not generate one of the online learning platforms. Many lecturers have generated mobile-based learning through WhatsApp as it is a simple and affordable learning platform apart from its weakness as the lecturers find it difficult to control and to filter students' chats. To some extent, the lecturers employ video conference based learning such as zoom and Google meet even though both students and lecturers found it more challenging due to the need of stable internet and signal access. Both lecturers and students have to make an agreement on the duration and frequency of meeting as the students, sometimes, could not be forced to fully attend the video conference meeting. To sum up, it is true that learning without involving technology tools will bring us to the very traditional way of teaching which might not be relevant with today's condition and situation. Manual teachers are required to mastery one of the technological tools to maximize the learning quality amid the very critical situation. It required not only technical ability to operate and apply the technology tools within the learning activities, but also the ability to choose the most appropriate technology tools to be applied after considering the curriculum and students' aspects.

The rapid emergence of technologies can be seen from the following data²:

- 1998 Google
- 1999 Blogger
- 2001 Wikipedia; iPod; iTunes
- 2002 Moodle

² Wan Ng, *New Digital Technology in Education* (Switzerland: Springer, 2015), DOI 10.1007/978-3-319-05822-1.

- 2003 MySpace; 3G mobile phones
 - 2004 Facebook; Flickr
 - 2005 YouTube; Wikispaces
 - 2006 Twitter; Khan Academy; Animoto
 - 2007 Asus Eee PC (netbook); iTunes U
 - 2008 Dropbox; 3G iPhone (iOS-based smartphone); Lenovo IdeaPad netbook; Edmodo
 - 2009 WhatsApp (IM); Gloster EDU; Samsung Galaxy (Android-based smartphone); Bing; Prezi 2010 KIK (IM); Instagram; iPad
- The new technologies include Internet-dependent technologies such as open source learning management systems (e.g. Moodle , Edmodo), social networking sites and apps (e.g. MySpace , Facebook , Twitter and instant messengers IM), cloud storage (e.g. Dropbox GoogleDrive), cloud-based creation service (e.g. Animoto , Prezi , GlosterEDU) and educational resource sites (e.g. Khan Academy , iTunes U).

Nowadays, new mobile devices such as notebooks, ultra mobiles, smart phones and computer tablets have been used as educational platforms for student learning; even they have penetrated and flooded the market. This emergence also leads us to the virtual classroom or online learning management system that is now being employed by the teachers during Covid-19 pandemic. The history of technological tools changing from time to time above indicates that technology transformation and advancement has been very fast. They experienced the changes within almost 2 years in average.

Pelgrum et.al in Akcaoğlu (2008) clearly reveal the differences between education in industrial society and information society which is significantly different in terms of school, teacher, student and

parent point of view as presented in the following table.³ They have predicted these characteristics which are now being experienced by the school, teacher, student and parent.

Table 1: Expected changes from education in an industrial society to education in an information Society

Actor	Education in the Industrial Society	Education in the Information Society
School	<ul style="list-style-type: none"> • Isolated from society • Most information on school • Functioning confidential 	<ul style="list-style-type: none"> • Integrated in society • Information openly available
Teacher	<ul style="list-style-type: none"> • Initiator of instruction • Whole class teaching • Evaluates student • Place low emphasis on communication skills 	<ul style="list-style-type: none"> • Helps students find appropriate instructional path • Guides students' independent learning • Helps student to evaluate own progress • Places high emphasis on communication skills
Student	<ul style="list-style-type: none"> • Mostly passive • Learns mostly at school • Hardly any teamwork • Takes questions from 	<ul style="list-style-type: none"> • More active • Learns at school and outside school • Much teamwork • Asks questions

³ Mete Akcaoğlu, “Exploring Technology Integration Approaches and Practices of Preservice and In-Service English Language Teachers” (Middle East Technical University, 2008).

	books or teachers • Learns answer to questions Low interest in learning	• Finds answers to questions High interest in learning
Parent	• Hardly actively involved in learning process • No steering of instruction • No life-long learning model	• Very active in learning process Co-steering • Parents provide model

As it can be seen from the table, with the help of technology integration, schools, teachers, students and parents experience drastic changes and perceive the education more positively. Schools become more integrated in the society and become platforms for asking question rather than platforms where the students learn to answer questions and become such confidential place which is isolated from the society. Recently, the existence of schools is inseparable with the existence of society in particular places. Today's school is widely opened for all people and schools are functioned not only as a place to learn, but also to improve the skill which is needed toward the social practice in the society. In addition, teachers become facilitators rather than initiators of instruction. Teachers' teaching strategy is not monotonous which potentially drive students to such boring environment. The teachers' orientation tends to be more students-centered that enable students not only act as object of learning but also subject of learning. In terms of students, they actively collaborate and work together to process the learning rather than just wait for the instruction from the teachers. Finally, parents tend to be more active in shaping their children's learning processes due to the collective responsibility in growing and developing the children's potentials rather than passively following the paths drawn by the curriculum of

the schools. The parents will be more engaged with schools as they perceive the schools as part of their life.

Innovation in teaching and learning with technology integration is more universal where the information is not only limited at schools environment but also from any other accessible sources in the internet. Such rich resources are available online out of schools environment. They are available beyond the school boundaries in a virtual world.⁴ The accessibility to wide sources of information enable students to actively take a role in the learning process rather than depend merely on the teacher as the sole source of knowledge.⁵

There are “five Cs” that have to be considered in learning a foreign language as stated by the American Council on the Teaching of Foreign Languages (ACTFL) namely communication, cultures, connections, comparisons, and communities.⁶

Communication is the essence of a language where it is part of productive skill that really matters in learning a second or foreign language. Apart from its linguistic competence, cultural competence seems crucial to support the understanding of language context toward an effective communication. Both language and culture is inseparable. In addition, connection deals with the function of language to understand content area of other disciplines as it is used as a bridge to comprehend the information across fields of studies. Comparison is related to the development insight from their first language with target language being studied. Finally, communities

⁴ C. Dede, “A Seismic Shift in Epistemology,” *Educause Review* 43, no. 3 (2016): 38–62.

⁵ P. Newhouse, “The IMPACT of ICT on LEARNING and TEACHING,” *Perth: Specialist Educational Services*. (2003), accessed October 16, 2021, <https://www.semanticscholar.org/paper/The-IMPACT-of-ICT-on-LEARNING-and-TEACHING-Newhouse/234c4485928fadd0aef80a6643fbce57c6754e2>.

⁶ Huiwei Cai, “E-Learning and English Teaching,” *IERI Procedia* 2, International Conference on Future Computer Supported Education, August 22- 23, 2012, Fraser Place Central - Seoul (January 1, 2012): 841–846.

deal with the roles of learners to participate and use the language in a multilingual community's context at home and around the world as part of global citizens. Those five Cs indicate the significance of learning language not only for communication but also as a tool to participate and stay connected within certain community to show their existence as a human being.

There are many tools and resources than can be generated in learning a foreign language which are now available on the World Wide Web such as conferencing, e-mail, whiteboard, streaming “plug-in” technologies, etc. These tools and sources enable us to cultivate five Cs through multimodal channels either for listening, speaking, writing, reading or communicating. The web is considered effective as a forum to discuss some related issues or enhance the language skills. In addition to the role of internet technology in serving the motivation in learning a language, the learners might find literally millions of documents, resources, data bases and various source of communication to stay interconnected.⁷

To sum up, as computer and internet are widely used, teachers have to adjust their pedagogical strategy and teaching orientation accordingly to focus more on student-centered. Unfortunately, the many teachers have not realised such urgency of change that the current information technology has brought us. It is why this chapter seems very crucial to gain the initial idea for EFL teachers to experience changes in their teaching. The adjustment to technology should be conducted as soon as possible because the emergence of technology tools is getting faster and faster. Once the teachers stay stagnant and do not start creating a change, there will be a lot of things to learn as the result of procrastinating toward a change.

⁷ Shu Ching Yang and Yi-Ju Chen, “Technology-Enhanced Language Learning: A Case Study,” *Computers in Human Behavior* 23, no. 1 (January 1, 2007): 860–879.

B. Definition of Technology Integration

I initially supposed that it will be found easy to define the definition of technology integration in particular context, learning a foreign language in this context. In 2009, the literatures that discussed technology integration was not that many, even very little, so it was hard to find such exact definition where all experts agree with. Belland (2009) stated his confusion on little resources that clearly provide definition of technology integration in the computers and education journal.⁸ He then contributed to provide one definition where this part would start from. He views the technology integration as the change of social system which is sustainable and persistent, within the school system, due to the application and adoption of technology to enable students construct their knowledge in order to analyze and solve the problems. It means that technology tools play very crucial roles that contribute to the alternation of school system either in curriculum and practices. The changes are not only experienced by the teachers that employ technology to enhance students' language learning process and facilitate language learning activities, but also the students who have to be very adaptive with that rapid changes.⁹

In the last 10 years, there have been tremendous studies on technology integration that exhibits various definitions. The current confusion is not due to the lack of resources but too many resources where I have to carefully select the most comprehensive definitions. One of definitions also claim that technology integration as the utilization of technology tools such as computers in order to develop students' technological skills in learning than will benefit them to

⁸ Brian R. Belland, "Using the Theory of Habitus to Move beyond the Study of Barriers to Technology Integration," *Computers & Education* 52, no. 2 (February 1, 2009): 353–364.

⁹Mohammad Reza Ahmadi and Guilan University, Guilan, Iran, "The Use of Technology in English Language Learning: A Literature Review," *International Journal of Research in English Education* 3, no. 2 (June 1, 2018): 115–125.

understand general content. It is believed that by permitting students to use technology tools, it might help them to solve the problems and improve the educational environment.¹⁰ Furthermore, the utilization of technology tools aims not only to solve problems, but also to get familiar with the tasks and reshape the task toward more productive work.¹¹ Looking at those two definitions, they emphasize the idea on the impact of technology integration to the possibility of solving problems toward more productive work or teaching in this context. Other views of technology integration came from Cuban, Kirkpatrick, and Peck (2001) who provide a very simple definition: the use of computers. They then classify the use of computers into two levels: computers used by low-level learners to gain the information and search their tasks (performing Internet searches) and high-level use where learners generate the computers to not only collect the data but also analyze and utilize the data for presentation purpose or other school project purposes (performing multimedia presentations, collecting, and interpreting data for projects).¹²

More specifically, in the context of language learning, technology integration refers to the purposeful manipulation of any kind of modern technology in language pedagogy where technology use and technology integration are different terms, sometimes they are used interchangeably.¹³ Technology use is seen as the utilization of technological tools, application or platforms without any specific

¹⁰Abbas Pourhosein Gilakjani, "A Review of the Literature on the Integration of Technology into the Learning and Teaching of English Language Skills," *International Journal of English Linguistics* 7, no. 5 (July 27, 2017): 95.

¹¹Sara Hennessy, Kenneth Ruthven, and Sue Brindley, "Teacher Perspectives on Integrating ICT into Subject Teaching: Commitment, Constraints, Caution, and Change," *Journal of Curriculum Studies* 37, no. 2 (January 1, 2005): 155–192.

¹²Larry Cuban, Heather Kirkpatrick, and Craig Peck, "High Access and Low Use of Technologies in High School Classrooms: Explaining an Apparent Paradox," *American Educational Research Journal* 38, no. 4 (January 1, 2001): 813–834.

¹³Nina Garrett, "Technology in the Service of Language Learning: Trends and Issues," *The Modern Language Journal* 93, no. s1 (2009): 697–718.

intention or unintentional use, while technology integration involves the presence of stipulated and scheduled ICT that indicates intention in usage and it is indicated as well as associated to CALL (Computer Assisted Language Learning) with its allies: MAAL, WELL, TELL etc. The definition that relates technology integration with pedagogy is also addressed by Okojie et.al (2006). They believe that technological skill and ability to use pedagogical knowledge is a foundation of integrating technology into teaching and learning. The form of technological skill is not only technical artifacts, but also theories about technology integration and application as well as research findings that might support the promotion and incorporation of technology in language teaching.¹⁴ Some examples of technological tools such as, but not limited to, the use of word processor to draft, redraft, and correct essays by the students. Another example is the use by teachers to create PowerPoint, to prepare lectures and presentations, and so forth. In such instances attention basically rests on technology itself, and technology awareness becomes a psychological burden.¹⁵

After discussing the definition where there will be more and more definition if it is not limited due to the advancement of technology that has developed very fast, further discussion on the required technological skill in the context of pedagogy seems essential. The following paragraph is aimed to discuss two perspectives of required skill for online teaching where it is a concrete form of technology integration in pedagogy. First point of view is derived from the idea of Hampel and Stickler (2007) who

¹⁴ Mabel CPO Okojie, Anthony A. Olinzock, and Tinukwa C. Okojie-Boulder, "The Pedagogy of Technology Integration," *Journal of Technology Studies* 32, no. 2 (2006): 66–71.

¹⁵ Abdu Al-Kadi, "A Review of Technology Integration in ELT: From CALL to MALL," *Language Teaching and Educational Research* 1, no. 1 (2018): 1–12.

proposed skill pyramid.¹⁶ There are three levels of pyramid skills that reflect the need of technological-pedagogical skill toward effective online language learning.

The first level, basic ICT competence, is a foundation among other skills because it is a starting point that decides whether the teachers are able to continue the teaching or not in the context of online learning. Basic ICT competence means the ability to operate technological tools including operating the use of networked computers such as keyboard and mouse, and familiarity with common commands and applications, for example, word processing, Internet, audio replay. The skill on this level might nowadays be a prerequisite for selecting tutors to teach online.

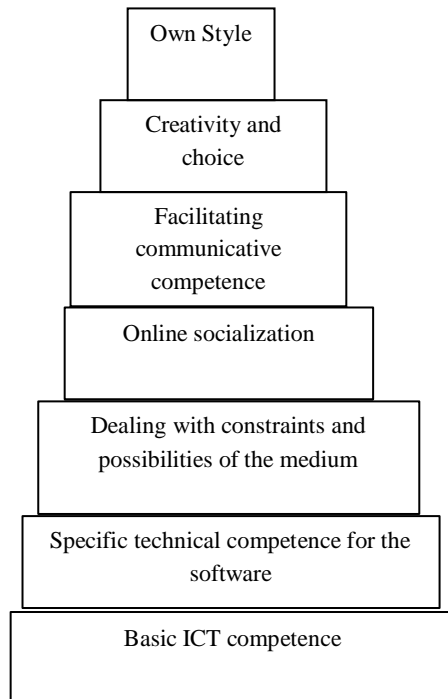


Figure 1: Skills pyramid

¹⁶ Regine Hampel and Ursula Stickler, “New Skills for New Classrooms: Training Tutors to Teach Languages Online,” *Computer Assisted Language Learning* 18, no. 4 (October 1, 2007): 311–326.

Next level is the skill of specific technical competence for certain software. It is necessary skill for individual or educational institution in creating a learning platform or generating the existed learning platforms. Some examples of educational software that can be maximized are blackboard; or custom-made audio-graphic conferencing software, for example Lyceum (the Open University's teaching software developed in-house). Every platform, sometimes, has different procedures of operation, so the teachers have to be familiar with the platforms before designing the curriculum. Next level is the skill of handling constraints and possibilities of the medium. Online learning is a type of vulnerable learning which is easily impacted by the external factors such as internet access, signal etc. that leads the learning ineffective and in efficient. Online teachers are required to be able to solve technical problems that might occur within the learning activity. Not only will tutors need to adapt their material and teaching content, they will also have to help students to adjust their expectations of the course.

The next level is dealt with the skill to create a sense of community in their classroom. Teacher and students are part of a community at school or more specifically in the classroom where interaction and engagement is the required. Learning is not only about transferring knowledge and information, it is also about how students experience learning through day-to-day activities. Online socialization in this level means the ability of teacher to presents and brings collaboration and interactive learning in a virtual classroom. This activity will determine the quality of the next level, teacher acts as a facilitator toward communicative competence. Teachers are compulsory to provide student-centered learning environment where students are given such freedom to participate in the classroom according to their level or ability. The learning progress does not have to be the same due to the fact that students may belong to either slow or fast learners. More importantly is the teacher have

presented interactive and communicative environment and providing the same opportunities for the students to improve.

The next level is creativity and choice. It is true that the World Wide Web has been heralded as a rich source for enhancing creativity in teaching; however, the information has not been selected yet to determine the most appropriate one for our context. This level is about the skill of selecting the most suitable resources, books or materials available online for student to be used in online learning. Many teachers who have no preparations find it easy to just copy-paste related materials available online without selection process. Last but not least, online teacher will implement all theories and practical skills they have by developing her or his own personal teaching style, using the media and materials to their best advantage, forming a rapport with his or her students and using the resources creatively to promote active and communicative language learning. To get the best picture of these level, the following table is adapted from Hampel and Stickler (2007) who directly provide more practical explanation of each level as follows.¹⁷

- **Basic ICT competence:** The tutor knows how to deal with sound problems, s/he is aware that they could be related to the soundcard, headset, ISP connection, or firewall.
- **Specific technical competence:** The tutor skillfully uses different tools in Lyceum (e.g., by booking virtual “classrooms”, gathering students in front of one screen, importing images on a whiteboard).
- **Awareness of constraints and possibilities:** The tutor knows that the lack of body language makes the use of certain

¹⁷ Ibid.

teaching devices, (e.g., miming), difficult if not impossible. S/he also makes the best use of the multimodality of the medium by combining text chat with audio (e.g., for giving simultaneous written feedback without **interrupting the student's oral contribution**).

- **Online socialization:** The tutor agrees on a “netiquette” for the virtual classroom with the students and encourages them to follow it (e.g., by asking them to “raise their hand” before speaking). S/he is aware that more effort is needed to create a sense of “presence” or “community” online and will encourage students to share responsibility for their virtual space and disclose personal information.

- **Facilitating communicative competence:** The tutor is aware of communicative principles from teaching in a classroom situation and can adapt those to online or “virtual” groups. For example, rather than inviting students to take turns verbally, the tutor could introduce the rule that students speak as soon as the previous speaker has finished. Tutors can also encourage students who find it difficult to speak to make more use of the text chat or other modes of communication.

- **Creativity, choice/selection:** Obviously, creativity will play a strong role in designing activities, but also in the choice and selection of pre-prepared activities. They can be used as designed or the tutor can adapt or replace them with her/his own creations. Creativity is not limited to materials, and tutors

can also find new uses for online tools. In Lyceum, for example, the “yes” button (originally intended for voting) is often used to signal consent to a verbal statement.

• **Development of own style:** Tutors can find the use of online media in teaching languages limiting at first, due to the lack of body language and the resulting restrictions to their “own style” developed in face-to-face settings. With increasing familiarity with the medium and growing confidence on lower skill levels, tutors can find their own style of teaching re-emerging. For example, one tutor who took part in our training found that as the course progressed, his increased sense of security in using the medium and the strengthened cohesion in his group allowed him to release control to the students. They would engage in “tidying” the whiteboard, moving images or text-chunks and even gather the whole class to a different view or module.

However, a critique on the skill pyramid above was delivered by Compton (2009)¹⁸ who believe that the skill in each level does not have to be in sequence and hierarchical. It can be developed concurrently. He further provides an example of level two and three, acquiring specific technical competence and dealing with constraints and possibilities of the medium, which are claimed as the same related issues, technological issues. Once the teachers learn a new software or application for educational purposes, they also deal with the constraints and other technical problems because Compton

¹⁸ Lily K.L. Compton, “Preparing Language Teachers to Teach Language Online: A Look at Skills, Roles, and Responsibilities,” *Computer Assisted Language Learning* 22, no. 1 (February 1, 2009): 73–99.

argues that each application or software has its strength and weakness. The teachers automatically will learn how to handle the weakness that might hinder the operation when it is used. In addition, skill of online socialization and facilitation of communicative competence are also the same issues that can be viewed at the same level simultaneously. Both skills are part of pedagogical issues that can be solved through the selection of appropriate strategies.

The second critique is about the lack of skill dealing with online language learning. It is clearly seen that the only facilitating communicative competence that is specifically related to online language learning. Compton suggest that the skill should consider language learning theories , language learning assessment as well as evaluation which might require certain approach to be adapted in online learning environment. Compton (2009) then proposes a new framework as an attempt to fill the gap from previous studies She divides online language learning into three primary sets: technology in language teaching, pedagogy in language teaching and evaluation of online language teaching. The first set is about technological skills that in accordance with the knowledge or ability to deal with hardware and software issues. The second set is pedagogical skills that relates to the knowledge and ability to conduct as well as to facilitate teaching and learning activities. Lastly, the skill is relevant to evaluative skills that enable ones to assess tasks and entire course as well as modify strategies or methods to achieve the learning objectives. One of the interesting parts of Compton's framework is the idea of expertise levels where those three skills are viewed using their standards or level: novice, proficient and expert. These levels are not static; rather it is a continuum of expertise. Beginners might start from the novice level and adjust all skills based on the novice indicators. The more they experience teaching using this framework, the more experience the teachers will be. It means the higher level of expertise they will gain. The skills within each level can be developed

individually or simultaneously but they are necessary in order to proceed to the next level of expertise.

Those levels are in accordance with the level of ICT competence introduced by UNESCO (2011). They were ranked as (1) beginners (ability to use basic function in a limited number of computer applications), (2) average users (ability to use a number of complex computer applications), (3) and advanced user (ability to competently use a broad range of devices and tools).¹⁹ These three levels seem representative in profiling teachers' skill in technology, pedagogy as well as assessment in recent years.

Another contribution from Compton that will be presented in this section is the description of stakeholders' responsibilities in a distance education system which is beneficial in order to provide an insight for the stakeholders. The following table is adapted from Compton (2009) that mentions eight stakeholders with their own responsibilities as follows:

Table 2: Stakeholders in a distance education system and their responsibilities

Stakeholder	Responsibilities
Student	Self-directing and have learner autonomy
Course developer	Works in a team of specialists including technology, content, media, and instructional design specialists
Site coordinator	Communicates with the teacher, student, and the larger community, organises and manages local circumstances, provides learner

¹⁹ UNESCO, "Unesco Ict Competency Framework for Teachers. (P. Hine, Ed.) (2nd Ed.)" (Paris: The United Nations Educational, 2011).

	support at local site for administrative, technological, and content issues
Tutor	Provides individualized instruction, grade assignments, and monitor student progress
Proctor	Proctors exams and quizzes at local sites
Student support services	Counselor provides guidance; administrative staff provides routine administrative assistance
Management/administration	Manages policy, planning, staffing, budgets, scheduling, resources, etc
Teacher	Humanizes the learning environment, facilitates and encourages interaction, organizes and presents information, and provides feedback

From the table above, it is clearly described that every single stakeholder play crucial role toward successful distance learning. I then imagine if a university tries to recruit or place the right man on the right place by adapting this concept, I believe that online learning will be very interesting and students will find it useful. To sum up, there are three strategies for online language teaching²⁰ to be possessed as follows:

²⁰ Lily K.L. Compton, "Preparing Language Teachers to Teach Language Online: A Look at Skills, Roles, and Responsibilities," *Computer Assisted Language Learning* 22, no. 1 (February 1, 2009): 73–99.

1. Creativity in using and adopting materials. It is the strategy to create new online language materials and tasks to facilitate communicative competence and interactive online interaction.
2. Creativity in facilitating online socialization and community building.
3. Intuitive and integrated assessment of language learning.

C. CALL, TELL AND CMC

This section tries to discuss the term CALL, CMC, TELL and other related terms introduced to technology integration in English language teaching. Initially, the author finds it confusing as many articles use those terms without providing such clear definition and historical background. It is necessary to make the definition clear since the very beginning before exploring further on the contextual use of those terms. Article written by Nguyen (2008) inspires this section a lot and most of the data are adapted from the article.²¹ However, before discussing the characteristics of common terms of technology in English language teaching, it is interesting to see how technology in English language teaching has developed. Healey (2016) gave a crucial contribution through the book by explaining the past, present and future of technology integration in English language teaching and learning.²² The development of many terms such as CAI, PLATO, CALI, CALL, TELL, CMS etc. can be seen from the following table.

²¹ Long V Nguyen, "Computer Mediated Communication and Foreign Language Education: Pedagogical Features," *International Journal of Instructional Technology and Distance Learning* 5, no. 12 (2008): 23–44.

²² Deborah Healey, "Language Learning and Technology: Past, Present and Future," in *The Routledge Handbook of Language Learning and Technology* (New York: Routledge, 2016).

Table 3: Growth in terminology of technology in English language learning

No	Platform/Term		Description
1	CAI	Computer-Aided Instruction	An emphasis on the machine and behaviouristic approach to learners. The machine taught and learners sat and pressed keys in response.
2	PLATO	Programmed Logic For Automated Teaching Operations	It was created in the 1960s at the University of Illinois and became more widespread by the 1970s. The very acronym – ‘Programmed Logic’ – Later implementations included audio and limited graphics.
3	CALI	computer-assisted language instruction	Some early teachers using computers suggested a change of nomenclature to aim at language learning specially.
4	CALL	computer-assisted or computer-aided language learning	Davies and Higgins (1982), among others, suggested these term.
5	CELL	Computer-enhanced language learning	Writers and researchers suggested

			different acronyms.
6	CAW	computer-assisted writing for writing programs	The suggested terms are more specific for certain program.
7	CASLA	Computer applications in second language acquisition	The suggested terms are more specific for certain program.
8	TALL or TELL	Technology-assisted or technology-enhanced language learning	These terms were getting more familiar and commonly used.
9	CMC	Computer-mediated communication	Its emphasis on learners communicating with each other using the Internet.
10	CALL	Computer-assisted or computer-aided language learning,	Did not cover the full extent of what learners do with computers, CMC retained its popularity.
11	TELL	Technology-enhanced language learning	Discussions are ongoing about the most appropriate term to use to describe the new reality of learner/teacher-generated content, web-enabled devices, and mobile technology, The term TELL has reemerged.
12	MALL	Mobile-assisted language learning	Terms with some reference to 'mobile'

			have also become more common, with mobile-assisted language learning.
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If we see the table, it could be understood that the growth of term drastically changed. It really depends on the dynamic of writers' and researchers' discussion that impact the use of those terms. Furthermore, it is truly also influenced by the development of technology. Once internet, for example, has emerged, then some modification of technology occurred that obviously change the terms when it is used in education.

Nguyen (2008) clearly defines CMC as mediational tools and as communication process. As mediational tool, CMC refers to the technological aspects as part of medium for communication, while as communication process, CMC includes aspect of messages, sender and receiver.²³ In addition, Levy (1997) tried to define the term CALL instead of CMC. It is claimed that CALL is the study of computer in language teaching and learning and the computer is not only limited to the computer, but also it embraces any applications of information and communication technology (ITC) that integrates in teaching and learning foreign languages.²⁴ The terminology was latterly unexclusive to the 'canonical' desktop and laptop devices labeled 'computers' but other possible technological tools used in L2 education. In its broader definition, CALL includes a number of technologies such as PCs, mobile phones, electronic whiteboards, all of which have computers of different sorts embedded in them. Other associated terms were coined later on: Internet-Assisted Language Learning (IALL), Web-enhanced language learning (WELL),

²³ Nguyen, "Computer Mediated Communication and Foreign Language Education: Pedagogical Features."

²⁴ M. Levy, *CALL: Context and Conceptualization*. (Oxford: Oxford University Press, 1997).

Technology-Enhanced Language Learning (TELL), and Mobile-Assisted Language Learning (MALL).²⁵ Two different terms such as CALI (Computer-Assisted Language Instruction) and CAI (Computer-Assisted Instruction) was used instead of CALL before the early 1980s.²⁶ Around the early 1990s, alternative terms such as TELL (Technology-Enhanced Language Learning) also emerged. The integration of computers into language teaching caused the emergence of a new term called as Computer Assisted Language Learning (CALL).²⁷

Back to CMC, it has been extensively studied from across disciplinary and methodological perspective that includes processes and tool-use, facilitates information design and delivery, and human-human and human-machine interactions with structural, cognitive and sociocognitive implications.²⁸ CMC, as first coined by Hiltz and Turoff (1978), was originally defined as the process where people create, exchange, and perceive information using networked telecommunications systems that involves encoding, transmitting, and decoding messages.²⁹

To get clearer insight on CMC, the following table reveals type of tools, description, and example of technology tools and as well as use of the tools. Type of tools deal with the function of certain platform, while the example is the product of technology in form of websites, application etc.

²⁵ Al-Kadi, "A Review of Technology Integration in ELT."

²⁶ G. Davies and J. Higgins, *Computers, Language and Language Learning* (London: CILT, 1982).

²⁷ Mehmet Ürün, "Integration of Technology into Language Teaching: A Comparative Review Study," *Journal of Language Teaching and Research* 7 (December 31, 2015): 76.

²⁸ Nguyen, "Computer Mediated Communication and Foreign Language Education: Pedagogical Features."

²⁹ Murray Turoff and Starr Roxanne Hiltz, "Computer Mediated Communications and Developing Countries," *Telematics and Informatics* 5, no. 4 (January 1, 1988): 357–376.

Table 4: Overview of computer-mediated communication tools for the foreign language classroom³⁰

Tool	Description	Example	Use
Course Management System (CMS)	A password-protected website to manage a course	ANGEL, Blackboard, Desire2Learn, WebCT, Moodle, Sakai	To share information for a course; to communicate within a class
Chat/Instant Messaging/Texting	Synchronous communication via the computer or the telephone that is usually text-based	IM (Instant Messenger) AIM (AOL Instant Messenger) Yahoo Messenger Skype	To quickly communicate about something while in different locations
Discussion Forum	Typically asynchronous communication ; posted in an online bulletin board; usually the discussion is displayed in a threaded format	Often part of websites such as a course management sites	To post a thought or a question; to receive feedback from others or to spark an online discussion
E-mail	Electronic mail	Available from a diverse range of providers	To communicate with others asynchronously

³⁰ Senta Goertler, "Using Computer-Mediated Communication (CMC) in Language Teaching," *Die Unterrichtspraxis/Teaching German* 42, no. 1 (2009): 74–84.

			y and to share documents
Blog	Online diary in multimedia format	Blogger.com Edublog.com blogspot.com	To share personal experiences or personal views with a select or unlimited group of readers while giving them the opportunity to comment
Wiki	A collection of web pages where multiple authors can contribute; usually changes are tracked	Wikipedia.org Wikispaces.com	To collaborate with other users to create an information resource on a topic of specialization
Social Networking Site	A network of web pages where community members can create their own site while communicating, sharing, and interlinking with others	Facebook.com MySpace.com StudiVZ.de Youtube.com Teachertube.com Flickr.com Digg.com Twitter.com	To stay in touch with friends, to make new friends, to link people or information, to rank and share information
Virtual	A virtual	Second Life	To meet

Reality Site	environment where users take on a persona and interact with each other		people, to create and explore a new (imaginary) world
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In addition, the study of CMC’s implication on pedagogy has been also investigated widely. This type of synchronous and asynchronous CMC is also explored through several studies. Synchronous means students are directly join or log in and participate in class at specific time that has been decided by the teacher. It is live meeting. On the other hand, asynchronous means students are allowed to view instructional materials each week at any time they prefer to log in. It is not live videoconference meeting. In addition to pedagogical implication, there are six benefits for students in using CMC: it increases students’ motivation, it support active learning, it promotes reflective learning, it enhances learner autonomy and it foster collaborative learning. Further details on sample of research and mode are presented in the following table.

Table 5: Pedagogical features of CMC³¹

Pedagogical features of CMC	Sample research publications	Mode of CMC	
		SCMC	ACMC
Increase motivation	Lee, 2004; Schwienhorst, 2004; Smith, 2003	√	
	Sotillo, 2000	√	√
	Weasenforth,		√

³¹ Nguyen, “Computer Mediated Communication and Foreign Language Education: Pedagogical Features.”

	Biesenbach-Lucas, & Meloni, 2002		
Support active learning	Warschauer, 1996	√	
	Lee, 2005	√	√
	Bikowski & Kessler, 2002		√
Promote reflective learning	Swaffar, Romano, Markley, & Arens, 1998	√	√
	Jonassen, 2004; Weasenforth, Biesenbach-Lucas, & Meloni, 2002		√
Enhance learner autonomy	Arnold, 2002; Payne & Whitney, 2002; Warschauer, 1996	√	
	Beauvois, 1995; Schwienhorst, 2004	√	√
	Chiu, 2008		√
Foster collaborative learning	Darhower, 2002; Leahy, 2008; Warschauer, 1997	√	√
	Abrams, 2005; Savignon & Roithmeier, 2004; Weasenforth et al., 2002		√

Apart from pedagogical impact, the use of CMC also influences the language areas or components in writing, reading, speaking and listening. The following table reveals some studies that focus on investigating CMC's benefit to the language components.

Table 6: Benefits of CMC in language skill development³²

Language skills	Sample research publications	Mode of CMC	
		SCMC	ACMC
Writing	Li, 2000	√	
	Blake, 2000	√	√
	Davis & Thiede, 2000; Meunier, 1998		√
Reading	Godwin-Jones, 2008; Greenfield, 2003	√	
	Fotos, 2004; Gruber-Miller & Benton, 2001	√	√
Speaking	Stockwell, 2003	√	
	S. Chun, 2003; Jepson, 2005; Payne & Whitney, 2002; Tudini, 2005	√	√
	Abrams, 2003; Dussias, 2006		√
Listening	Volle, 2005	√	

In addition, the influence of CMC on language skill development has also been studied especially on grammar, vocabulary and pronunciation as presented as follows:

Table 7: Benefits of CMC in language areas or components³³

Language area or components	Sample research publications	Mode of CMC	
		SCMC	ACMC
Grammar	ax, 2003; Fiori, 2005; Fitze, 2006; Kern, 1995;	√	

³² Long V. Nguyen, "Computer Mediated Communication and Foreign Language Education: Pedagogical Features," *International Journal of Instructional Technology and Distance Learning* 5, no. 2012 (2008), accessed October 19, 2021, http://www.itdl.org/Journal/Dec_08/article02.htm.

³³ Ibid.

	Lee, 2006; M. R. Salaberry, 2000; Sotillo, 2005; Van Deusen-Scholl, Frei, & Dixon, 2005		
	Abrams, 2003; Dussias, 2006; Honeycutt, 2001; Sotillo, 2000	√	√
	Gonzalez-Bueno & Perez, 2000; Li, 2000; Shang, 2007		√
Vocabulary	Fitze, 2006; Fuente, 2003; Toyoda & Harrison, 2002	√	
	Fotos, 2004; Li, 2000		√
Pronunciation	Jepson, 2005	√	

D. Research on Technology Integration in ELT

It is undeniable that technology has significant implication on education, not only in the curriculum, but also pedagogical practice that leads to the need of teaching method and strategy adaptation. In this section, the review of related literatures on technology integration in English language teaching is presented. Benefits and challenges of implementing technology in English teaching are also discussed.

Mustafa (2018) released the finding of his research on students' perspectives to use technology in their classroom. The finding shared that there was 88.88% of students who believed that technology-based instruction is necessary and it should be implemented in language learning process. In addition, they also stated that they had a strong positive opinion on the contribution of technology in improving their learning quality. However, once they were asked about the need of traditional method of teaching, they also still

required the use of that method in combination with the technological pedagogy.³⁴

Dwiono et.al (2018) conducted a research on the use of ICT by English teachers. Observation and interview was conducted and it was found that most of the teachers, 87%, dominantly were in the beginner level.³⁵ It indicates that the teacher primarily employ a basic features of presentation, word processor software such as PowerPoint and Microsoft word and other digital resources. As suggested by Puentedura (2006) that there are four level of ICT use in English language teaching: Substitution, Augmentation, Modification and Redefinition.³⁶ Substitution deals with application of technology for a task that could be accomplished without technology. It means that it is direct tool substitute with no functional change. Augmentation is defined as a technological improvement for a task that could be completed without technology. So, functional improvement is existed. Modification allows for a pre-existing task to be significantly altered in a way not possible without technology. Finally, redefinition would be the creation of a completely new task not possible without the technology. In terms of these levels, the study confirmed that the most dominant use of ICT integration level is substitution and augmentation level. To sum up, the findings are the reflection of a limited number of computer application used by the teachers with only little change and improvement.

Similar study was done by Gao et.al. (2009) who found that the majority of pre-service teachers were unable to translate the theory of

³⁴ Elhadi Nasr Elhadi Mustafa, "The Impact of YouTube, Skype and WhatsApp in Improving EFL Learners' Speaking Skill," *International Journal of Contemporary Applied Researches* 5, no. 5 (2018): 14.

³⁵ Rija Dwiono, Dewi Rochsantiningsih, and Suparno Suparno, "Investigating the Integration Level of Information and Communication Technology (ICT) in the English Language Teaching," *International Journal of Language Teaching and Education* 2, no. 3 (December 1, 2018): 259–274.

³⁶ Ruben R Puentedura, "SAMR: Moving from Enhancement to Transformation" (2013): 30.

ICT integration into teaching practice. They frequently employed ICT to improve and enhance teacher centered instruction on a regular basis during the teaching practicum which is not effective learning and in contrast with the aim of technology utilisation toward an effective and efficient learning. Fortunately, three of them were able to use ICT to engage their students in student centered learning. They started to demonstrate their leadership potential to affect others to use ICT for improving the quality of student learning. The findings suggest that pre-service teachers may need more guidance, modeling and collaboration to develop a better understanding of technology based pedagogy from their own practice so that they can synthesize their constructivist orientation, student centered teaching approaches, and effective use of ICT.³⁷

Another study was conducted by Zainal (2012) on the benefits of technology integration in learning literature.³⁸ The study revealed that there are four functions of ICT integration in teaching foreign language such as literature. First, it can be functioned as an aid to comprehension. Second, it is used to promote learners' responses. Third, it enables students to have language awareness. Lastly, it is pivotal to increase students' motivation.

Zhao (2003) also revealed that, at least, there were four benefits of utilizing technology into English teaching.³⁹ First, it eases students to access online resources. The access will be more efficient as open resources are available on the internet where students are able to

³⁷ Ping Gao et al., "Developing a Better Understanding of Technology Based Pedagogy," *Australasian Journal of Educational Technology* 25, no. 5 (November 11, 2009), accessed August 17, 2021, <https://ajet.org.au/index.php/AJET/article/view/1117>.

³⁸ Azlin Zainal, "ESL Teachers' Use of ICT in Teaching English Literature: An Analysis of Teachers' TPCK," *Procedia - Social and Behavioral Sciences* 34, Languages, Cultures and Virtual Communities Les Langues, les Cultures et les Communautés Virtuelles (January 1, 2012): 234–237.

³⁹ Yong Zhao, "Recent Developments in Technology and Language Learning: A Literature Review and Meta-Analysis," *CALICO Journal* 21, no. 1 (2003): 7–27.

access them through multimedia technologies. The second benefit is the opportunity to practice communication in two different ways: via computer or directly with other speakers through video conference application or other computer media communication tools.⁴⁰ The third benefit revealed in her research is the possibility to gain feedback including grammar checker, spelling checker, and pronunciation corrector through automatic speech recognition. Foreign language learners are also able to learn grammar, spelling check and dictionary functionality as well as to maintain communication with teachers and peers to increase their academic activities.⁴¹ Furthermore, it is also easy for us to scan the grammatical errors of a long written text to improve the quality of writing. The fourth advantage is the role of ICT in increasing students' motivation. This advantage seems in relevant with the study conducted by Yang and Chen (2007) that reported students' experiences in learning with technology.⁴² Other reasons why most students enjoyed learning with technology are active learning styles, interactivity, self control, motivation and immediate feedback as well as the opportunities to acquire more diverse and practical knowledge. They were in favor learning with technology due to the innovative ways of teaching that the teachers use in the classroom, so the students deeply valued the learning.

Applying technological tools in English language teaching is not as easy as we thought because it requires a learning process to be able to generate technology toward effective learning. Study conducted by Felix (2001) reported that students felt challenged in the beginning

⁴⁰ Tuti Hidayati, "Integrating ICT in English Language Teaching and Learning in Indonesia," *JEELS* 3, no. 1 (2016).

⁴¹ Grainne Conole, "Listening to the Learner Voice: The Ever Changing Landscape of Technology Use for Language Students," *ReCALL* 20, no. 2 (2008): 124–140.

⁴² Shu Ching Yang and Yi-Ju Chen, "Technology-Enhanced Language Learning: A Case Study," *Computers in Human Behavior* 23, no. 1 (January 2007): 860–879.

but found it more and more comfortable and enjoyable after they are accustomed to the technology. In his research, web based learning was applied in the classroom and it enabled students to set off authentic task instantaneously. It was easy to find such rich resources and materials without leaving their computer. All things can be accessed at the same time. Time by time, students are really dependent on the use of technology in their learning for educational purposes or entertainment purposes. They, recently, rely on technological tools in almost entire part of learning.⁴³ Not only students, teachers also believe that their attitudes and beliefs about technology use in teaching and learning brings the biggest impact on their success apart from internal factors such as passion for technology, problem-solving mentality and support from administrators and personal learning networks.

Teachers' own beliefs and attitudes about the relevance of technology to students' learning were perceived as having the biggest impact on their success. Additionally, most teachers indicated that internal factors such as passion for technology, having a problem-solving (mentality) and support from others (administrators and personal learning networks) played key roles in shaping their practices.⁴⁴ It reveals that the existence of technology is inseparable with improvement of educational quality and practices which benefit both students and teachers.

Further research on the advantages of technology integration in English language teaching, particularly on how technology integration provide access to materials, opportunities of communication and motivation, is revealed in the following table adapted from Ürün

⁴³ Conole, "Listening to the Learner Voice."

⁴⁴ Peggy A. Ertmer et al., "Teacher Beliefs and Technology Integration Practices: A Critical Relationship," *Computers & Education* 59, no. 2 (September 1, 2012): 423–435.

(2016).⁴⁵ It contains the review of previous studies. The researchers, tools, methods and the findings on the effect of it are also presented.

Table 8: International Research on Providing Access to Materials

Researcher	Tool	Method	Effect
Bhatti (2013)	e-books (computer)	Two groups received 24 reading lessons either through CALL or through an instructor-led method. Reading skills were measured by pre- and posttests and a paired one-tailed t-test was used to analyze test scores.	CALL was 35% more effective than the traditional instructor led class.
Gobel and Kano (2013)	Gobel and Kano (2013)	The students in the program (N = 230) practiced RWL and took progress tests using a Moodle module (modular object-oriented dynamic learning environment) that also kept records of	RWL had a significant effect on reading rate and vocabulary recognition, but not for general English proficiency.

⁴⁵ Mehmet Ürün, “Integration of Technology into Language Teaching: A Comparative Review Study,” *Journal of Language Teaching and Research* 7 (December 31, 2016): 76.

		<p>their progress (MoodleReader). Student gains in reading rate, vocabulary recognition, and general English proficiency was measured by a test and questionnaire.</p>	
Green and Youngs (2000)	Activities on the internet	<p>Researcher substituted regular classroom instruction with web activities one class period per week for beginning college French and German students for a full semester.</p>	<p>1-Treatment group learnt language at a rate similar to that of their peers in the control groups. 2- the students had a positive experience using the web.</p>
Herron (2000)	Authentic video(for French learners)	<p>One class watched authentic videos in French while the other class followed the regular curriculum without the video.</p>	<p>video helped their first-year college French learners develop significantly better understanding of the target culture.</p>
Green and	Activities on	Substituted regular	1-Treatment

Youngs (2000)	the internet	classroom instruction with web activities one class period per week for beginning college French and German students for a full semester.	group learnt language at a rate similar to that of their peers in the control groups. 2- the students had a positive experience using the web.
Weyers (1999)	Authentic video(for Spanish learners)	One class watched a Mexican television show that met 60 minutes daily for a total of 8 weeks, while the other class followed the regular curriculum without the video.	1-the video group's performance on both listening comprehension and oral production to be significantly better than the regular group 2-The video group also outperformed their counterparts on other measures of communicative competence.
Nutta (1998)	Computer software	Compared instruction from	The ESL students using

		the teacher versus using a multimedia computer program (audio, video, recording capabilities etc.) on tenses in English.	the computer program performed as well or significantly better than their counterparts attending the class.
Sheng-Shiang, HuiChin, and Shih-hsien (2013)	online annotations	Four types of online annotations:(1) marking vocabulary, (2) adding Chinese explanatory notes to unknown vocabulary, (3) marking text information, and (4) adding summary notes to each paragraph.	Marking vocabulary and adding Chinese explanatory notes facilitated recognition and meaning of unknown vocabulary.
Al-Seghayer (2001)	a video clip in combination with a text definition	Vocabulary teaching A video clip+text definition Vs. a picture in combination with a text definition.	Video clip in combination with a text definition is more effective in teaching unknown vocabulary than a picture in

			combination with a text definition.
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Table 9: International Research on Fostering Learner Motivation

Researcher	Tool	Method	Effect
Elsner (2013)	computer-based multilingual storybooks	Experimental European Comenius project of MuViT (Multiliteracy Virtual) The participants were 69 fourth grade pupils from four primary schools in Frankfurt, Germany and Istanbul, Turkey. Pupils were observed(code-switching, solving tasks, self explaining) while working with the software in class.	The findings indicated that the MuViT tools made a significant contribution to multilingual and media education in school.
Plana et al.(2013)	instant short messages via WhatsApp	Experimental 95 B2 level university students in Spain. Reading texts and activities about the texts were sent to the participants via WhatsApp. For ease	90.63% of the respondents acknowledged that their participation in the project increased their motivation to

		of delivery, the texts and comprehension questions were administered through SurveyMonkey Initial Questionnaire(reading habits) A Final Survey(satisfaction)	read in English.
Huang (2013)	online extensive reading (e-book)	Experimental 81 university students in Taiwan read at least one online e-book weekly and turned in reading logs on an online reading forum.	E-book reading had a positive effect on students' motivations in terms of several dimensions: reading efficacy, challenge, curiosity, involvement, reading for grades, and integrative ambition.
Kim (2012)	SCMC	How synchronous computer-mediated communication (SCMC) and face-to-face (F2F) oral interaction influence the way in which	The use of collaborative processes to construct utterances was more predominant

		learners collaborate in language learning and how they solve their communicative problems.	in face-to-face interaction than in SCMC.
Agarwal and Karahanna (2000)	WEB	A researcher-designed survey on cognitive absorption: the state of flow and cognitive engagement(N=288)	The findings supported their hypothesis that cognitive absorption supported by technology motivates students to use technology and as a result to better learn foreign language.
Warschauer (1996)	Computer-based Academic writing	167 ESL and EFL university students enrolled in academic writing classes in either the United States, Hong Kong, or Taiwan	1- indicated a positive attitude toward learning with computers. 2- Even more significant was that in examining the differences in

			motivation scores between classes, it was found that the class with the lowest mean score was the one in which computers were least necessary to the coursework.
Elsner (2013)	computer-based multilingual storybooks	Experimental European Comenius project of MuViT (Multiliteracy Virtual) The participants were 69 fourth grade pupils from four primary schools in Frankfurt, Germany and Istanbul, Turkey. Pupils were observed (code-switching, solving tasks, self explaining) while working with the software in class.	The findings indicated that the MuViT tools made a significant contribution to multilingual and media education in school.
Plana et	instant short	Experimental 95 B2 level university	90.63% of the respondents

al.(2013)	messages via WhatsApp	students in Spain. Reading texts and activities about the texts were sent to the participants via WhatsApp. For ease of delivery, the texts and comprehension questions were administered through SurveyMonkey Initial Questionnaire(reading habits) A Final Survey(satisfaction)	acknowledged that their participation in the project increased their motivation to read in English.
Huang (2013)	online extensive reading (e-book)	Experimental 81 university students in Taiwan read at least one online e-book weekly and turned in reading logs on an online reading forum.	E-book reading had a positive effect on students' motivations in terms of several dimensions: reading efficacy, challenge, curiosity, involvement, reading for grades, and integrative ambition.

Kim (2012)	SCMC	How synchronous computer-mediated communication (SCMC) and face-to-face (F2F) oral interaction influence the way in which learners collaborate in language learning and how they solve their communicative problems.	The use of collaborative processes to construct utterances was more predominant in face-to-face interaction than in SCMC.
Agarwal and Karahanna (2000)	WEB	A researcher-designed survey on cognitive absorption: the state of flow and cognitive engagement(N=288)	The findings supported their hypothesis that cognitive absorption supported by technology motivates students to use technology and as a result to better learn foreign language.
Warschauer (1996)	Computer-based Academic writing	167 ESL and EFL university students enrolled in academic writing classes in either the United	1- indicated a positive attitude toward learning with

		States, Hong Kong, or Taiwan	computers. 2- Even more significant was that in examining the differences in motivation scores between classes, it was found that the class with the lowest mean score was the one in which computers were least necessary to the coursework.
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Table 10: International research on providing opportunities for communication

Researcher	Tool	Method	Effect
Ibanez et al. (2011)	3D multi-user virtual environment	12 non-native Spanish speakers were provided with natural text chatting with non-player characters,	The need for scaffolding was observed. In terms of communication, 3D audio provided a

		<p>textual tagging of virtual objects, automatic reading of texts in learning sequences and the orchestration of learning activities to foster collaboration</p>	<p>strong feeling of immersion.</p>
Alm (2009)	internet blog(German language)	<p>1-The students(N=20) kept a reflective journal and were given the choice of using a blog or an exercise book, 2-writing tasks, including discussing current affairs, completing grammar exercises and podcast reports 3- completed self-reflections on their German skills at the beginning and</p>	<p>1-Most of the students chose to use a blog for their journals and enjoyed the convenience it provided. 2- The students who chose to share their blogs liked the ability to exchange ideas with their classmates.</p>

		end of the course	
Noytim (2010)	Weblogs	Weblogs' role in enhancing EFL students' English language learning in the context of a university in Thailand.	Weblogs fostered students' analytical and critical thinking skills.
Oskoz (2009)	synchronous computer mediated communication (SCMC)	SCMC interactions among intermediate Spanish learners to understand the extent to which learners in SCMC engage in patterns of collaboration similar to those used in F2F.	Learners created their own agenda and focused their attention on the language features that interested them the most rather than their teachers' instructional goals.
Meskill and Anthony (2005)	CMC tools	Experimental The relationship between CMC and foreign language learning.	1-the instructional opportunities afforded by electronic communications make CMC an excellent tool to

			<p>complement live foreign language classes 2- Furthermore, feedback was smoothly integrated into the flow of conversation and students were able to correct their mistakes immediately.</p>
<p>Van Deusen-Scholl, Frei, and Dixon (2005)</p>	<p>CMC 1.0 tools</p>	<p>Experimental Examined the relationship between in-class, online, and out-of-class learning</p>	<p>Learners became part of a community of practice outside the classroom and took on social and communicative roles that are quite different from those inside the classroom.</p>
<p>Lin, Lee and Chen (2004)</p>	<p>Online discussion board in Chinese language arts</p>	<p>Experimental Discussing on a web forum for a total of 12</p>	<p>1- ICT usage has, to a great extent, facilitated the writing skill development. 2-</p>

	instruction	sessions	Online discussion board enabled students to communicate with writers and get quick feedback on their writings.
Chen, Belkada and Okamoto (2004)	Web-based listening environment	Experimental study in order to investigate whether different forms of interactivity affect language acquisition in the Web-based listening environment.	Web-based course helped maximizing students' language learning experiences and enhance their language abilities in English.
Abrams (2003)	synchronous computer mediated communication (SCMC)	Investigated the effectiveness of CMC on oral performance through a quasi-experimental study (96 students taking intermediate German at university level	Students who were exposed to synchronous CMC outperformed the students in the face-to-face group.

Young (2003)	CMC	Mixed methods research methodology 29 students in a Taiwan high school)	The study revealed that the integration of ICT into second language education helped students improve their communication and problem-solving skills through online activities
Harless et al. (1999)	a virtual conversation program in Arabic at the Defense Language Institute	The students interacted with these virtual characters for at least 8 hours per day for 4 days	The participants' reading and speaking skills increased significantly while their listening skill increased convincingly.
Holland (1999)	speech-enabled interactive microworld program	The program allowed the learners of Arabic to construct objects by speaking to the computer	It improved student motivation and oral output.

CHAPTER II

TEACHING SPEAKING, WRITING, LISTENING AND READING WITH TECHNOLOGY

A. Introduction

This section discusses the result of review from previous studies on the use of technology tools in teaching the four English language skills: speaking, writing, listening and reading. The review tries to recommend appropriate technological tools used by the teachers as well as the impact resulted by the technological integration. It is expected that the review provides such practical ideas to the readers on using certain and proven technology tools in teaching English. The section is begun with a long introduction that explains problems of English teaching in learning in those four skills. It is continued by the section of literature review of using certain technology tools in teaching speaking, writing, reading and listening.

Since 2020, I have been teaching Intensive Spoken Communication Practice which is part of speaking course in the beginner level at State Islamic University of Mataram. According to a random survey conducted at class, the students claimed that speaking seemed as the most difficult skill learned at the university compared to other skill. It is surely not a generalization because some students might have such preference and strength in productive skill like speaking rather than those receptive skills. However, it indicates that teaching speaking is more challenging if we look at the students' psychological and cognitive readiness toward speaking. It is confirmed through the study conducted by Bailey (2006) who argues that that learning to speak is harder than the other skills, as speaking occurs in real time and there is no sufficient time for editing and

revising what one wished to say.⁴⁶ Once the words or sentences have been said, then it happened. The speakers should produce other says or sentences if it needs clarification about what have been stated. This process is very complex because it involves speaker and receiver who should ensure that the message is truly received and understood by the receiver or listener.

Relevant finding of research is also pointed out by Muanjayanah (2004) who discusses four main problems of speaking which are more likely experienced as follow:

1. Inhibition. The students feel shy or afraid to make mistake in the class so they tend to avoid speaking either individually or in a group.
2. Nothing to say. Many students experience such “weird” situation when speaking English. Due to the lack of practice and use of the language, they, sometimes, could not think of a single word, so they rather keep silent and have no idea rather than continue talking.
3. Low or uneven participation. Fast learners or talkative students usually dominate the class interaction and engagement. Particularly in large classes and where a few students are dominating the discussion.
4. Mother tongue use. It is not easy to rapidly change the use of mother tongue to target language. It really requires such a long time from the process of acquiring language. Learners find it natural and effortless to use the mother tongue whenever possible in class.⁴⁷

In addition to the problems experienced by the students in learning speaking, there are many characteristics that cause speaking

⁴⁶ Kathleen M. Bailey, “Working for Washback: A Review of the Washback Concept in Language Testing,” *Language Testing* 13, no. 3 (November 1, 1996): 257–279.

⁴⁷ A. Muanjayanah, *The Implementation of Communication Language* (Jakarta: Bumi Aksara, 2004).

English complicated according to Brown as cited in Utami (2021). Each of them will be explained as follows⁴⁸:

1. **Clustering fluent speech.** It is a phrasal not word by word. Learners can arrange their output both cognitively and physically (in breath group) through such as clustering.
2. **Redundancy.** The speaker tends to repeat the some words in explaining the same context. They actually have an opportunity to make meaning clearer by avoiding redundancy of language. Learners can capitalize on this feature of spoken language.
3. **Reduced forms contractions, elisions, reduced vowel, etc.,** they are all form of special problems in teaching spoken English. Students who do not learn colloquial contractions can sometimes develop a stilted, bookish quality in speaking that in turn stigmatize them.
4. **Performance variable.** One of the advantages of spoken language is that the process of thinking as student speaks allowed manifesting a certain number of performance hesitations, pauses, backtracking, and corrections. Learners can actually be taught how to pause and hesitate.
5. **Colloquial language.** Colloquial language and they get practice in producing these forms.
6. **Rate of delivery.** Another salient characteristic of fluency is the rate of delivery. One of student's tasks in teaching spoken English is to help learners achieve an acceptable speed along with other attributes of fluency.
7. **Stress, rhythm, and intonation.** This is the most important characteristic of English pronunciation. The stress-timed rhythm of spoken English and its intonation patterns convey important messages.

⁴⁸ H.D. Brown, *Teaching by Principles: An Interactive Approach to Language Pedagogy (2nded)* (New York: Longman, 2001).

8. **Interaction.** Learning to produce waves of language in a vacuum – without interlocutor – would rob speaking skill of its richest components the creativity of conversational negotiation.

Apart from speaking, the problems also occurred in learning writing. According to Seyabi (2014) there are five main problems experienced by the students in learning writing as follows:⁴⁹

1. **Deciding how to start an essay/paragraph.**

Many students find it difficult how and where to start writing. It is caused by lack of practice and lack of vocabularies. Reading many sources and practice writing is one of the practical solution to easily get ideas on knowing to start writing an idea.

2. **Not knowing how to write a correct English sentence.**

Mastering grammar is crucial toward a good writing. In speaking, people cannot automatically detect the mistake or errors in terms of grammar, however, in reading; readers find it very easy to analyze the errors.

3. **Putting the ideas together in a coherent way.**

After successfully write some sentences or paragraphs, another challenge is putting the ideas in a coherent way. This organization is crucial to have such good and understandable writing. Readers will not be difficult in identifying main ideas and supporting ideas in every single paragraph.

4. **Choosing the right vocabulary to express their ideas and not having enough ideas about the topics that their teachers ask them to write about.**

⁴⁹Fawzia Al Seyabi and Victoria Tuzlukova, “Writing Problems and Strategies: An Investigative Study in the Omani School and University Context” 3 (2014): 12.

Further supporting data is presented by Seyabi (2014) on main problems that students experience in writing as clearly revealed in the table below:⁵⁰

Table 11: Students' experience in writing

No	Problems and difficulties	School	University
1	I have some problems when writing in English.	3.78	3.85
2	I feel overwhelmed when writing: I don't know how to start, how to develop my ideas and how to conclude.	3.58	3.65
3	My biggest problem in writing is deciding how to start the essay/paragraph.	3.49	3.57
4	My biggest problem in writing is not knowing how to write a correct English sentence.	3.29	3.12
5	My biggest problem in writing is putting the ideas together in a coherent way.	3.37	3.39
6	My biggest problem in writing is choosing the right vocabulary to express my ideas.	3.48	3.51
7	My biggest problem in writing is not having enough	3.46	3.66

⁵⁰ Ibid.

	ideas about the topics that my teacher asks us to write about.		
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Another skill explained in this section is listening. Many students also claim that listening is difficult due to several factors such as a distraction. It might come from the external factors such as noise. This is one of the factors that differentiate this receptive skill. This condition might lead to the anxiety where the listeners are not sure with his or her ability to understand the information, concepts, or vocabulary in a message. Noise can be defined as one of the biggest factors to interfere with listening. It is anything that interferes with your ability to attend to and understand a message. There are many kinds of noise, but we will focus on only the four you are most likely to encounter in public speaking situations: physical noise, psychological noise, physiological noise, and semantic noise.⁵¹

Psychological noise means that the distractions to a speaker's message caused by a receiver's internal thoughts. For example, it is not easy to provide such full attention to understand the meanings of a message once individuals are being experienced personal problems that might influence their psychology fitness. The presence of another person to whom individuals feel attracted, or perhaps a person you dislike intensely, can also be psychosocial noise that draws your attention away from the message. Another noise is physiological noise. This type of noise really depends on the body condition. Maybe individuals are listening to a speech in class around noon and they haven't eaten anything. Their stomach may be growling and their desk is starting to look tasty. Maybe the room is cold and they are thinking more about how to keep warm than about

⁵¹ Saylordotorg.github.io, "Why Listening Is Difficult," accessed October 26, 2021, https://saylordotorg.github.io/text_stand-up-speak-out-the-practice-and-ethics-of-public-speaking/s07-03-why-listening-is-difficult.html.

what the speaker is saying. In either case, your body can distract you from attending to the information being presented.

Last but not least is semantic noise. It happens when a receiver feels confused and is not able to understand the meaning of words used by the speakers. It seems you are struggling to search the meaning from their word choices but the speakers always continue to speak and code the information. In this situation, the receiver's attempt to build effective communication is needed. The receiver might interrupt or get the speaker to simplify their sentences or provide a clear and understandable explanation. For example, one of the receivers was listening to a speaker who mentioned using a sweeper to clean carpeting. He/she was confused, as she did not see how a broom would be effective in cleaning carpeting. Later, the receiver found out that the speaker was using the word "sweeper" to refer to a vacuum cleaner; however, in the meantime, her listening was destructed by her inability to understand what the speaker aimed to say. Another example of semantic noise is euphemism. Euphemism is diplomatic language applied for delivering unpleasant information. For instance, if someone is said to be "flexible with the truth," it might take us a moment to understand that the speaker means this person sometimes lies. Further examples of each type of noise can be clearly seen from the following figure adapted from saylordotorg.github.io.

Physical Noise

- Construction activity
- Barking dogs
- Loud music
- Air conditioners
- Airplanes
- Noisy conflict nearby

Psychological Noise

- Worries about money
- Crushing deadlines
- The presence of specific other people in the room
- Tight daily schedule
- Biases related to the speaker or the content

Physiological Noise

- Feeling ill
- Having a headache
- Growling stomach
- Room is too cold or too hot

Semantic Noise

- Special jargon
- Unique word usage
- Mispronunciation
- Euphemism
- Phrases from foreign languages

Figure 2: Type of noise⁵²

⁵² Ibid.

Chen (2013) conducted a research on students' problems in listening.⁵³ In this research, it is obviously stated that the main problem faced by the students in listening is the unfamiliarity of the vocabularies. This relate to the lack of students' mastery of vocabulary that might caused by lack of reading or listening practice. Another problem found in the research was rapid speed rate from the speakers as well as the speakers' accent. These two problems remained very significant because it directly related to how speakers pronounce the words correctly and clearly. Moreover, linking sound between words is also considered as another constraint in listening. Inability to listen linking sound between words can be trained through regular practice in listening west song or native-speaker talk from YouTube, Instagram and other resources.

For more detail finding from Chen (2013), you can carefully pay attention on the data provided in the table below.

Table 12: Students' listening problems

Listening Problems	RJ1		RJ2		RH3	
Unfamiliar vocabulary	25	37%	17	20%	12	16%
Rapid speech rate	19	28%	13	16%	10	13%
Speaker's accent	4	6%	3	4%	4	5%
Linking sound between words	8	12%	7	8%	7	9%
Cannot listen to the next part when thinking about meaning	11	16%	9	11%	6	8%

⁵³ Ai-hua Chen, "EFL Listeners' Strategy Development and Listening Problems: A Process-Based Study," *The Journal of ASIA TEFL* 10, no. 3 (2013): 22.

Cannot segment the speech			8	10%	8	11%
Cannot remember what was heard			10	12%	9	12%
Cannot form a mental image from words heard			4	5%	5	7%
Cannot figure out main ideas of the message			7	8%	8	11%
Lack of background knowledge to understand the intended meaning	1	1%	5	6%	7	9%
Total Entries	68		83	100%	76	100%

In addition to the list of students' problems in listening, the following data is adapted from the study conducted by Nushi and Orouji (2020) who found that there were eleven difficulties pointed out by the students.⁵⁴ The most crucial problems faced the students is unclear sound due to technical problems such as the quality of audio or listening sources. It is then followed by unfamiliarity of vocabulary and losing the concentration due to the noise from internal and external factors. In the final list, an interest on the listening topic is considered as not significantly influential factors. Furthermore, the eleven difficulties could be shortened into three

⁵⁴ Musa Nushi and Fereshte Orouji, "Investigating EFL Teachers' Views on Listening Difficulties Among Their Learners: The Case of Iranian Context," *SAGE Open* 10, no. 2 (April 1, 2020): 2158244020917393.

main categories of difficulties: pronunciation based difficulty, individual characteristic based and content based difficulty. Pronunciation difficulties deal with the clarity of pronunciation spoken by the speakers which really depends on the English accent. Individual difficulties tend to be more specific about individual internal problems or a distraction coming from environment that may disturb listeners' focus or concentration. Content-based problems refer to the ability of students in understanding the topic being discussed or spoken by the speakers. For more specific data, it can be clearly seen from the following figure.

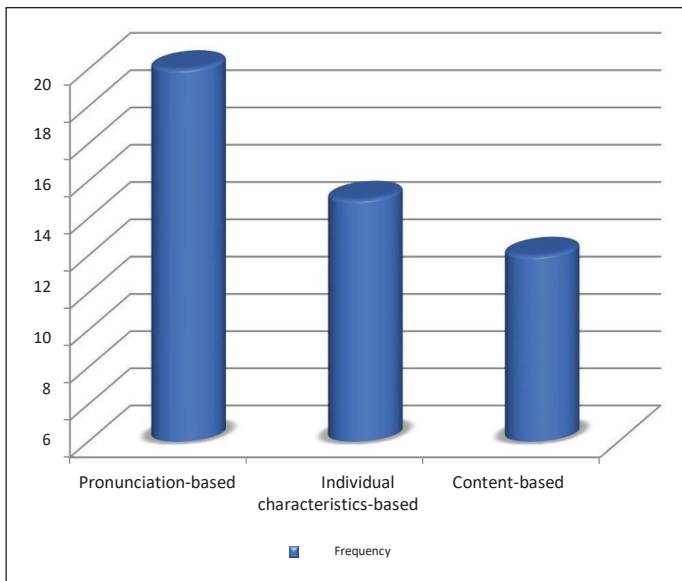


Figure 3: Three main listening difficulties

B. Technology in Teaching Speaking

Nunan (2003) argues that there are six main points that should be internalized as the aim of teaching speaking as follows:⁵⁵

⁵⁵ David Nunan, *Practical English Language Teaching Teacher's Text Book* (Singapore: McGraw-Hill, 2003).

1. Produce the English speech sounds and sound patterns.
2. Use word and sentence stress, intonation patterns and the rhythm of the second language.
3. Select appropriate words and sentences according to the proper social setting audience, situation and subject matter.
4. Organize their thoughts in a meaningful and logical sequence.
5. Use language as a means of expressing values and judgments.
6. Use the language quickly and confidently with few unnatural pauses, which is called as fluency

In chapter 2, we have briefly discussed the idea of technology integration in English language teaching. In accordance to speaking, it is clearly found that the utilization of technology in teaching speaking enable students to enhance their pronunciation and automatically practice orally to correct their pronunciation through some audio-visual media or online pronunciation checker. They might find the native speaker-like tools to practice. In short, the element of speaking introduced by Harris (1974) including pronunciation, grammar, vocabulary, fluency and comprehension⁵⁶ can be improved through the integration of technology in teaching speaking. The result of this research was supported by Bahadorfar, et al., (2014) who states that there are some media and technology that can be used for the students such as; Language Laboratory, Speech recognition software in mobile phone , Internet, TELL (Technology Enhanced Language Learning), Pod casting, Quick Link Pen, Quicktionary, Youtube and Radio.⁵⁷

This section is attempted to reveal the use of several technological tools in teaching speaking. The following example of modern technologies used in teaching speaking is fully adapted from

⁵⁶ D. Harris, *Testing English as a Second Language* (New York: Mc. Graw. Hill Book Company, 1974).

⁵⁷ Maryam Bahadorfar and Reza Omidvar, "Technology in Teaching Speaking Skill," *International Journal of Multidisciplinary Research Review* 2 (April 1, 2014): 9–13.

Kuning (2019) as she revealed a clear explanation on the type of modern technology tools and its description.⁵⁸

Modern technologies available for teachers of English today are:

Table 13: Recommended modern technologies

No	Technology tools	Description
1	Communication lab	Software's are available to develop speaking skills. By incorporating suitable software through computers the students will play it again and again with their own interest and try to improve their speaking skills, which are most essential in this modernized IT world. The usage of headphones in the lab makes the students to have interest over the subject and induces them to repeat again and again instead of feeling boredom.
2	Video conferencing	Video conferencing is the method in which one person can access to the speeches of other persons in some other parts of the world. It is the live relay of a programme, which is mostly used to view the lecture of a professor who resides in foreign country. In short it is very helpful for the students to understand what is going in this world and to hear the speech of the

⁵⁸ Dewi Sri Kuning, "Technology in Teaching Speaking Skill," *Journal of English Education, Literature and Linguistics* 2, no. 2 (2019).

		<p>top most personalities in a lively manner. The most notable point in video conferencing is that the students can post questions immediately and get their answers at once.</p>
3	Video Library	<p>Video Libraries are most essential in our fast and modernized world. This is helpful for the students to those who miss some interesting session. In this process the teaching of the faculty will be recorded and made available to the students. The students can view the tapes in their leisure hours. The advantage in this method is that students can replay it when there is a necessity.</p>
4	CALL (Computer Assisted Language Learning)	<p>The educational role of Computers in learning a second language and the role of CALL (Computer Assisted Language Learning) is significant. The teacher can use the latest technologies, which have the potential to transform the students from passive recipients of information into active participants. CALL is defined as the search for and study of applications of the Computer in language teaching and learning.</p>

5	TELL (Technology Enhanced Language Learning)	TELL (Technology Enhanced Language Learning) is the use of computer technology including hardware, software and the internet to enhance teaching and learning of languages. It allows the students to get access with all the technologies available for the enhancement of English learning. Students are allowed to use online dictionaries, chat, and to view the various happenings around the world.
6	Pod casting	Podcasts can be uploaded or downloaded, this audio help the learner familiarize with the target language and teachers can use them as useful audio material that can be used in class for activities like discussions, besides, in the web, there are even particular podcasts that are for ESL learners and these can include pronunciation for particular needs of students. Podcast undoubtedly help learners in speaking. Pod casting is the integration of audio files where we can feed our own materials and ply it inside and outside of the classroom. Students use i-pods to hear their favorite music files. In the same way they have their education in the form of

		<p>entertainment. Podcasting allows students to use their tech-based entertainment systems for educational purposes. With it we are able to move away from the traditional face-to-face training without losing the student-to-trainer relationship that is so effective in any learning process. Podcasts enables students and teachers to share information with anyone at anytime. An absent student can download the podcast of recorded lesson and is able to access the missed lectures. They could also access lectures of experts which may not otherwise be available because of geographical distance and other reasons.</p>
7	Quick Link Pen	<p>Quick Link Pen allows learners to copy and store printed text, Internet links. It helps to transfer the data to computers and enables the reader to get the meaning of the word from a built in dictionary. Accessing this type of machine seems to be a more convenient method. Recent developments in machine translations presents translation engines like GO Translator and Bablefish.</p>

8	Quicktionary	It is a pen-like device. It allows the reader to easily scan the word and get its definition and translation on its own LCD screen. Technology such as Enounce and Sound-Editor enable learners to adjust the speech rate of listening materials to assist their comprehension, and present spectrum of speech waves and visual depictions of mouth and tongue movement to ease the learning and refine pronunciation.
9	Programmes through educational satellites	In the college we can create Educational Satellite lab, whereby satellite programs of educational value like UGC's country wide classrooms, Anna University programmes and other worldwide programmes are recorded and students are given access to the recording either through big screen or small monitor.
10	Speech Recognition Software	Speech recognition software also helps improving the students 'speaking, this can convert spoken words to machine-readable input. The device recognizes the accuracy of what was read and then provides a positive reinforcement like "You sound great!" or gives the user an opportunity to try again, in this way

		<p>the learner can figure if he is reading well or not. As the user's skill improves, the technology reads less material so that the learner reads more. This software also evaluates and provides scores of grammar, pronunciation, comprehension and provided with the correct forms, for examples if a student mispronounces a word, the learning tool can immediately spot it and help correct it. This device can be a very useful device for distance learners because they don't have a teacher who corrects their speech and this device can help improving their speaking skills.</p>
11	Internet	<p>Internet is a commonly acknowledged term and widely used by people throughout the world. Students now use Internet in the class to learn English. Online teaching inside the classroom seems to be interesting and makes the students to find out the suitable materials for them. Students are instructed to do the grammar exercises which are available online. Through Internet we can collect data from various sources for any instruction. to improve speaking, students can use Skype, MSM</p>

		<p>Messenger, Google talk (used to have conferences on line) and other applications where students can connect with friends, other students, teacher and even native speakers, these ways of learning have been observed to improve oral proficiency in students and make up for the lack of native speakers in the areas where students live and what is more, on line conferences also enhance intercultural awareness, motivation and raise the level of interaction. Over the internet, students can find a lot of learning materials, for instance, audio, video, radio and TV shows, games, voice recordings, quizzes, podcasts and so on , in this way, students get exposed to a great amount of target language and this help them develop their speaking skills.</p>
12	Blogging	<p>Blogging can be used for instructing the candidates when the teacher is off campus. The teacher can post his article or the instruction to the students, where the students are allowed to post their comments and queries. The teacher can answer the question through his blog. Blogging seems to be widely in use.</p>

From Kuning's research, she suggested that modern technological tools are much more interesting and serve such enjoyable and fun learning. It also can be generated to increase students' motivation and help them to enhance their language learning in a fruitful way. In addition, these tools help students learn at their own pace and promote autonomy in them. To close her ideas, Kuning (2019) also provide 5 suggestions due to the advancement of technology and the urgency of technology as the instructional medium as follows:⁵⁹

1. Modern technical ways should be followed for effective learning and teaching of the speaking skill. It has been proven that technology enable students gain such fun learning and skill improvement.
2. English language teachers should encourage their students to use technology in developing their speaking skill. It needs cooperation between teachers and students to design technology based learning.
3. The computer is being viewed more as an integral part of the learning activity, and as a means by which skills are transferred to learners.
4. Theory and practice in second language learning can be matched together by the use of modern technology.
5. Educational institutions should modernize their technical instruction capabilities by using new equipments and laboratories for supporting the teaching process.

Other type of technology tools were introduced by Bahadorfar and Omidvar (2014) who clearly mentioned some recommended tools as well as provided succinct descriptions of the tools. The data

⁵⁹ Ibid.

in the table is fully adapted from their work and presented as it is to present researchers' comprehensive ideas about the tools.⁶⁰

Table 14: Other type of technology tools

No	Technology tools	Description
1	Communication lab	Software's are available to develop speaking skills. By incorporating suitable software through computers the students will play it again and again with their own interest and try to improve their speaking skills, which are most essential in this modernized IT world. The usage of headphones in the lab makes the students to have interest over the subject and induces them to repeat again and again instead of feeling boredom.
2	Speech recognition software	Speech recognition software also helps improving the students speaking, this can convert spoken words to machine-readable input. The device recognizes the accuracy of what was read and then provides a positive reinforcement like "You sound great!" or gives the user an opportunity to try again, in this way the learner can figure if he is reading well or not. As the user's

⁶⁰ Maryam Bahadorfar and Reza Omidvar, "TECHNOLOGY IN TEACHING SPEAKING SKILL," *International Journal of Multidisciplinary Research Review* 2 (April 1, 2014): 9–13.

		<p>skill improves, the technology reads less material so that the learner reads more. This software also evaluates and provides scores of grammar, pronunciation, comprehension and provided with the correct forms, for examples if a student mispronounces a word, the learning tool can immediately spot it and help correct it. This device can be a very useful device for distance learners because they don't have a teacher who corrects their speech and this device can help improving their speaking skills.</p>
3	Internet	<p>Internet is a commonly acknowledged term and widely used by people throughout the world. Students now use Internet in the class to learn English. Online teaching inside the classroom seems to be interesting and makes the students to find out the suitable materials for them. Students are instructed to do the grammar exercises which are available online. Through Internet we can collect data from various sources for any instruction. to improve speaking, students can use Skype, MSM Messenger, Google talk (used to have conferences on line) and other</p>

		<p>applications where students can connect with friends, other students, teacher and even native speakers, these ways of learning have been observed to improve oral proficiency in students and make up for the lack of native speakers in the areas where students live and what is more, on line conferences also enhance intercultural awareness, motivation and raise the level of interaction. Over the internet, students can find a lot of learning materials, for instance, audio, video, radio and TV shows, games, voice recordings, quizzes, podcasts and so on , in this way, students get exposed to a great amount of target language and this help them develop their speaking skills.</p>
4	TELL (Technology Enhanced Language Learning)	<p>TELL is the use of computer technology including hardware, software and the internet to enhance teaching and learning of languages. It allows the students to get access with all the technologies available for the enhancement of English learning. Students are allowed to use online dictionaries, chat, and to view the various</p>

		happenings around the world.
5	Pod casting	Podcasts can be uploaded or downloaded, this audio help the learner familiarize with the target language and teachers can use them as useful audio material that can be used in class for activities like discussions, besides, in the web, there are even particular podcasts that are for ESL learners and these can include pronunciation for particular needs of students. Podcast undoubtedly help learners in speaking. Pod casting is the integration of audio files where we can feed our own materials and ply it inside and outside of the classroom. Students use i-pods to hear their favorite music files. In the same way they have their education in the form of entertainment. Podcasting allows students to use their tech-based entertainment systems for educational purposes. With it we are able to move away from the traditional face-to-face training without losing the student-to-trainer relationship that is so effective in any learning process. Podcasts enables students and teachers to share information with

		<p>anyone at anytime. An absent student can download the podcast of recorded lesson and is able to access the missed lectures. They could also access lectures of experts which may not otherwise be available because of geographical distance and other reasons.</p>
6	Quick Link Pen	<p>Quick Link Pen allows learners to copy and store printed text, Internet links. It helps to transfer the data to computers and enables the reader to get the meaning of the word from a built in dictionary. Accessing this type of machine seems to be a more convenient method. Recent developments in machine translations presents translation engines like GO Translator and Bablefish.</p>
7	Quicktionary.	<p>It is a pen-like device. It allows the reader to easily scan the word and get its definition and translation on its own LCD screen. Technology such as Enounce and Sound-Editor enable learners to adjust the speech rate of listening materials to assist their comprehension, and present spectrum of speech waves and visual depictions of mouth and tongue movement to ease the</p>

		learning and refine pronunciation.
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To sum up this section, additional technology tools such as Youtube, mobile phones and video tapes are also adapted from previous research. It is the same mechanism of presentation that it is fully adapted from the findings of those studies.

Table 15: Other recommended technology tools

1	YouTube ⁶¹	Youtube YouTube is an American online video-sharing platform headquartered in San Bruno, California. YouTube allows users to upload, view, rate, share, add to playlists, report, comment on videos, and subscribe to other users. It offers a wide variety of user-generated and corporate media videos. Available content includes video clips, TV show clips, music videos, short and documentary films, audio recordings, movie trailers, live streams, and other content such as video blogging, short original videos, and educational videos. According to Wikipedia, most of the content on YouTube is uploaded by individuals, but media corporations including CBS, the BBC, Vevo, and Hulu offer some of their material via YouTube as part of the YouTube partnership program. Unregistered users can watch,
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⁶¹ Bunga Nur Primayu Utami, “The Use of Media and Technology to Enhance English Speaking Skill During Pandemic Covid-19 Era,” *International Conference on Education of Suryakencana (IConnects Proceedings)*, no. 0 (March 17, 2021), accessed October 15, 2021, <https://jurnal.unsur.ac.id/cp/article/view/1313>.

		but not upload, videos on the site, while registered users are permitted to upload an unlimited number of videos and add comments to videos. Age-restricted videos are available only to registered users affirming themselves to be at least 18 years old.
2	Messages through Mobile Phones ⁶²	Mobile phones can also be utilized to enrich vocabulary skills by receiving new words daily. There are many apps which can improve their vocabulary and give new words and its origin, thesaurus etc every day. The students needs to link with the websites in their mobile phones and makes the learners to get chance to learn new words regularly. CALL The educational role of Computers in learning a second language and the role of CALL (Computer Assisted Language Learning) is significant. The teacher can use the latest technologies, which have the potential to transform the students from passive recipients of information into active participants. CALL is defined as the search for and study of applications of the Computer in language teaching and learning.
3	Video Tapes ⁶³	Video Tapes helps the learners to learn

⁶² B Waheeda Parveen, "USE OF TECHNOLOGY IN IMPROVING SPEAKING SKILLS," *JOURNAL OF ENGLISH LANGUAGE AND LITERATURE* 3, no. 3 (2016): 4.

		<p>drama, one-act play and monologues where scenes from popular English films can be screened first without any running script on the scene. Then the students are asked to find out the words, script etc., Again the scene will be repeated with the scripts on the scene. This kind of telecasting videotape with and without script makes the students to get access with the pronunciation, accent and word usage of English with interest. This method will make the students to repeat it again in their homes voluntarily.</p>
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C. Technology in Teaching Writing

Writing is a difficult process as it requires several steps namely pre writing, while writing and after writing. In pre writing activity, the authors has to find an appropriate topic based on the target readers, then it is continued to gathering ideas, finding relevant resources as the reference and making a draft or mind map to organize the idea. After completing the entire pre writing, while writing activity is done. Once the author has successfully finished the draft, it then goes to the reviewing process to ensure the structure and content as well as conduct editing process if needed. Last but not least, the author conducts final checking and correction. These all steps are inspired by Randaccio (2013).⁶⁴

Hyland (2008) argues that teachers might employ several steps of writing which can also be part of writing practices process as follows:

⁶³ Ibid.

⁶⁴ Monica Randaccio, "Writing Skills: Theory and Practice," *theory and practice*, no. 7 (2013): 24.

- a. Familiarization. In this stage, learners tend to study a text to understand its grammar and vocabulary to be adapted and used in the writing practice.
- b. Controlled writing. In this stage, the students might manipulate fixed patterns from reputable sources or texts and it is applied in writing practice.
- c. Guided writing. The students imitate model texts – usually filling in gaps, completing texts, creating topic sentences, or writing parallel texts.
- d. Free writing. Students use the patterns they have developed to write an essay, letter, etc.⁶⁵

Several studies have indicated the problems faced by EFL students. Sasmita et.al. (2021) found that there four main problems pointed out by EFL students dealing with writing problems namely writer’s block, difficulty in expressing ideas, feeling less confident and afraid making mistakes. Writer’s block claimed as the biggest problem faced by the students with more than 43%. Moreover, the result of study also reveals that content that includes the unity and coherence of paragraph, the organization and the grammar become the most frequent mistakes and errors experienced by the students.⁶⁶

Another study reveals that there are five types of problems or constraints found in writing: content, organization, grammar, vocabulary and mechanic.⁶⁷ Content indicates the arrangement of sentences as well as the quality of their sentences. Organization deals

⁶⁵ Ken Hyland, “Writing Theories and Writing Pedagogies,” *Indonesian JELT* 4, no. 2 (October 1, 2008): 1–20.

⁶⁶ Yeni Vara Sasmita and Lestari Setyowati, “Problems Faced by EFL Students in Learning to Write,” *Linguista: Jurnal Ilmiah Bahasa, Sastra, dan Pembelajarannya* 5, no. 1 (June 21, 2021): 11–25.

⁶⁷ Rostanti Toba, Widya Noviana Noor, and La Ode Sanu, “The Current Issues of Indonesian EFL Students’ Writing Skills: Ability, Problem, and Reason in Writing Comparison and Contrast Essay,” *Dinamika Ilmu* 19, no. 1 (June 11, 2019): 57–73.

with the arrangement of paragraph toward a coherence and cohesion paragraph. Grammar is about the appropriate tenses used by the author. Vocabulary relates to the word choice, not only about the quality and appropriateness, but also it is about the range of vocabularies. Last but not least, mechanics which relates to punctuation position whether or not the author is able to locate appropriate punctuation in the right position within the paragraphs. The following table is adapted from Toba et.al (2019) which pointed out those main problems mentioned above as well as the student's explanation on the problems they found.⁶⁸

Table 16: Students' problems in writing

Aspects of Writing	EFL Students' Writing		Students' Responses
	Ability (%)	Problem (%)	
Content (30)	75.70	24.30	<ul style="list-style-type: none"> • I feel difficult to get, develop, and relate ideas about similarities and dissimilarities of two objects. • I confuse to write ideas in thesis statement that contained comparison and contrast points. 3. I have understood the structures of comparison and contrast essay, but my difficulties are related to developing ideas based on

⁶⁸ Ibid.

			each structure of essay.
Organization (20)	79.40	20.60	<ul style="list-style-type: none"> • My problem is composing the sentences organization. I do not have basic knowledge on how to write good English sentences. • I do not understand to write comparison and contrast essay. 3. I understood how to organize the comparison and contrast essay, but it is difficult to compose thesis statement on the body paragraph.
Vocabulary (20)	86.55	13.45	<ul style="list-style-type: none"> • Honestly, I still have lack of English vocabulary. I always forget what I have known and memorized when writing took place. • I confuse when using or selecting suitable words based on context in my writing because one word in Indonesia has several meanings in English.
Grammar (25)	74.40	25.60	<ul style="list-style-type: none"> • I have problems in using pronouns and prepositions.

			<ul style="list-style-type: none"> • I have limited knowledge of grammar on how to use suitable tenses in writing comparison and contrast essay. It sometimes make me so confuse whether to use simple present, past, future, or perfect tenses.
Mechanics (5)	66.60	33.40	<ul style="list-style-type: none"> • I do not understand how to use mechanics correctly in essay writing. Secondly, I confuse to locate the correct punctuation marks in my writing composition. • I got problem in spelling when hand-writing took place in the classroom, so that I prefer to use computer or laptop.

There are many types of modern technologies recommended by previous studies. Lin and Yang (2011) found that students explicitly claimed that they felt positive about their writing skill when using Wiki because they were able to get feedback both from teachers and peers to improve their writing ability. They also stated that social interaction through Wiki enabled them to work collaboratively and this type of work was perceived as one of the benefits. However, they encountered such functional and psychological obstacles to use new tools toward technology-enhanced learning systems.⁶⁹

⁶⁹ Wen-Chuan Lin and Shu Ching Yang, "Exploring Students' Perceptions of Integrating Wiki Technology and Peer Feedback into English Writing Courses," *English Teaching: Practice and Critique* 10, no. 2 (July 2011): 88–103.

Another kind of technology tool that can be used in teaching writing is Canva. The qualitative results from a research on the students' voice regarding the advantages of using Canva reveals that it is beneficial to develop the idea, motivation, being confident, being creative, as well as make readers interested in reading the text. They also assumed that using Canva make them easy to understand the meaning of the written text.⁷⁰

Google Docs is also one of the platforms that can be integrated in teaching writing. A study reports that 95% of the students enjoyed learning writing via Google Docs as one of the online writing system. Students claimed that they felt happy as they did not have to print out their draft and submit it during the class. Their writing is more organized with the use of online document tool as a collaborative writing platform which is accessible and interactive. Through Google Docs as the web-based collaborative writing system, students could gain a fast feedback both from the instructor and from their peers.⁷¹

The following statements show students' responses about their experience of writing English essays on the web-based collaborative writing platform of the course.⁷²

- I could use other students' well-written writing as the model writing, so I could check some grammatical or sentence structural errors. (Data from open-ended questionnaire).
- Other students in my class could read my essays and offer me instant advice. In turn, I could read my friend's essay writings. I could improve my English writing skills while

⁷⁰ Audi Yundayani, Susilawati Susilawati, and Chairunnisa Chairunnisa, "Investigating the Effect of Canva on Students' Writing Skills," *English Review: Journal of English Education* 7, no. 2 (June 1, 2019): 169–176.

⁷¹ Kyeong-Ouk Jeong, "A Study on the Integration of Google Docs as a Web-Based Collaborative Learning Platform in EFL Writing Instruction," *Indian Journal of Science and Technology* 9 (October 25, 2016).

⁷² Ibid.

reading other's essays. (Data from the semi-structured interview).

- Compared to other courses, this English writing course using Google Docs was really effective. Every week, this course gave me new ideas and inspired me a lot. (Data from open-ended questionnaire).

The following statements show students' concerns regarding the use of Google Docs.

- Sharing my writing on the web was sometimes embarrassing. When I made some grammatical errors in my essay writing, I felt uncomfortable. (Data from open-ended questionnaire).
- Google Docs was sometimes unstable. Some part of my writing once disappeared while writing online. (Data from open-ended questionnaire).
- I had to wait till another student was writing on the web to avoid accidental crash on the online document. (Data from open-ended questionnaire).
- When I wrote some response comments on others' essay writing using my smart devices, battery problems, typo and unreadability due to small phone size were sometimes perplexing. (Data from the semi structured interview).

In addition, a critical review-based study tried to find the answer of research questions: technology tools widely used to enhance students' writing and the benefits of using those tools. The search was started on Academic Search Premier, ERIC EBSCO, ERIC ProQuest, Google Scholar, and PsychINFO included the keywords education, technology, Web 2.0 tools, online, EFL/ESL writing instruction, AWE tools, CALL, English language learners, and multimodal and digital literacies, and examined references cited in

peer-reviewed papers that covered the topics of technology for writing instruction. The range of the research time was the past twenty years. There were 39 publications were included in the analysis. The following table is the result of literature review studies which found three main categories of technology and Web 2.0 tools found in the literature: (a) Collaboration and presentation tools, (b) evaluation and feedback tools, and (c) organization tools.⁷³ The following table presents the technology tools/websites and the current or previous studies on those three main themes. It is fully adapted from Vicentini and C de Oliveira (2018).⁷⁴

Table 17: List of research on technology tools/website for writing

No	Technology Tools/Websites	Research
1	Collaboration and Presentation Tools	
	Blogs	Blogs are the most prevalent collaborative tools in the literature (Alharbi, 2015; Boling, Castek, Zawilinski, Barton, & Nierlich, 2008; Calvert, 2014; Clark, 2010; Collier, Foley, Moguel, & Barnard, 2013; Davis & McGrail, 2011; Dzekoe; 2017; Kilpatrick, Saulsburry, Dostal, Wolbers, & Graham, 2014; Lacina & Griffith, 2012; Margaryan, Littlejohn, & Voit, 2011; Martin & Lambert, 2015; Mills & Exley, 2014; Miyazoe & Anderson, 2012; Morton-Standish,

⁷³ Cristiane Vicentini and Luciana C de Oliveira, "Using Technology Tools in Writing Instruction" 5, no. 2 (2018): 8.

⁷⁴ Ibid.

		<p>2014; Nobles & Paganucci, 2015). The use of blogs can be of benefit in writing instruction when utilized as multimodal presentation tools, and their instant publication allows creators to edit and revise content easily (Boling et al., 2008). One of the most user-friendly multimodal blogs is Glogster, through which users can create multimedia online posters (Dzekoe, 2017; Kilpatrick et al., 2014). Other multimodal blogs can be created using EduBlogs, KidzWorld, KidBlog, and ThumbScribes (Morton-Standish, 2014). Escrapbooking.com is also suggested as a resource for creating and constructing blogs (Lacina & Griffith, 2012).</p>
	<p>Fan sites and social media pages</p>	<p>Fan sites and tribute pages are also collaborative, multimodal tools in which learners can describe their favorite authors and their work, using images, music, avatars, games, and puzzles. Their use can support writing instruction by facilitating students' engagement with the material and providing a space for them to post testimonials, favorite quotes, and new narratives, which can be additional or related stories involving the same characters as in the original (Unsworth, 2008); Mugglenet is a</p>

		<p>great example of a fan site for Harry Potter books. Another idea to encourage students to write is using “Fakebook pages” (https://www.classtools.net/FB/home-page), where they can pay homage to and celebrate their favorite book characters, historical figures, or authors (Morton-Standish, 2014).</p>
	<p>Movie-making and digital story tools.</p>	<p>MovieMaker, iMovie, and Animoto are other very popular tools referred to in the literature (Baepler & Reynolds, 2014; Calvert, 2014; Clark, 2010; Edwards-Groves, 2012; Kilpatrick et al., 2014; Martin & Lambert, 2015; Mills & Exley, 2014; Nobles & Paganucci, 2015; Yuan & Bakian-Aaker, 2015). These collaborative programs empower students when sharing their stories, while enabling them to post such narratives online (Calvert, 2014; Clark, 2010). Students utilizing technology for storytelling are able to increase their motivation for writing while also improving their language skills (Sessions et al., 2016). Other recommendations for video animations, storytelling, and voiceovers are Powtoon, iStopMotion, Puppet Pals, and Toontastic (Yuan & Bakian-Aaker, 2015), and Knowmia</p>

		<p>and Educreations for recording and creating videos (Kilpatrick et al., 2014). More examples of highly interactive and multimodal storytelling and presentation tools are VoiceThread, Prezi, Flipsnack (Martin & Lambert, 2015); Book Creator (Kervin & Mantei, 2016; Rowe & Miller, 2016; Saulsburry, Kilpatrick, Wolbers, & Dostal, 2015); JayCut (Baepler & Reynolds, 2014); Little Bird Tales, iBooks Author (Kilpatrick et al., 2014), Storybird, Storyjumper, Bookemon (Morton-Standish, 2014), Drawing Pad (Rowe & Miller, 2016), Tellagami (Kervin & Mantei, 2016) and Strip Designer (Kilpatrick et al., 2014). Stories can also be told through the creation of made-up newspaper clippings using Fodey, which can then be published onto websites, wikis, blogs, or Twitter (Kilpatrick et al., 2014).</p>
	<p>Online collaborative writing and storing tools.</p>	<p>The use of Google Docs is also frequently cited in the literature (Bikowski & Vithanage, 2016; Boling et al., 2008; Brodahl, Hadjerrouit, & Hansen, 2011; Calvert, 2014; Dzekoe, 2017; Zhou, Simpson, & Domizi, 2012) as it affords online collaboration in writing and revising documents, as</p>

		<p>well as storage. This type of collaborative technology, which allows simultaneous editing, enables students to negotiate meaning as they work together to write documents online (Bikowski & Vithanage, 2016); the researchers noted how the use of technology helped participants improve their writing and organization skills, while allowing for “flexibility and student experimentation” in the collaborative process (p. 90). Other collaborative tools found in the literature were Etherpad (Brodahl et al., 2011) and Dropbox (, 2013; Kilpatrick et al., 2014).</p>
	<p>Wikis</p>	<p>Wikis are highly useful and user-friendly presentation and collaboration tools mentioned in the literature (Alharbi, 2015; Boling et al., 2008; Kilpatrick et al., 2014; Margaryan et al., 2011; Martin & Lambert, 2015; Miyazoe & Anderson, 2012). As opposed to more traditional pencil-and-paper writing activities, wikis can motivate users to create and share content (Boling et al., 2008). A great tool for sharing multimodal media is Wikispaces (Kilpatrick et al., 2014).</p>
	<p>Discussion boards and forums.</p>	<p>These tools are frequently utilized in hybrid and online environments</p>

		(Alharbi, 2015; Calvert, 2014; Comer, Clark, & Canelas, 2014; Jose & Abidin, 2016; Margaryan et al., 2011; Miyazoe & Anderson 2012). Online forum discussions can increase EFL students' interest and motivation in interacting with others. They also support brainstorming, organization, and revision/editing, and stimulate the creation of original and authentic writing (Jose & Abidin, 2016). Word-of-the-day forums can also be an excellent tool for teaching vocabulary while incorporating discussion opportunities where students can engage with others using the newly acquired lexicon (Calvert, 2014).
	ePortfolios	These digital, multimodal versions of traditional paper-based portfolios, on which users can display artifacts representing their schoolwork, are increasingly growing in popularity. Because they are digital, ePortfolios afford instant publication and revision opportunities (Alshahrani & Windeatt, 2012; Baepler & Reynolds, 2014; Clark, 2010).
	Podcasts	Users can also plan and tell stories using podcasts—digital audio files that can be shared online or through mobile apps (Boling et al., 2008; Margaryan et al., 2011; Mills & Exley,

		<p>2014). One of the most user-friendly tools is GarageBand (Mills & Exley, 2014). While creating their scripts for recording the podcasts, students are utilizing key writing skills for an authentic audience, which can be motivating to learners. A successful example is cited in Boling et al. (2008), where a sixth-grade writing teacher posted his students' podcasts on his Youth Radio blog (https://youthradio.wordpress.com/) in order to connect these young writers to their communities and provide them with a space to share their stories and interests.</p>
2	Evaluation and Feedback Tools	
	<p>Automated writing evaluation (AWE) tools.</p>	<p>In this second category, AWE tools are the most pervasive evaluation and feedback instruments found in the literature. There are several free and commercially available AWE tools, including Grammarly (Nova, 2018) and PaperRater (Paper Rater, n.d.), both of which also have paid versions that provide more advanced feedback features. Educational institutions can make use of commercial tools such as Criterion, MY Access!, Turnitin Feedback Studio and Revision Assistant, W-Pal, and WriteToLearn</p>

		(Burstein, Chodorow, & Leacock, 2004; El Ebyary & Windeatt; 2010; Grimes & Warschauer, 2010; Laing, El Ebyary, & Windeatt, 2012; Landauer, Lochbaum, & Dooley, 2009; Lavolette, Polio, & Kahng, 2015; Li, Link, & Hegelheimer, 2015; Roscoe & MacNamara, 2013). A main advantage of using AWE tools is that students can obtain instant assessment and feedback on their written assignments, which in turn gives teachers more time to focus on other important aspects of writing instruction.
	Annotation tools	Screenchomp is suggested for recording and annotating, functioning like notes you would make on a whiteboard. The work can then be shared with others online (Kilpatrick et al., 2014). VideoANT enables video annotation and feedback, facilitating peer review directly onto the video. Video and written annotations appear side by side in the same document, which enables users to reflect on their scripts and improve their communication skills (Baepler & Reynolds, 2014).
3	Organization Tools	
	Mind maps and graphic organizers.	Popplet is the most widely cited tool found in the literature. It allows users

		to create mind maps, timelines, graphic organizers, and many other ways in which to visually organize information (Kervin & Mantei, 2016; Kilpatrick et al., 2014; Saulsburry et al., 2015; Sessions et al., 2016).
	Online storyboards.	Another excellent tool for the creation of digital outlines of narratives is the use of online storyboards such as StoryboardThat and Storyboard Pro (Morton-Standish, 2014).
	Organization and notetaking tools	Corkulous and Padlet can help students' writing by providing them with tools for notetaking, organization, multimedia, collaborative brainstorming, and editing (Kilpatrick et al., 2014). Notability, Evernote, and UPAD are additional options that allow users to organize their writing, create outlines, and share content (Kilpatrick et al., 2014)

D. Technology in Teaching Listening

Listening is one of receptive skill where EFL students also find it difficult especially when it deals with the native speakers. For many students, increasing their listening skills is the hardest of the four skills to master. Unlike reading, listening happens in real time and it can be hard to control the speed of the information coming at them. They may also have to deal with a range of unfamiliar accents, noise

interference from background environment and the pressure to respond to the person they are listening to.⁷⁵

According to Richards (1983) listening involves several sub-skills that can be presented briefly below:⁷⁶

1. Guessing the topic.
2. Predicting the topic.
3. Note-taking while listening.
4. Asking for repetition to identify main ideas.
5. Asking for slower speech speed to identify main ideas.
6. Scanning for global ideas or gist.
7. Skimming for specific details of who, what, when and where.
8. Guessing meaning from context.
9. Recalling important details.
10. Identifying markers of addition.
11. Identifying markers (i.e. words) of cause and effect.
12. Identifying markers (i.e. words) of clarification/ explanation.
13. Identifying markers (i.e. words) of conclusion.
14. Identifying markers (i.e. words) of comparison.
15. Identifying markers (i.e. words) of contrast.
16. Identifying markers (i.e. words) of exemplification.
17. Identifying markers (i.e. words) of generalization.
18. Identifying what the speaker said.
19. Identifying why the speaker said it.
20. Identifying when the speaker changes the topic.
21. Recognizing parts of speech.
22. Distinguishing between facts and opinions.

⁷⁵ Nik Peachey, "Listening Skills: 10 Online Tools For Developing Your Students' Skills," last modified September 23, 2019, accessed November 1, 2021, <https://oxfordtefl.com/blog/10-tools-for-developing-students-listening-skills/>.

⁷⁶ Jack C. Richards, "Listening Comprehension: Approach, Design, Procedure," *TESOL Quarterly* 17, no. 2 (1983): 219–240.

23. Detecting key words to identify meaning.
24. Distinguishing between literal and implied meaning.
25. Detecting meanings expressed in different grammatical forms.

Looking at the above-mentioned sub skills, listening seems very complex because it involves many aspects from perception of meaning, speaker and listener's interpretation as well as analysis, evaluation and judgment of the spoken words which every listener might find it different. Furthermore, apart from listening skill, internal and external factors might also determine the success of listening. Internal factors can be skill that is acquired through practice and it also involves the concentration. External factor comes from the noisy from environment that contributes to the concentration level. Once the listener is distracted, the listening activity will be stopped.

Apart from required skills, there are some problems found in the context of English teaching and learning to listen. First, the students tend to be unfamiliar with the listening itself such as the topic, diction or pronunciation. It is due to the less frequency of practices. It is just conducted once or twice a month. Second, the students also had a problem with spelling words. It means that they can speak up well, but cannot spell words well. The listening practice will train not only to understand the meaning but also to remind listeners of spelling and correct pronunciation. The last problem, the teacher is rudimentary which gives listening input.⁷⁷ Another study also reveals that there are some major problems embedded in the skill of listening for EFL students.⁷⁸ These problems were derived from a

⁷⁷ R. Dwi Arifa Camelia, Maulana Yusuf Aditya, and Arfiyan Ridwan, "Podcasts: Improving Students' Extensive Listening Skills," *English Teaching Journal : A Journal of English Literature, Language and Education* 9, no. 1 (June 16, 2021): 54–59.

⁷⁸ Dr Awatef Ali Sheir, Najah El Bashir Ali, and Dr Heba Mostafa, "The Effectiveness of Using Technology in Teaching Listening to Libyan Preparatory School Students," *Educational Sciences Journal* (n.d.): 26.

number of factors, which include the inability to cope with the speed of the speech, the inability to ask for repetitions, limited vocabulary, and lack of concentration. More technically, it is also explained that the listeners find several problems that relate to the listening ability, word familiarity and connection of mental representation and input they have. Further explanation is presented below which is adapted directly from Sheih et.al.

1. Quickly forget what is heard.

Students reported that they could not remember certain words and phrases they had just heard. One of the most common complaints was that, although they could understand what was said when they heard it, they would forget it as soon as they began listening to another part of the message. This problem may occur to everyone, especially when the speaker is native speaker.

2. Do not recognize words they know.

The second most frequent problem the students faced during listening was related to a fundamental aspect of comprehension perceptual processing. It is likely that for some of them, sound-to-script relationships have not been fully automatized. Therefore, although they knew certain words by sight, they could not recognize them by sound. Unfamiliarity in connecting words (spelling) and sound of the words can be one of the causes of this constraint. Sometimes, the words are pronounced very quickly and sounds native, so listeners miss the words.

3. Understand words but not the intended message

Students said they were unable to get the full meaning of the message even though they had understood the literal meaning of the words. This is a utilization problem because it is related to the listeners' ability to make useful elaborating inferences or act on the intended meaning of the message. Explicit meaning is a meaning which results from analysis and contextualization process. It is not easily detected if the listener does not involve high-level of thinking

process to gain the hidden or indirect messages from the speaker's utterances.

4. Unable to form a mental representation from words heard.

The last of the five common problems happens at the parsing phase. The students reported that they failed to derive a reasonable mental representation of the input by connecting the words they heard. An ability to connect one word with other words to form an understandable meaning is one of the required skills in listening activities. Sometimes, in a long speech, listeners have to follow along the speaker's speech to gain a complete and comprehensive meaning. In listening IELTS, for example, there is a lecture parts where listener has to wait for full information to be able to answer the questions. During this process, listeners should be able to connect word by word or sentence by sentence to get intended meaning.

5. Other listening problems

Three more problems at the level of perception were found. Students pointed out that they could not chunk streams of speech into recognizable words or phrases. In this situation, listener seems miss the whole information that results missing the intended messages.

To deal with these problems, teachers play very crucial role toward an effective listening environment. According to Mubarok (2015) there are four roles that teacher can maximize in listening class.⁷⁹

1. Organizer

Teacher has to tell students the purpose of their listening and give them clear instructions about how to achieve it.

2. Machine operator

⁷⁹ Husni Mubarok, "The Implementation of Blended Learning Model in Improving Students' Listening Comprehension," *Jurnal Tarbawi* 12, no. 1 (2015): 24.

Teacher in this role becomes operator in playing the audio or video. If teacher does not operate the machine, listening class will break. It happens especially when the class is conducted in language laboratory where most of the system has been centralized in the operator's computer.

3. Feedback organizer

In this role, teacher should give feedback in listening class. This role may happen in pre-listening, whilst, or post listening activity. By giving feedback, students will realize their mistake in understanding the audio.

4. Prompter

When students have listened to a tape or a disk for comprehension purposes, teacher can have them listen to it again for them to notice a variety of language and spoken features.

The following section presents some list of technology tools, application or websites that can be generated to teach listening. This information is fully adapted from Peachey (2019).⁸⁰

Table 18: List of technology tools in teaching listening

No	Application	Description
1	Listen Notes	This is a podcast search engine with a huge collection of podcasts on a wide range of topics. Podcasts are a great source of listening materials for students and can easily be downloaded onto mobile devices for replay at any convenient moment. Listen Notes can help teachers or students to find listening materials that fit their interests. If they log in, students can start to 'curate' collections of different podcast episodes that they like and keep working on their listening skills while

⁸⁰ Peachey, "Listening Skills."

		listening to them whenever is convenient.
2	Accent Rosie	This is a great app for any of your students who use Facebook. It is a simple free app that works with Facebook Messenger and sends students short audio clips. The students have to listen to the audio clip and write down what they hear. They can then send their text back and get instant feedback on how much they got correct. This is a great way for students to regularly work on developing their listening skills.
3	TeachVid	This is another app that combines listening with watching videos. TeachVid uses video from YouTube and builds a range of different activities around them, varying from text reconstruction, translation, multiple choice, jumbled sentences and many more. One of the nice things about TeachVid is that students can choose the types of exercise they want to do for improving specific listening skills.
4	Read Aloud	This is a text to speech voice reader that can be plugged into the Google Chrome or Firefox browser. Adding the plug-in takes a couple of seconds and once added students can go to any webpage and simply click on an icon on the tool bar of the browser. The app will then open and read the text of the page to them. As it

		reads, it highlights the text so students can see the words as they hear them.
5	Synth	Synth is an interesting way to make podcasts more interactive and engaging for students. You can record your podcast, a message, a question or an audio file for your students to listen to and they then have to record a reply, or add to your message. This is a great way to either collect knowledge together or create dialogue with students while developing their listening skills. It can be used on iOS or in the web-browser.
6	Fluid Data	This is a really interesting tool for anyone who is interested in improving their listening skills and learning how different lexical items appear in authentic speech. It is a little like a corpus, but has a wide collection of audio files that can be searched for specific language items. You do this by typing the word or phrase you want to find into the search field. Fluid Data then shows you a list of audio clips with the part of the clip that contains the example phrase highlighted by an orange bar.
7	Listen and Write	This app is similar to LyricsTraining, but has a wider variety of source materials. Again it is based around listening to what you hear and writing it down and like LyricsTraining you can select the level of

		challenge by deciding how many of the words of the script you need to type in.
8	SpeakPipe	This app allows you to create your own short video files, upload them to server and get a link that you can share with your students. This is a great tool for helping students who have specific problems with remembering pronunciation of words or phrases or for recording example sentences or very quick listening activities for students.
9	Video Converter	This is a really useful tool for separating audio from video or for converting files for uses in different formats on different devices

E. Technology in Teaching Reading

Reading is closely associated with the literacy because it involves understanding of texts or information as well as the analytical skill. Reading does not only reveal the ability to finish reading couple of paragraphs, but deals with the understanding on the message and information incorporated in the text. To understand this text, it requires certain level of literacy.

One of the interesting studies dealing with the impact of technology tools on reading habit and literacy was conducted by Olszak (2015).

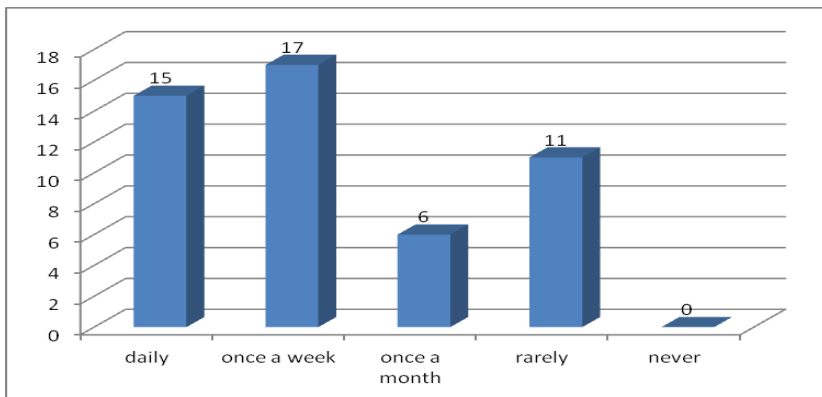


Figure 4: How often do you read books/texts/other materials

The research aimed to investigate EFL adolescents’ attitudes to applying new technologies into reading process as well as seeking to shed light on the relevance and benefits of engaging ICT in the EFL reading classroom.⁸¹ The following data were fully adapted from her research as one of the example of research findings on reading frequency, type of reading resources, reading strategy as well as mostly visited or generated technology tools. Further explanation from the author is also incorporated after the presented data.

According to the data above, frequency of reading book for most of the students was very small which once a week even there are 6 persons stated that they just read a book once a month.

Furthermore, in terms of types of book, students tend to read comedies, fantasy and sensational type of book. It might relevant with the students’ age where they love to watch movies and comedies to have fun and entertainment. In contrast, non-fiction, literature and historical books remained less favorite book for them.

Table 19: What kind of books/texts do you read most often

⁸¹ Izabela Olszak, “The Effect of Online Tools on Reading Habits among Teenage Students,” *English for Specific Purposes World* 16, no. 45 (2015): 12.

Type of material	Frequency %
Comedies	58
Fantasy	53
Sensational	53
Biography, journals	48
Adventure	45
Psychological books	38
Professional journals	35
Non-fiction	28
Literature	25
Historical	20

According to this research, the students employed some strategies when they encounter unfamiliar words. Three most favorite strategies are getting the meaning out of the context, using previous knowledge and checking the meaning using online tools. Getting meaning out of the context means students tried to correlate words by words even guess the meaning. Using prior knowledge means students tried to relate and contextualize the unfamiliar words with existing knowledge or words they have on their memory. Last but not least, students apply technology tools to find the meaning by doing online translation.

Table 20: Reading strategies when encounter unfamiliar words

Type of strategy	Frequency %
Get the meaning out of the context	85
Use previous knowledge	68
Check using online tools	63
Ask other people for help	53
Underline and check	48
Underline and check after reading	28
Skip and read further	28

In addition to internet resources, 75% of students use foreign online dictionaries and English-Polish dictionary. It indicates that students are aware of the importance of technology in helping them understand materials.

Table 21: Internet resources used in reading

Internet resources	Frequency %
Online libraries	28
Digital magazines	35
Foreign online dictionaries	75
Synonym online dictionaries	28
Polish-English dictionary	78
English-Polish dictionary	75
Thematic portals	35
Online encyclopedias	43
Phraseological dictionaries	43
Thematic dictionaries	23
Illustrated dictionaries	10
Educational webpages	35
Database	28
News and portals	50

The last description taken from the research finding mentioned above is the most frequent ICT tools used to finish their homework. Most of the students tend to use websites, students' portal and networking sites to finish their homework.

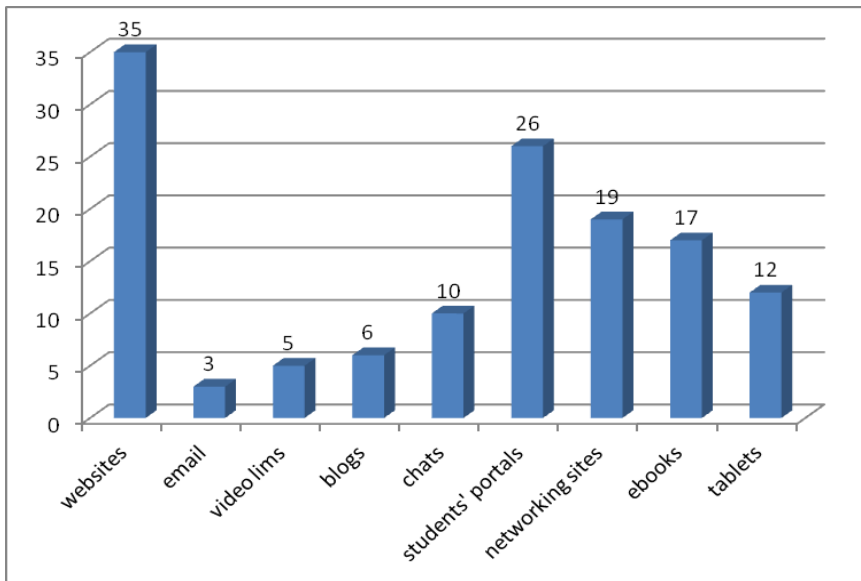


Figure 5: Which ICT tools do you use while doing homework

Many researchers claimed on the benefits of technology in EFL reading classes. Most of the benefits of technology on reading class is the potential of technology to increase students' aspects of motivation, interactivity, authentic material, learners' autonomy, automatic feedback, and thinking skills.⁸² Moreover, it is inevitable that technologies enable to support learning in various ways. Many features of the computer are able to enhance vocabulary development and reading comprehension by using multimedia platforms. Multimedia refers to computer-based systems that use various types of content, such as text, audio, video, graphics, animation, and interactivity. The key concepts of multimedia are thus

⁸² M.D. Ahmed, "The Use of Mobile Phones in Learning English by Sultan Qaboos University Students: Practices, Attitudes and Challenges," *Canadian Journal on Scientific & Industrial Research* 2, no. 3 (2015): 143–152.

'computer-based' and 'interactive'.⁸³ These technologies may be equally as important for older readers, particularly those who have not experienced great success in their school careers. To assess our collective and cumulative knowledge about the impact of digital tools on the reading performance of middle-school students, we conducted a meta-analysis.⁸⁴

Burns (2021) recommended eleven technology tools that are beneficial in teaching reading.⁸⁵ Most of the platforms are very familiar and have specific function.

- Kahoot – *try it* to review literary elements.
- Seesaw – *try it* to for a reflection on reading.
- Spark Video – *try it* for a book trailer.
- Padlet – *try it* for a KWL pre-reading activity.
- Today’s Meet – *try it* for a read aloud backchannel.
- Explain Everything – *try it* for strategy tutorials.
- Nearpod – *try it* for annotating text.
- New York Times VR – *try it* to provide background knowledge.
- Spark Page – *try it* to publish book recommendations.
- Buncee – *try it* for shareable reading responses.
- Popplet – *try it* to organize thinking.
- Spark Post – *try it* for a virtual exit slip.

⁸³ Andreea I Constantinescu, “Using Technology to Assist in Vocabulary Acquisition and Reading Comprehension (TESL/TEFL),” *The Internet TESL Journal* 13, no. 2 (2007), accessed November 1, 2021, <http://iteslj.org/Articles/Constantinescu-Vocabulary>.

⁸⁴ P David Pearson et al., “The Effects of Technology on Reading Performance in the Middle-School Grades: A Meta-Analysis With Recommendations for Policy,” *Learning Point Associates* (2005): 57.

⁸⁵ Monica Burns, “11 Technology Tools for the Reading Classroom - Class Tech Tips,” last modified 2021, accessed November 1, 2021, <https://classtechtips.com/2017/03/04/11-technology-tools-reading-classroom/>.

The following table is recommended websites and platforms for teaching reading. These platforms with description is fully adapted from Educatorstechnology (2016) that comprehensively provide explanation which is very helpful for the readers.⁸⁶

Table 22: Recommended websites and platform in teaching reading

No	Websites/Platforms	Description
1	Reading Rockets	Reading Rockets is a national multimedia project that offers a wealth of research-based reading strategies, lessons, and activities designed to help young children learn how to read and read better. Our reading resources assist parents, teachers, and other educators in helping struggling readers build fluency, vocabulary, and comprehension skills.
2	ReadWriteThink	ReadWriteThink is a great platform that provides a wide variety of educational materials covering different literacy areas including reading, writing, listening and speaking. You can use the integrated search functionality to filter resources based on criteria such as grade level, resource type, themes, learning

⁸⁶ Educatorstechnology, “6 Great Web Tools for Teaching Reading,” *Educational Technology and Mobile Learning*, 2016, accessed November 1, 2021, <https://www.educatorstechnology.com/2016/09/6-great-web-tools-for-teaching-reading.html>.

		objectives and many more.
3	Reading Rainbow	Reading Rainbow® first launched in 1983 as a children’s television series designed to encourage reading...Reading Rainbow, the #1 education service, now offers its fully reimagined library of books, videos, and games for the Web, iPad, and Kindle Fire. With the mission of bringing a passion for reading to Every Child, Everywhere, Reading Rainbow is available at home, in the classroom, and on the go.
4	Reading Bear	Reading Bear is a great tool for helping kids learn to read. Reading Bear integrates both vocabulary practice (over 1200 vocabulary items) and phonetic awareness (covering different phonetic principles and patterns of written English) into their lessons. All of these lessons are provided in the form of narrated presentations playable either as a video or as an interactive slide show.
5	Starfall	Starfall has been teaching children to read with phonics for well over a decade. Our systematic approach, in conjunction with audiovisual interactivity is perfect for preschool, kindergarten, first grade, second grade, special education, homeschool,

		and English language development (ELD, ELL, ESL). Starfall is an educational alternative to other entertainment choices for children.
6	Reading Eggs	The program has been developed by a highly experienced team of educational teachers, writers and developers. The Reading Eggs program focuses on a core reading curriculum of phonics and sight words using skills and strategies essential for sustained reading success. It completely supports what children learn at school and will help to improve your child's results at school.

F. Further Recommendation on Technology Tools in ELT

There are many resources that you can use to teach your lessons, sometimes those tools have been created for English language learners and sometimes they haven't. Remember that technology is not a magic wand that will solve all of your problems. Learning how to Teach English with Technology is more than using a laptop and a projector to display some PowerPoint slides, so here are the best tools to Teach English with Technology that you can use to make classes more engaging.⁸⁷

⁸⁷ José Manuel, "34 Great Ways to Teach English with Technology - EnglishPost.Org," *Https://Englishpost.Org/*, last modified 2021, accessed October 26, 2021, <https://englishpost.org/tools-teach-english-technology/>.

Table 23: Further recommended technology tools

No	Application/Website	Description
1	Quizlet	<p>Quizlet is an online learning tool that lets you create flashcards, short tests and spelling Quizzes, you can take vocabulary lists everywhere or create one according to your language teaching needs.</p> <ul style="list-style-type: none">• Quizlet reads the word and definition to the student out loud and that's how student can learn the pronunciation of the words.• Quizlet makes learning fun because students can play several games to reinforce the learning of new vocabulary.• Quizlet helps student to prepare students for the spelling bee contest, you can easily import excel spreadsheets and start practicing right away• Quizlet helps students practice and test their vocabulary size, they can pick the set and even include the words that they consider more difficult.• Quizlet helps students to become independent learners because

		<p>there are thousands of quizlet sets created by other users.</p> <ul style="list-style-type: none"> You can create Quizlet so students can prepare themselves for tests. I usually do that hoping that the use of the smartphone can help them focus more.
2	Kahoot	<u>Kahoot</u> is a free game-based learning platform that makes it fun to learn, with Kahoot you can create your own quizzes and analyze the score at the end.
3	Quizziz	<u>Quizziz</u> makes it super-easy to create great quizzes in no time.
4	ClassMarker	<u>ClassMarker</u> : ClassMarker's secure, professional web-based Testing service is an easy-to-use, customizable online Test maker for business, training & educational assessment with Tests & Quizzes graded instantly saving you hours of paperwork.
5	Whatsapp Web	<u>Whatsapp Web</u> : This app was created to enhance communication, you can use it to send all kinds of information to students, you also can use it as a forum in specific moments. You can also send dialogues so students go around the classroom talking to others.

6	Google Forms	<u>Google Forms</u> : You can create surveys and quizzes that students can answer from their phone browsers and you will see all the results in a spreadsheet.
7	Microsoft Forms	<u>Microsoft Forms</u> : You can create surveys and quizzes that students can answer from their phone browsers and you will see all the results in a spreadsheet.
8	Your StocK Music Player	Your Phone Stock Music Player : Sometimes you want smart people to create that app that will do everything for you but the truth is that you have to play with what you have, when you have a whatsapp group you can send tracks so students listen and answer questions.
9	Collage Maker App	Your Collage Maker App : You can tell your students to describe a picture or make conversation around a collage you sent via whatsapp. Another idea is that you tell them to make a collage with the vocabulary you just introduced.
10	Phone Audio Recorder	Your Phone audio recorder : Use those things that most people don't use, tell students to record a conversation or to answer questions orally and send them to you via whatsapp
11	GoConqr	GoConqr is a personal learning environment that allows students &

		teachers to create, discover and share learning resources.
12	WordSalad	<u>WordSalad</u> is an app for generating “word clouds” from text that you provide. It lets you tweak the word clouds by changing colors, fonts and words orientation. The app detects the language your text is in, does some magic and draws a pretty picture. Once you have finished crafting your word cloud you can export it on your device or share it with your friends.
13	Quill	<u>Quill</u> Help your students advance from fragmented and run-on sentences to complex and well-structured sentences with Quill Connect. Using the evidence-based strategy of sentence combining, students combine multiple ideas into a single sentence. They then receive instant feedback designed to help them improve the clarity and precision of their sentences.
14	CrossWord Labs	<u>Crossword Labs</u> is a very nice website to create your own crosswords, don't expect others to do them for you. Students can solve them online.
15	Socrative	<u>Socrative</u> is your app for fun and effective classroom engagement. Get instant insight into student learning

		with easy-to-create quizzes, polls, exit tickets and more! Check out the features below to choose the Socratic account that's right for you.
16	Plickers	<u>Plickers</u> This is something I have to give a try one of those days, Plickers is a powerfully simple tool that lets teachers collect real-time formative assessment data without the need for student devices.
17	StoryBird	<u>Story Bird</u> : Simple tools help you build books in minutes. Let the art inspire and surprise you as you write.
18	Powtoon	<u>Powtoon</u> : Make animated explainers for free with <i>PowToon</i> ; <i>PowToon</i> – Make cool animated explainer videos; <i>GetPowToon</i> and make animated presentations.
19	Pixtoon	<u>Pixtoon</u> : The world's most popular and easy to use comic and storyboard creator. Based on creativity, you can teach English through comics, definitely a nice way for students to become.
20	Memrise	<u>Memrise</u> make learning languages and vocab so full of joy and life, you'll laugh out loud. Create your own courses of rich, multimedia flashcards.
21	My Free Bingo Cards	<u>My Free Bingo Cards</u> have the best Bingo Card Generator in the world, popular Number Bingo Games to print or play online, and a

		growing selection of beautiful bingo cards for all occasions. All ther bingo cards can be customized by changing the title, words and even the colour and background.
22	Duolingo	<u>Duolingo for Schools</u> brings the world’s most popular language-learning platform to your classroom. It is 100% and free and it can complement your classes.
23	Vocaroo	<u>Vocaroo</u> is a shiny new service for sending voice messages across the interwebs.Sometimes You can’t listen to all of your students because of time constraints so why not sending them to Vocaroo so they can record an audio and send it to you?
24	Flippity	Flippity: Easily turn a Google™ Spreadsheet into a Set of Online Flashcards and Other Cool Stuff such as: <ol style="list-style-type: none"> 1. Online Flashcards 2. Trivia Game Show 3. Random Name Picker 4. Memory Match Game 5. Word Search 6. Spelling Word Manager 7. Crossword Puzzle 8. Bingo Game
25	Quik	<u>Quik</u> creates awesome videos with just a few taps. Students can choose

		your favorite photos and video clips to create an awesome video that they can show in class.
26	Edmodo	<u>Edmodo</u> is a global education network that helps connect all learners with the people and resources needed to reach their full potential. If your institution doesn't have a website to help students interact with each other, you should give Edmodo a try.
27	Instagram	Instagram: You can easily use instagram to make students practice out of class. You can create an account for educational purposes, publish some photos about a particular topic and ask students to comment on them. You can also upload short video clips explaining a particular aspects of language.
28	Youtube	<u>Youtube</u> has proven again and again to be really helpful to teach language. You can send a video before class so they watch it and get ready for what they are going to study. You can also use videos in class for presentation and practice time.
29	Padlet	Padlet collaborate better and are more productive with Padlet. You can make beautiful boards, documents, and web pages that are easy to read and fun to contribute to. I have used this web app in face-to-

		face and online classes, I like to monitor students as they are writing stuff.
30	Voki	Voki is a fun tool that students can use for homework, classwork or projects. You can Customize their appearance and what they say, and share with others! This app is very useful when you want to do something creative around the speaking abilities that students are trying to develop.
31	Mentimeter	With <i>Mentimeter</i> you can make your audience feel involved by enabling them to contribute to presentations with their smartphones and show the results live. Add polls, word clouds, Q&As, slides and more to your presentations and create an interactive experience for your audience. I have used this to teach online classes and I think polls can generate interesting conversations especially when you are teaching intermediate levels.
32	Word it Out	Another creative way to teach English with technology is using word clouds to teach vocabulary. WordItOut lets you transform your text into word clouds. You can then save and share them, so everybody can find and enjoy them. Wordles can also be used to introduce a topic,

		you can create a wordle around the any topic you want. These are also useful for freer production tasks.
33	Fake Chat Conversations Apps	There are many fake chat conversation apps that you can use to teach English so choose the one that you feel more comfortable with. I think that Fake Chat Conversations app can be really helpful when you want to make sure that students understood the topic. Let's say that you just taught them about Greetings and Introductions and you want to make sure that they understood the lesson. You can ask them to create Fake Chat conversations that they can submit using a Dropbox Link.

CHAPTER III

STUDENTS' PERCEPTION ON THE USE OF TECHNOLOGY IN ENGLISH LANGUAGE LEARNING

A. Introduction

The following data are taken from the survey study conducted in English language education study program, Faculty of Education and Teacher Training, State Islamic University of Mataram in August 2021. In this section, the data are still in a raw due to the limited time to do coding and other qualitative analysis process to be presented in this book. However, the author intends to reveal these raw data in order to attract readers' attention on the students' responses to the utilization of technology especially in higher education. Fortunately, initial analysis and conclusion is also presented to discuss each theme provided in the table. Readers are expected to gain such general ideas on the students' responses in term of the most favorite use of platform, most favorite technology tools and its time allotment, student's feeling on the incorporation of technology in English language learning and most recommended learning platforms, students' problems in learning English using technology and an ideal online teachers expected from the students.

The following tables indicate the result of survey study filled out by the 125 students from semester 3, 5 and 7. They have been exposed to the use of technology in English language teaching and learning especially during the critical time of Covid-19 pandemic. Technology integration is primarily needed to conduct online learning or blended learning when face-to-face (F2F) class is not allowed due to the public policy of school disclosure to avoid the Covid-19 outbreak.

B. Most favorite platform

The use of social media in teaching and learning has grown recently. The students, millennial, are native technology who is able to quickly adjust their skill and competence on the technology tools utilization. A report confirmed that the increasing number of social media utilization for learning in USA has grown up to 21% in 2012 and 2013. Wikis, Blogs and Facebook become the most commonly used platform which reaches almost 70% and 41% between Wikis and Blogs respectively.⁸⁸ In the present data, students assert that Youtube, WhatsApp, Instagram, Facebook, Websites and Tiktok are the preferred media platform in learning English. However, the most frequently mentioned media platform is Youtube. It is in accordance with the previous studies that confirmed Youtube as the most favorite platform for students. It could be a good material and enable teachers to incorporate English lessons. Furthermore, it also enable students to imitate and practice native-like pronunciation and expressions from native speakers. Additionally, the multimodal text in YouTube could play a n essential role in helping learners understand their English lessons.⁸⁹ It is also revealed that Youtube is an effective media platform that can increase students' confidence and expression level because they do not need to worry as they can check such correct pronunciation or expression on how foreigners pronounce or express.⁹⁰ To sum up, existence of Youtube for millennial seems very beneficial.

⁸⁸ Voyce Li, "Social Media in English Language Teaching and Learning," *International Journal of Learning and Teaching* 3, no. 2 (2017): 148–153.

⁸⁹ Wael Abdulrahman Almurashi, "The Effective Use of Youtube Videos for Teaching English Language in Classrooms as Supplementary Material at Taibah University in Alula," *International Journal of English Language and Linguistics Research* 4, no. 3 (2016): 32–47.

⁹⁰ Euis Meinawati et al., "INCREASING ENGLISH SPEAKING SKILLS USING YOUTUBE," *Polyglot: Jurnal Ilmiah* 16, no. 1 (January 30, 2020): 1–13.

Table 24: Most favorite media platform

No	Most favorite media platform
1	WhatsApp, Youtube, Websites
2	Youtube, Other
3	WhatsApp, Youtube
4	Youtube
5	WhatsApp, Youtube, Websites
6	WhatsApp
7	Instagram
8	Instagram, WhatsApp, Other
9	Instagram, WhatsApp, Youtube
10	WhatsApp, Youtube, Websites
11	Instagram, WhatsApp, Youtube, Websites
12	Facebook, Youtube, Websites
13	WhatsApp, Youtube, Websites
14	Facebook, Instagram, Youtube
15	Youtube, Websites, TikTok
16	Youtube, Websites, Other
17	Facebook, Instagram, WhatsApp, Youtube, TikTok, Other
18	WhatsApp, Youtube, Websites
19	Instagram, WhatsApp, Youtube, Websites
20	WhatsApp, Youtube, Websites
21	Instagram, Youtube, Websites
22	Instagram
23	Instagram, WhatsApp, Youtube, Other
24	WhatsApp
25	WhatsApp
26	WhatsApp, Youtube, Other
27	Instagram, WhatsApp, Twitter, Youtube, TikTok, Other
28	Instagram, Youtube, TikTok
29	Instagram, Youtube, Websites
30	WhatsApp, Youtube, Websites

31	Facebook, Instagram, Youtube
32	WhatsApp, Youtube, Websites
33	WhatsApp, Youtube, Websites
34	WhatsApp
35	Instagram, WhatsApp, Youtube, Other
36	Youtube
37	WhatsApp, Youtube, Websites
38	Instagram, Youtube, Websites
39	WhatsApp, Youtube, Websites
40	WhatsApp, Youtube, Websites
41	Instagram, WhatsApp, Youtube
42	Instagram, WhatsApp, Youtube
43	Youtube, Websites, Other
44	WhatsApp, Youtube, Websites
45	Instagram
46	Facebook, Youtube
47	WhatsApp, Youtube, Websites
48	Youtube
49	Youtube
50	Youtube
51	Facebook, WhatsApp, Youtube
52	Instagram, WhatsApp, Youtube
53	Facebook, Instagram, WhatsApp, Youtube
54	Instagram, WhatsApp, Youtube
55	Youtube, Websites, Other
56	Youtube
57	WhatsApp, Youtube, Websites
58	WhatsApp, Youtube, Websites
59	WhatsApp, Youtube, Websites
60	Instagram, WhatsApp, Youtube
61	Youtube
62	WhatsApp, Youtube, Websites

63	Facebook, Instagram, WhatsApp, Youtube, TikTok, Other
64	Instagram, Youtube, Websites
65	Facebook, Instagram, WhatsApp, Youtube
66	WhatsApp, Youtube, Websites
67	WhatsApp, Websites, Other
68	Instagram, WhatsApp, Youtube
69	Instagram, Youtube, Other
70	WhatsApp
71	WhatsApp, Twitter, Youtube
72	Instagram
73	Instagram, Youtube, Websites
74	Facebook, WhatsApp, Websites
75	Instagram, WhatsApp, Youtube
76	WhatsApp
77	Instagram, WhatsApp, Youtube
78	Instagram, Youtube, Websites
79	WhatsApp, Youtube, Websites
80	Youtube, Websites, Other
81	Facebook, WhatsApp, Youtube
82	Instagram, WhatsApp, Youtube
83	Youtube
84	Instagram, WhatsApp, TikTok
85	Facebook, Instagram, WhatsApp, Youtube, TikTok
86	Facebook, WhatsApp
87	Youtube
88	Youtube
89	Instagram, Websites, TikTok
90	WhatsApp, Youtube, Websites
91	WhatsApp, Youtube, TikTok
92	WhatsApp, Youtube, TikTok
93	Instagram, WhatsApp, Youtube
94	Facebook, Instagram, WhatsApp

95	Instagram, WhatsApp, TikTok
96	WhatsApp, Youtube, TikTok
97	Facebook, Instagram, WhatsApp
98	Instagram
99	Websites
100	Facebook, WhatsApp, Youtube
101	WhatsApp, Youtube, Websites
102	WhatsApp, Youtube, Websites, Other
103	Instagram, WhatsApp, Youtube
104	Instagram, WhatsApp, Youtube
105	Youtube
106	WhatsApp
107	WhatsApp, Youtube, Websites
108	Instagram, WhatsApp, TikTok
109	Instagram, WhatsApp, Youtube
110	WhatsApp, Youtube, Websites
111	Instagram, WhatsApp, Youtube
112	WhatsApp
113	Instagram, WhatsApp, Youtube
114	Youtube, Websites, Other
115	Instagram, WhatsApp
116	WhatsApp
117	Instagram, WhatsApp, Youtube, Websites
118	Instagram, WhatsApp, TikTok
119	WhatsApp, Youtube, Websites
120	Instagram, WhatsApp, Youtube
121	Websites
122	WhatsApp, Youtube, Websites
123	Facebook, Instagram, Youtube
124	Youtube
125	Instagram, WhatsApp, Youtube, Websites

C. Most used of technology and time allotment

An interesting information as the result of survey conducted by Databoks.katadata.com (2020) is presented in this section.⁹¹ The use of internet by the students aged 4-24 years for learning is increasing. In 2020, more than 59% students used the internet for learning. This percentage remains higher compared to the percentage in 2016 with online 34%. In terms of school level, the biggest number of users are elementary school students where within 2 years, the students have accessed internet to 36% in 2020. This percentage is higher compared to the data in 2018 with 16.64%. In addition, the use of internet and technology tools also improve in junior high school level that reach more than 74%, senior high school to more than 91% and higher education with more than 95%. These statistics is also revealed in the figure below. The above-mentioned data indicate that internet and technology has become primary need especially during Covid-19 pandemic. Apart from its use for academic purpose, it is also functioned for entertainment and other purposes.

The data revealed in this study indicates that students use three kinds of devices or technology tools namely Smartphone, computer and laptop. However, using Smartphone is more preferable for the students. In terms of time allotment, most of the students allocate time in using technology tools for study in more than 2 hours. In contrast, they use technology devices for entertainment or other purpose with in less than 3 hours.

⁹¹ Databoks.katadata.com, “Penggunaan Internet di Kalangan Siswa Sekolah Semakin Meningkat | Databoks,” last modified 2020, accessed October 30, 2021, <https://databoks.katadata.co.id/datapublish/2021/05/03/tren-siswa-sekolah-menggunakan-internet-semakin-meningkat>.

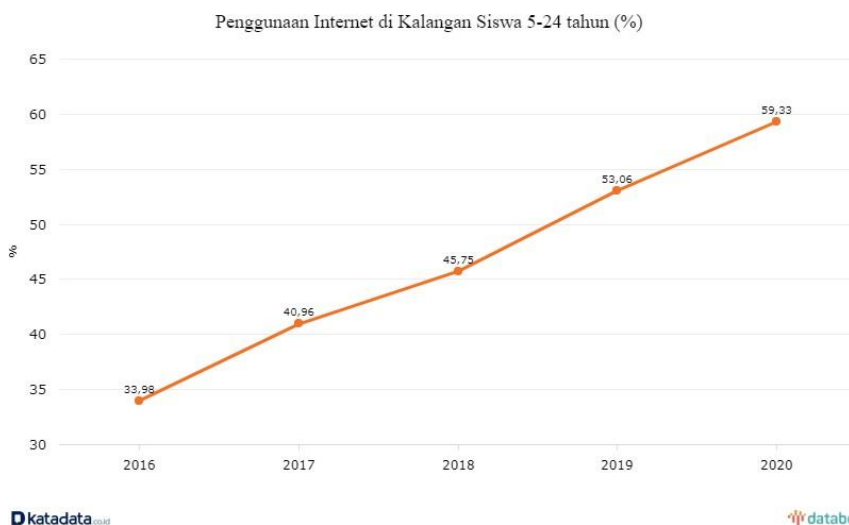


Figure 5: The use of internet by students aged 5-24 years

Table 25: Most used of technology and time allotment

No	Most used of technology tools	Use of technology for study	Use of technology for entertainment and other purposes
1	Smartphone	3-6 hours	3-6 hours
2	Smartphone	3-6 hours	1-3 hours
3	Smartphone	3-6 hours	1-3 hours
4	Smartphone	3-6 hours	Less than 1 hour
5	Smartphone	3-6 hours	Less than 1 hour
6	Smartphone	Less than 1 hour	More than 6 hours
7	Smartphone	1-3 hours	1-3 hours
8	Smartphone	More than 6 hours	1-3 hours
9	Smartphone	1-3 hours	More than 6 hours
10	Smartphone	3-6 hours	1-3 hours
11	Smartphone	3-6 hours	3-6 hours
12	Smartphone	3-6 hours	1-3 hours

13	Smartphone	3-6 hours	1-3 hours
14	Smartphone	1-3 hours	1-3 hours
15	Smartphone	1-3 hours	3-6 hours
16	Smartphone	More than 6 hours	1-3 hours
17	Laptop/computer	1-3 hours	More than 6 hours
18	Smartphone	3-6 hours	3-6 hours
19	Laptop/computer	More than 6 hours	More than 6 hours
20	Smartphone	Less than 1 hour	More than 6 hours
21	Smartphone	1-3 hours	More than 6 hours
22	Smartphone	1-3 hours	3-6 hours
23	Smartphone	Less than 1 hour	1-3 hours
24	Smartphone	1-3 hours	1-3 hours
25	Smartphone	More than 6 hours	More than 6 hours
26	Smartphone	1-3 hours	1-3 hours
27	Smartphone	3-6 hours	Less than 1 hour
28	Smartphone	3-6 hours	1-3 hours
29	Smartphone	3-6 hours	1-3 hours
30	Smartphone	1-3 hours	1-3 hours
31	Smartphone	1-3 hours	3-6 hours
32	Laptop/computer	1-3 hours	Less than 1 hour
33	Laptop/computer	1-3 hours	Less than 1 hour
34	Smartphone	Less than 1 hour	Less than 1 hour
35	Smartphone	Less than 1 hour	Less than 1 hour
36	Smartphone	1-3 hours	Less than 1 hour
37	Smartphone	3-6 hours	3-6 hours
38	Smartphone	More than 6 hours	1-3 hours
39	Smartphone	3-6 hours	Less than 1 hour
40	Smartphone	1-3 hours	Less than 1 hour

41	Smartphone	3-6 hours	1-3 hours
42	Laptop/computer	1-3 hours	1-3 hours
43	Smartphone	3-6 hours	3-6 hours
44	Smartphone	1-3 hours	1-3 hours
45	Smartphone	1-3 hours	1-3 hours
46	Smartphone	1-3 hours	1-3 hours
47	Smartphone	1-3 hours	More than 6 hours
48	Smartphone	1-3 hours	More than 6 hours
49	Smartphone	Less than 1 hour	Less than 1 hour
50	Smartphone	3-6 hours	Less than 1 hour
51	Smartphone	1-3 hours	3-6 hours
52	Smartphone	3-6 hours	1-3 hours
53	Smartphone	1-3 hours	More than 6 hours
54	Smartphone	1-3 hours	1-3 hours
55	Smartphone	Less than 1 hour	1-3 hours
56	Smartphone	3-6 hours	1-3 hours
57	Smartphone	1-3 hours	3-6 hours
58	Smartphone	More than 6 hours	Less than 1 hour
59	Smartphone	Less than 1 hour	More than 6 hours
60	Smartphone	Less than 1 hour	1-3 hours
61	Smartphone	More than 6 hours	1-3 hours
62	Smartphone	1-3 hours	1-3 hours
63	Smartphone	1-3 hours	More than 6 hours
64	Smartphone	1-3 hours	1-3 hours
65	Smartphone	1-3 hours	1-3 hours
66	Smartphone	1-3 hours	1-3 hours
67	Smartphone	Less than 1 hour	More than 6 hours
68	Smartphone	1-3 hours	3-6 hours
69	Smartphone	3-6 hours	3-6 hours
70	Laptop/computer	1-3 hours	1-3 hours

71	Smartphone	1-3 hours	More than 6 hours
72	Smartphone	More than 6 hours	More than 6 hours
73	Smartphone	3-6 hours	3-6 hours
74	Smartphone	1-3 hours	1-3 hours
75	Smartphone	More than 6 hours	3-6 hours
76	Smartphone	1-3 hours	1-3 hours
77	Smartphone	1-3 hours	3-6 hours
78	Smartphone	3-6 hours	3-6 hours
79	Smartphone	1-3 hours	3-6 hours
80	Smartphone	Less than 1 hour	3-6 hours
81	Smartphone	1-3 hours	1-3 hours
82	Smartphone	1-3 hours	3-6 hours
83	Smartphone	1-3 hours	3-6 hours
84	Smartphone	More than 6 hours	Less than 1 hour
85	Smartphone	1-3 hours	3-6 hours
86	Smartphone	3-6 hours	Less than 1 hour
87	Smartphone	1-3 hours	1-3 hours
88	Smartphone	1-3 hours	More than 6 hours
89	Smartphone	Less than 1 hour	1-3 hours
90	Smartphone	1-3 hours	1-3 hours
91	Smartphone	1-3 hours	More than 6 hours
92	Smartphone	1-3 hours	More than 6 hours
93	Smartphone	1-3 hours	3-6 hours
94	Smartphone	1-3 hours	3-6 hours
95	Smartphone	3-6 hours	3-6 hours
96	Smartphone	3-6 hours	Less than 1 hour
97	Smartphone	3-6 hours	More than 6 hours
98	Smartphone	3-6 hours	3-6 hours
99	Smartphone	3-6 hours	1-3 hours

100	Smartphone	1-3 hours	More than 6 hours
101	Smartphone	1-3 hours	1-3 hours
102	Smartphone	1-3 hours	Less than 1 hour
103	Smartphone	1-3 hours	More than 6 hours
104	Smartphone	3-6 hours	More than 6 hours
105	Smartphone	1-3 hours	3-6 hours
106	Smartphone	1-3 hours	1-3 hours
107	Smartphone	1-3 hours	1-3 hours
108	Smartphone	3-6 hours	1-3 hours
109	Smartphone	1-3 hours	3-6 hours
110	Smartphone	1-3 hours	Less than 1 hour
111	Smartphone	3-6 hours	3-6 hours
112	Smartphone	1-3 hours	1-3 hours
113	Smartphone	Less than 1 hour	3-6 hours
114	Smartphone	1-3 hours	1-3 hours
115	Smartphone	3-6 hours	More than 6 hours
116	Smartphone	3-6 hours	1-3 hours
117	Smartphone	3-6 hours	1-3 hours
118	Smartphone	1-3 hours	3-6 hours
119	Smartphone	1-3 hours	1-3 hours
120	Smartphone	More than 6 hours	1-3 hours
121	Smartphone	1-3 hours	3-6 hours
122	Smartphone	Less than 1 hour	1-3 hours
123	Smartphone	3-6 hours	Less than 1 hour
124	Laptop/computer	3-6 hours	1-3 hours
125	Smartphone	3-6 hours	3-6 hours

D. Student's feeling and most recommended platform

Almost all students perceive the use of technology in English language teaching and learning positively. They also recommend Google Classroom as one of the most compatible platform for them.

In addition, the students also recommend WhatsApp as one of mobile-based learning to be utilized in English language teaching. Videoconference based platform such as zoom and Google meet are not strongly recommended by the students. The reasons are dealt with the availability of internet quota and access because videoconference based platform require strong connection and sufficient internet access. Furthermore, the students also do not recommend the use of LMS. It might relate to the frequency of error or trouble in using university LMS (Learning Management System).

Table 26: Students' feeling and most recommended platform

No	Feel motivated in learning with technology	Recommended learning platform
1	Yes	Google Classroom
2	Yes	Google Classroom
3	Yes	WhatsApp
4	Yes	WhatsApp
5	Yes	Google Classroom
6	Yes	Google Meet
7	Yes	LMS
8	Yes	Google Classroom
9	Yes	WhatsApp
10	Yes	Google Meet
11	I don't know	Google Classroom
12	Yes	Google Classroom
13	Yes	LMS
14	Yes	Google Meet
15	Yes	Google Classroom
16	Yes	Google Meet
17	Yes	Zoom
18	Yes	LMS

19	Yes	Zoom
20	I don't know	WhatsApp
21	Yes	WhatsApp
22	Yes	Google Classroom
23	I don't know	WhatsApp
24	I don't know	Google Classroom
25	Yes	WhatsApp
26	Yes	Google Classroom
27	Yes	Google Meet
28	Yes	Google Meet
29	Yes	Google Classroom
30	I don't know	Google Meet
31	Yes	Google Meet
32	Yes	Google Meet
33	Yes	Google Meet
34	Yes	LMS
35	I don't know	Google Classroom
36	Yes	LMS
37	Yes	WhatsApp
38	Yes	Google Classroom
39	Yes	Google Meet
40	No	Google Classroom
41	Yes	Google Classroom
42	Yes	Google Meet
43	Yes	Google Meet
44	I don't know	WhatsApp
45	Yes	WhatsApp
46	I don't know	Google Meet
47	Yes	Google Meet
48	Yes	Google Meet
49	I don't know	LMS
50	Yes	Google Meet

51	I don't know	Zoom
52	I don't know	Google Meet
53	I don't know	Google Classroom
54	Yes	Google Classroom
55	Yes	Google Classroom
56	Yes	Google Meet
57	Yes	Google Classroom
58	Yes	Google Classroom
59	I don't know	Google Meet
60	Yes	LMS
61	Yes	Google Classroom
62	Yes	Google Classroom
63	Yes	Google Classroom
64	Yes	Google Classroom
65	Yes	LMS
66	Yes	Google Classroom
67	Yes	Google Classroom
68	Yes	Google Classroom
69	Yes	LMS
70	Yes	LMS
71	Yes	WhatsApp
72	Yes	Google Meet
73	Yes	LMS
74	Yes	LMS
75	Yes	Google Classroom
76	Yes	Google Classroom
77	Yes	Google Classroom
78	Yes	Google Classroom
79	Yes	Google Classroom
80	Yes	LMS
81	Yes	Google Classroom
82	Yes	Zoom

83	Yes	Zoom
84	Yes	Google Meet
85	Yes	Google Classroom
86	Yes	Google Classroom
87	Yes	Google Classroom
88	I don't know	Zoom
89	Yes	LMS
90	Yes	Google Classroom
91	Yes	LMS
92	Yes	LMS
93	Yes	Google Meet
94	No	Google Classroom
95	Yes	Google Meet
96	Yes	Google Classroom
97	Yes	Google Meet
98	Yes	Zoom
99	Yes	Google Meet
100	Yes	Google Classroom
101	Yes	LMS
102	Yes	WhatsApp
103	Yes	LMS
104	I don't know	LMS
105	Yes	Google Classroom
106	Yes	Google Meet
107	Yes	Google Meet
108	I don't know	Google Classroom
109	No	Google Meet
110	I don't know	Google Classroom
111	Yes	WhatsApp
112	I don't know	LMS
113	I don't know	Zoom
114	Yes	Google Classroom

115	Yes	Google Classroom
116	Yes	WhatsApp
117	Yes	LMS
118	Yes	Google Classroom
119	Yes	WhatsApp
120	I don't know	WhatsApp
121	Yes	WhatsApp
122	Yes	Google Meet
123	Yes	Google Classroom
124	I don't know	Google Meet
125	Yes	Google Meet

E. Students' problems in learning English with technology

There are four main constraints pointed out by the students in the survey namely signal, connection, internet quota and unclear explanation from the teachers which result confusion. These technical problems occurred due to the lack of financial support to the students as well as lack of telecommunication infrastructure provided by the government. Financial support is vital because most students, especially those who live in rural area, really depend on their parent's supports; while the parents are still struggling earn some money for daily needs or primary demand. They, for sure, do not have specific budget allocated for their children internet quota. It means that integrating technology in English language learning is not fully accepted due to some technical problems. In addition, telecommunication infrastructure should be accelerated by the government toward an equality and equity of education.

Table 27: Students' difficulties

No	Students' difficulties
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1	The first problem is signal difficulties, because at any time it can get out of the network and interfere with ongoing lessons. the second, unable to communicate and exchange ideas with friends directly.
2	The fast explanation
3	Internet connection, because the signal always up and down. Then, sometimes I can't joint with the apps what we use to study or when I send a message on WA , it will not send.
4	Connection
5	Internet connection and quota
6	Connection
7	quota and signal problems
8	Sometimes I get error and bad signal, furthermore hoax
9	Do not completely understand
10	Less free to practice freely
11	So far nothing
12	Internet connection
13	I think bad internet connection
14	Especially bad signal and the voice from our lecturer unclear
15	Signal
16	Bad connection
17	Signal
18	I think there's no problem as long as I have quota
19	Limited tools of learning such as the use of apps, sometimes poor connection, and difficult to get assessment of our value
20	internet connection, and a lot of distraction on my phone
21	I found some new application. It sometimes make me confuse how to use it
22	Connection
23	The signal or the platform i use is error
24	ineffective because not many student understand the material
25	signal and quota

26	Sometimes I don't understand
27	I found that people lacks of grammatically correct
28	When I learning English using technology don't feel free to ask that I didn't understand.
29	I seldom find some problems in the technology itself, but i find problem in myself. I'm a moody person, so it makes me not consistent in learning English.
30	Signal
31	Error application
32	signal and quota
33	signal and quota
34	I think in quota internet because in my village nothing network
35	Internet Connection Which often breaks and runs out
36	My problem when I use technology is sometimes lack of understanding of the technology
37	Connection problem
38	I have problem with my connecting
39	Sometimes I feel the signal is not really friendly, we must have internet package which is kind of expensive.
40	The problem I was found when I studying English with technology is if we don't understand the mastery given by lecture we can't to ask directly
41	Constrained by quota, signal etc
42	I think no problems in using technology to learning English
43	Practice.
44	The problems that I often found in learning English are connection, error in platform system.
45	nothing just signal
46	easy to sleep with the light from the technology
47	Less understand

48	I feel difficult to understand and often bed network.
49	Bad network I don't understand the material
50	Sometime, my storage is full because i should saved any files for study and exercise. And the big problem is if my phone have bad internet connection.
51	The problems, when I used technology for studying, I am okay and happy, but I always don't feel enough and satisfied because hands on practice are better.
52	My first problem is my device is not the powerful so I often use the charger, and then when I use technology I got some distraction from some notifications from social media or suddenly call from random people in my contact and also my surrounding is doesn't like what I expect
53	I got plenty of problems when I study English using technology such as internet data, connection, and unclear lesson
54	signal low
55	Internet quota and space on my mobile phone
56	Can't be interact
57	I have problem with data connection
58	Network
59	I have found the technology sometimes error
60	Miss understanding
61	Problems when I learning English using technology 1. Internet quota 2. Easily bored
62	When I try to understand words or sentences in English, I feel like I was wrong even its right
63	There is no
64	Low Signal and need more internet quota
65	When I try to understand the meaning how to use the technology

66	Bad internet connection
67	I don't have many internet quota
68	Signal
69	Mistakes in translate the words that i have unknown.fr
70	Limited tools and time
71	Sometimes it's just about internet quota (internet access) Apart from that, learning through technology is very easy for me
72	To understand the material about writing
73	The problem is the internet connection
74	Data Connection
75	Signal and internet quota
76	Internet access
77	1.No chance to ask the question if we still don't understand about the material (when we learn English use social media such as YouTube, IG, FB, etc) 2. Networking 3. The less ability to operate the technology
78	Lack of practice in English
79	There are some applications which is difficult to use, for example bad connection etc.
80	I don't think much about it. Usually I only learn directly about what I have not mastered through YouTube. I follow a native speaker you tuber and learn a lot from her.
81	There are any problems which I found in learning English using technology. That is : No quote Internet, found any misunderstanding of the lesson, etc.
82	Connection of internet, and internet quota
83	The most problem I got when I was learning using technology is the connection. Sometimes the connection is bad. It causes I can't listen to speaker clearly.
84	can't really understand other people's delivery when talking on

	social media
85	Less understanding, not maximal in learning
86	Interesting method for increase knowledge
87	May be for me it's the internet access only.
88	I think it less communication between students and lectures
89	The problem I found learning English with technology was certainly a network problem and inefficient of understanding matter online
90	I didn't find any problems, it's just a signal interference problem that caused the connection while studying to be disrupted.
91	I think internet connection and some material that I don't understand and need someone else to explain it
92	I think internet connection and some material that I don't understand and need someone else to explain it
93	No signal
94	I'm not understand if I learning online
95	a little difficult to understand because it is not face to face
96	To translate the statement which one I don't know
97	The problem that I got when learned English by using Technology is signals not support in my village and the signals are come and gone
98	the Signal less, doesn't have enough money for buying internet quota
99	Error network, and internet quota not enough
100	signal and sometimes I don't understand how to do that for example we call Gaptek or others
101	The big problem is connection and sometimes the technology do error
102	Internet data package and Internet signal
103	unsatisfactory network
104	Sometimes we got bad signal during online meeting

105	The usually problem is signal
106	The problems that I have found in learning English using technology is the first with network because I often found it when online learning
107	The problems I found in learning English using technology : I don't get the real feeling of studying English. Cause I don't know how the teacher is teaching me. I can't see how the teacher is speaking, and his manner to teach and transferring the knowledge to us. I can follow someone's manner, but no one can correct me if I do wrong in following him.
108	Difficult to understand what the lecture explains
109	The problem I get when learning to use technology is. Lack of access, limited quota. when we give a percentage maybe our signal is lost and so on
110	I am often find a problem if I using the technology such as no signal etc
111	Problems is, we must have internet quota, good signal and good situation during study
112	Problems with signal and quota.
113	Maybe process in delivery
114	Sometimes when we can't access Moodle/LMS because the system is error
115	Connection with internet
116	A common problem that every student experiences in learning to use technology such as smart phones, laptops, and others is signal constraints or weak networks that have an impact on the effectiveness of the teaching and learning activities.
117	Signal
118	I can find a lot of words or vocabularies that I don't know
119	My tasks don't go to my lecturer in Google classroom
120	The problems whom I found in learning English using

	technology are bad network and I understand less the material
121	The poor internet connections, limited balance, and so on.
122	The problems are about the connection.
123	The internet connection
124	Connection and no internet quota
125	It is difficult to learn speaking

F. An ideal online teacher

Research has indicated that many teachers find it hard to incorporate technology into education. It might due to the lack of teachers' exploration on the relationship between pedagogy and technology. Some teachers have put technology and pedagogy as different entity, while they are supported with each other. The ability of using technology should be in line with the ability to teach (pedagogy). Exploring the relationship between technology and pedagogy might raise teachers' and students' critical thinking. At the same time, technology really supports our work effectively and the utilization of technology in classroom can be clearly integrated after conducting need analysis whether the class is appropriate in using technology or not. Students' background is obviously crucial to be considered before deciding which technology will be employed. Technology can only be an effective teaching tool if teachers participate in decisions to adopt technology. This is because teachers have the responsibility of facilitating instruction and incorporating technology at the classroom level, yet many school administrators tend to make decisions related to technology adoption/training without consulting teachers.⁹²

⁹² Joyce Waddell, "The Role of Technology in the Educational Process University," last modified 2015, accessed October 30, 2021, <https://education.msu.edu/green-and-write/2015/the-role-of-technology-in-the-educational-process/>.

Apart from teachers' perspectives, the following table notes the students' expectation or perspectives on an ideal online teacher especially English language teachers or lecturers. There are many criteria that students mention in the present survey. Some of the criteria are guiding, motivating, explaining each lesson in detail and clear, lead students to understand and effective and efficient in delivering materials. These five criteria is not comprehensively representative because there are many other criteria mentioned by the students. However, it can be seen that an ideal online teachers for some students are about teachers' character as well as teachers' approach.

In addition, teaching millennial technology seems like teaching fish to swim. However, teachers have to be creative and innovative in employing such appropriate teaching media and technology in their teaching. In online context, teachers need to play more than just teach, but also as a technician who should be ready when the students ask questions dealing with certain application. There are, at least, nine things that have to recognize by an online English teachers as follows:

1. They have state certification & curriculum expertise
2. They have tech skills
3. They teach creatively
4. They are welcoming
5. They make themselves accessible
6. They provide proactive feedback
7. They are encouraging
8. They are adaptable
9. They teach with passion

Table 28: Ideal online teacher for students

1	The first criteria are: guiding, motivating, and explaining each lesson in detail and clearly so that students understand
2	They explained the lesson with patience and not in a hurry
3	We have to use more interesting media and some methods
4	The teacher who understands how to use technology... Because I've got C a few years ago just because my lecturer doesn't understand how to use Google Classroom
5	Can understand and understand a student's basic ability, student capture, and student learning..
6	Just like Mr Sonny
7	able to guide students until they can
8	Good attitude and responsibilities
9	Who guided me from not being able to being able to be patient
10	Practice freely
11	That can make their students confidents when study English and make the class be not boring. The most important is don't be fierce :)
12	Always motivated me to do the best
13	Creative, innovative, and friendly
14	Friendly and he has some method in study do we will not bored when we study
15	Effective and efficient in delivering materials
16	Diligent and punctual teachers, for the learning process to run optimally.
17	using memes to teach English
18	Professional
19	Responsible, giving the feedback, and active both guiding and leading
20	can make a lot of fun during the online class, and can reduce the task for us (students)

21	Interested ways to teach in English
22	More creatively method to teach
23	Fun, patient and motivated
24	the criteria student must be active for looking something especially the material.
25	The English teacher who can explain us the material easily and can understand us when we have problem with our study in teaching and learning process.
26	Pleasant
27	I hope English teacher Will using more viral in socmed in Case to avoid students get bored , make English learning useful for everyday life
28	I hope, they're teachers who want to be more patient when the students are not understand about the material, and they not angry when we Made mistakes or there are some mistakes in our speaking and grammar. so we can feel free and enjoy to learn English.
29	I hope a discipline teacher of course. Besides that i also hope a fun teacher.
30	I really hope that in the future I Will find English teacher that can make student are feel excited when learning process by interesting method.
31	Care with students and good in delivering materials
32	Communication with all students
33	Communication with all students
34	Yes I hope we can learning offline
35	Hopefully there will be no more online learning
36	Able to make students understand what is being taught
37	Smart use of technology to teach and master the material being taught
38	I hope we can learn in campus thanks

39	That teacher understand how the technology work, and then they can deliver the material nicely and better, and also they can make their student feel comfortable, confidence, and brave to deliver their own opinion.
40	My criteria of good online English teachers I hope in future are: A. I hope lecture more using Google meet to study for our condition now in pandemic era in order we more get understanding and in order if we meet with the lecture in other time we know his/her face in order also we know more about our friends B. Please for the lecture if there is problem we face when the during study please understand our condition
41	Face to face every now and then
42	the lecture who always teach us with fun way, so students can more have fun to study online
43	Whose that always guides us and motivated us of course. And I wish that our English teacher will always attend in our class
44	Maybe the teachers must be open to all of the students who need their help in learning, and understand about the students condition
45	Fun and friendly
46	understanding and not favoritism
47	provide material clearly
48	Calm, i can easy to understand and honest
49	teacher who can guide us to more easily understand the material
50	Online English teachers who have big spirit to teach their students with patient and always thinking that the students must be understanding with their explanation.
51	The important, teachers are always active in teaching

52	I think the criteria are, the teacher more able than students to use technology (no judge and offense), interactive to communicate with students and sometimes greet students not only in class but in free time also and the last is teacher who motivate us and cheerful.
53	I hope the best criteria of future teacher is personal approach to students who are less in mastering the theory
54	the professional & humble teachers
55	Maybe like video call it's much better
56	Care with their student
57	I hope that online English teacher in the future be creative, easy to understand and low budget
58	I hope teachers can make students interesting for learning anything
59	Good in delivering materials
60	I think zoom app is good to used.
61	the teacher is friendly, the material is small but it is explained in an easy and understandable method, so students don't feel bored
62	The teacher that explained the material carefully and clearly. And can solve the problem that I feel like I confused and also the teacher that make the material very simply. Thanks
63	The criteria of good online English teachers I hope in the future is teachers should explain what they send to students at the same time
64	Smart , active and professional
65	If the teacher can make beyond the progress for all student
66	I hope an online English teacher not only give me material, but give me examples in real life and always trying help me to understand the material well.
67	The kind teachers
68	Mixing the methods

69	Easy going teacher, maybe.
70	Able to make me more fluent
71	A teacher who can teach his students fairly and well
72	more Fun with some modern Feature in social media
73	The wise and fun teacher
74	The criteria I hope are that when teacher making games of the material, using blended language when it explain the lesson.
75	Can understand students' problems in learning English and reduce assignments because students look at cell phones too often will cause myopia.
76	the method in learning should be equal to have a good presentation.
77	1.The teacher who are creative in teaching. Using many kind of technique to teach the student. 2.The teacher who has a good communication with the student. Not only attend the class then give the assignment but also attend the class and make a good relation with the student. I think a good teacher is someone who become an idol of their student:)
78	Guiding well and patiently, giving lots of practice
79	I hope that the lecturer can be more creative and make the online class more effective even though through virtual learning.
80	I hope they really know about their entire student. They don't only focus with the good students but they have to know about other students' problem such as what the students concern in learning English or what the difficult things the students have to learn English.
81	The students need a kinds of online English teacher, and stay patients.
82	more better than now

83	My criteria of good online English teacher in the future are the teacher can use a suitable technology, it simplify student to understand the material, it does not troublesome students in learning and something like that.
84	The teacher criteria I want are those who can provide motivation to learn English well, and can motivate me to the spirit of learning.
85	Good attention to the student, listen the complain from the student if they don't understand, explain the lesson clearly
86	Able to explain student how to use it well
87	Creative, innovative, responsibility, and understanding the problems and conditions of their students
88	Always control the students when learning process.
89	Can understand matter and certainly can understand technology
90	Can attract students' attention, so students are interested in the lessons taught by the teacher, Understand the inability of students to the material that has been discussed, Motivate students who are in trouble in learning activities at the end of each lesson.
91	teacher who can make students aware to learn independently
92	teacher who can make students aware to learn independently
93	Be a great teacher
94	I hope not online again
95	who always provide appropriate learning
96	Google meet
97	Understand the condition
98	Back to the main idea of online learning that is to make the student easy to study, so the criteria of good online English teacher is must be suitable from the purpose of online learning.
99	I hope in the future, the teachers can understand to

	student's if the student's get problems in online class
100	maybe more fun again because actually if over serious it's become boring
101	I hope the teachers can understand us when we do mistakes and when we have any trouble. I also hope that the teachers can motivate us to do better
102	Friendly..I think that so
103	A teacher who is cheerful, intelligent and kind
104	May be able to understanding their student condition and ability
105	Give students explanation before task
106	Actually I hope teacher who was consistent when they give material and also explain to us about Its not just give exercise without explanation
107	I hope that I have a good online teacher. Can teach me nicely till I really gets the feeling of offline learning, even we learn online. He really do his job clearly, good delivery, give his attention fully to all his students, discipline, always advise and remind us, kind, show his smiling face, and anything that the teacher thought it's best for us. Thank you Sir.
108	Can make student enjoy the learning process
109	who always teaches us to pass via meet or via zoom. Not through sending materials and assignments.
110	who always understands and understands his students who can't speak English
111	I hope criteria teachers for in the future is, not only just giving students material about English, but also must giving more practice with using zoom meeting or Google meet, also teachers must know about potential students have about English, probably less or more knowledge about it. Also, always give motivation to students why you must study and know about English, so that way probably

	students have reason for more study hard.
112	Good fun and explains all the material clearly and doesn't make you bored in class
113	Give opportunity to students
114	I hope that every teachers can be more active
115	Creatively teacher and not make boring student
116	The criteria for a good online English teacher for me in the future are teachers who can understand how their students deal with online learning. The advantages and disadvantages, constraints, and all kinds related to the learning process must be understood by a teacher.
117	Know more about technology
118	I hope when we do the online class the lecturer or teacher can teach or explain to us well. Not only with assignments where we don't understand the material given
119	The simple one.. Those who can make us understand just by using WhatsApp and YouTube
120	I hope the teacher can understand our difficulty in understand the material in online class and I hope the teacher able to explain the material with efficient not only send the material and give us assignment
121	Always communicate with the students about the problems the students have about using technology in online learning, like often. I hope, the teachers also have their understanding towards the students if their students cannot attend the class like usually, maybe due to their personal condition or perhaps their balance is out of the date or any other reason that sounds logically. Hopefully, the teachers also do not underestimate the students inquiries in group chat or in personal chat. Gratitude.
122	Always explain the materials that we will learn.

123	I hope in the future the online learning can more give us motivation, then we can improve our self more than before
124	4 me, I hope no ones being an online English teacher because it's never ever worth it. Be a good English teacher in real life that's the point.
125	The teacher who explain the materials specifically

G. Students' general perception

In this table, students mostly show their agreement on the utilization of technology in English language teaching. They believe that technology provide easiness for them to learn English especially during the critical years of Covid-19 pandemic. However, they strongly hope that telecommunication infrastructure such as internet access, signal and other technical support provided by the stakeholders. In terms of teaching and learning activities, they expect that teachers generate technology to help them understand the lesson, not as teacher alternation because the existence of teachers in providing such clear explanation and evaluate every single process both to the students' achievement and students' learning experience is crucially required.

To sum up, students actually want to have blended learning where teachers are able to combine both online and face-to-face class. According to their perspectives, blended learning is easier for them as they will have opportunity to ask questions and clarify unclear explanation and assignment given by the teachers in online class. In addition, students are aware of the importance of technology integration in learning English. They believe that humans' life cannot be separated with technology advancement. However, technology integration in this case is understood as the utilization of technology where teachers use it to help them toward effective teaching and learning process. It is expected that technology integration is in its applicable meaning to ease learning activities.

Table 29: Students' general perception

No	Students' general perception
1	Yes, I agree, but maybe it should be equalized to make it more optimal.
2	I Disagree
3	I don't think so, it depend on our selves
4	Definitely
5	I agree
6	50% agree
7	Yes
8	I agree but we need to combine it using face to face (hybrid system?)
9	Disagree
10	Don't really agree
11	Yes, I got many knowledge that I didn't get in class
12	Yes, I do
13	Yes, I agree
14	Yes I agree but sometimes
15	Yes
16	Agree
17	Yeah
18	Yes,
19	Absolutely Agree
20	really agree
21	Yes
22	Agree
23	Yes I do
24	Maybe yes
25	Yes, I agree to use technology in teaching and learning English
26	Yes, but if I can chose, I will chose face to face
27	Yes, I agree Its efficiency

28	No, I feel the best way to teaching or learning English is face to face, or offline.
29	I agree, because technology helps us much in learning English. We can search English article, searching new vocabulary etc.
30	Yes, but we need to study face to face also(blended learning)
31	Agree
32	yes
33	yes
34	Learning management system
35	Disagree, because difficult to understand and can't seriously listening
36	Yes I agree
37	Yes I agree
38	Yes, I agree
39	Yes, I do. of course, because in this technology era we have to improve our way to learning and teaching, this will increase our ability at technology.
40	Yes I agree for now because the condition is really bad because of Covid -19 so we need to teaching and learning using technology to reduce spread of covid-19
41	Maybe yes or no . I don't know, cause it is have a Positive side
42	yes I do
43	25% from 100%
44	Yes I agree to use technology as teaching and learning English in this pandemic condition
45	Yes agree
46	Sorry, I don't know
47	Yes, agree
48	Yes I am agree

49	Neutral
50	Yeah. I agree.
51	Yes agree because when we use technology we fell very helpful, let alone learn face to face
52	I agree, but it's still like back sword, our capability and facility were not good enough
53	Sometimes
54	agree
55	Yes I agree
56	Off course I am
57	Yes I'm agree
58	Yes, I agree because in era technology and learning English very important in era
59	Yes I agree
60	Yes I agree
61	Ye, I am agree. Because teaching and learning English without technology can't help students to completing assignment.
62	Yes, I do.
63	Yes, I agree
64	Yes I do
65	Yes. Of course
66	I agree because it will helps us to learn English wherever and whenever.
67	Yes I agree
68	Agree
69	Yes, I am.
70	yes
71	Yes I agree
72	Yes I Agree
73	I'm agree
74	Yes, I do

75	Yes
76	Yes
77	Yes I do
78	Agreed, but there is a lack, as I mentioned above, a lack of practice
79	Yes, I'm agree
80	I do agree.
81	Ye I do
82	yes I agree
83	I agree learning using technology because in this era everything using technology. So, everyone need to know technology both how to use it and something like that.
84	Yes. I'm agree
85	Yes based on the pandemic, but better face to face
86	Yes sure
87	The most agree
88	Not really
89	Yes
90	Yes, I totally agree, because using technology in teaching and learning will make it easier for us, especially in this pandemic situation.
91	I agree about it
92	I agree about it
93	Yes, I agree
94	Not agree
95	No
96	Yes of course
97	Yes, I agree
98	Agree
99	Yes, of course
100	Yes, because it's worth it
101	I disagree because learning English need to meet between

	tutor and students
102	Yes I'm agree
103	quite agree
104	Yes little bit but I prefer teaching with face to face
105	For me 50/50
106	Yes. I agree because that's help us when online learning
107	Yes, it's ok. Cause we have a big problem now. It's about this pandemic. So if we can't learn offline, at least we have something can connect each other for learning. But sometimes still need the offline meeting.
108	Agree but , I hope there is offline class too
109	I don't agree. Because it's not effective when we learn via online. Because it's language learning. We should do offline learning
110	I do not agree
111	actually I don't agree with the statement, when we must study English with using technology, because I think not effective, but what can we do willy nilly we must do it because also the situation not support for do study face to face.
112	No
113	Yes, but better directly
114	Agree, but it was more effective if those app doesn't have a problem
115	More agree
116	I agree, because learning English using technology allows us as students to explore or learn new things more dynamically and efficiently.
117	Yes
118	Yes I agree, but sometimes I thing we must demonstrate our ability to some foreigners or native language

119	Definitely
120	Actually I disagree because I think using technology less efficient
121	Half agree and half disagree, because there are the advantages of using it, but there are also disadvantages of using it.
122	In this pandemic I should agree for learning English
123	Yes, I agree
124	Not
125	I disagree

To conclude, it is clear that students perceive technology integration on learning English positively. It might improve speaking, writing, listening and reading ability. To conclude this chapter, the result of study found by Nomass (2013) is revealed.⁹³ There are ten findings that he pointed out in his research as follows:

- 60% of the students generate technology in their daily life.
- 98% of the students claim that the computer is able to improve their English vocabulary.
- 96% of the students agree that using computer in the classroom improves students' interaction with learning.
- 75% of the students assure that their teachers sometimes encourage them to use technology for learning English language.
- 96% of the students believe that using computer will help them to develop their writing skills.
- 33% of the students assure that their university has a good source of technology for learning English language.
- 83% of the students believe that the use of computer will improve their listening skills.

⁹³ Bassma Basheer Nomass, "The Impact of Using Technology in Teaching English as a Second Language," 3 1 (2013).

- 66% of the students prefer using technology to learn English language.
- 98% of the students believe that using technology will help them to learn English language faster than other ways.
- 90% of the students believe that using technology can help them to improve their speaking skills.

H. What Students Like and Dislike about Online Learning

This section aims to present a raw data gained from the survey study conducted at English language education study program State Islamic University of Mataram. The data reveals the perception on what EFL students like and dislike about online learning. After learning online for one semester, the students are expected to express their feelings or perception on online learning.

Previous research confirmed that students perceive online learning positively although it is categorized a new learning system for them. Apart from technical problems such as connection, difficulty in using the application and money other problems, most of them show positive responses. Yanti (2021) reports her findings on students' perception of online learning where the students argue that online learning platform facilitate them to learn independently. Moreover, they assume that learning process using online learning platform is effective because it saves time and effort as well as paper that are usually required in the assignment.⁹⁴ Several studies also found that the use of online learning platform increase students motivation as well as engagement. In terms of interaction, online learning platform enable students and teachers interact without limited by time and dimension.

⁹⁴ Dawi Yanti, "STUDENTS' PERCEPTION ON THE EFFECT OF ONLINE LEARNING DURING COVID 19," *Acitya: Journal of Teaching and Education* 3, no. 2 (July 31, 2021): 176–187.

In English language teaching and learning context, online learning platforms are pivotal for students because they facilitate students to practice their speaking, writing, reading and listening skills. It is pointed out that most of students agreed that the online learning platforms help them to practice language skills, acquire new vocabularies and improve their understanding on the content of the lesson.⁹⁵

The following table reports the raw data on what students like and dislike of using technology tools in learning online during Covid-19 pandemic. At the glance, some students express their perception in terms of the benefits of online learning in facilitating them to learn everywhere and anywhere which is flexible. They also claim that interacting directly with lecturers through videoconference based platform is interesting. Apart from its positivity, the students also address weaknesses of learning online. One of them is technical problems such as weak signal, unavailability of internet access and quota as well as unavailability of technology tools. Another problem is about lack of interactive communication among lecturers and students. Further students' expression on their negative perception toward learning is presented in the table.

Table 30: Students' comment on what they like about online learning

No	What students like about online learning
1	Google meet
2	We have a flexible time to learn everywhere and anywhere
3	Give the individual assignment at home
4	Work from home
5	face to face with the lecturer through the Google meet

⁹⁵ Laxmi Mustika Cakrawati, "STUDENTS' PERCEPTIONS ON THE USE OF ONLINE LEARNING PLATFORMS IN EFL CLASSROOM," *ELT Tech: Journal of English Language Teaching and Technology* 1, no. 1 (December 31, 2017): 22–30.

	application
6	Discussion
7	I like in question and answer section
8	Discussion session
9	Question and answer session
10	Just stay at home, no need to go to outside
11	I like about online learning is how accessible everything is.
12	When we meeting with other friends and lecture face to face and when we attendance
13	All parts of online learning are great, but I don't really like them.
14	The most part that I like in online learning is when answer the quiz through game.
15	Study everywhere
16	Learn through Google meet
17	I like online learning on discussion part I can discuss with my lecturer and give my opinion about the material more confidence
18	I little bit like online class, because it Will demand the students' to learn individually and they can discuss with their group in online class.
19	When lecturer give some home work by use game
20	I little bit like Online learning because it make us easier to find out the material that we don't know so that it Will make us get more knowledge or insight
21	Presentation by application
22	When the lecture explains material trough goggle meet...
23	We can do the online class wherever we are
24	play
25	We can do we online class while eating and so on
26	I like if the lecturer explain simple materials and all the materials got the point' what they explain
27	When we study by Google meet or zoom

28	Discussion with friends
29	Discussion
30	We can do that by home
31	Learning in the outdoor
32	I like to learn online when I have a good signal and have a quote, and I have better discussion using zoom application. so I can see my lecturer when they explain about the material, because I don't really like reading but I like to study while watching them.
33	When lecturer give me material and explain.
34	When students could to deeper understanding about the material explained, while their used online class.
35	When we learn by meeting
36	When the lecturer gives us assignment using games
37	all of material I like
38	Discussion
39	When the material is easy to understand, when on time to coming from Google meet or wa or zoom best on the schedule, and when the lecturer is not too seriously, when quota and signal is available.
40	Discussion on zoom
41	Can attend lecture without bothering to go to campus
42	When question and answer session
43	When the lecturer gave some slides and explained it carefully and when some of us didn't understand, we would ask some questions confidently.
44	When explained by the lecturer through Google meet and discussions with friends through the WA group
45	when teacher explain short material because if lecturer explain long material I can't understand all of the material
46	I like when being audience for presentation
47	Used via Google meet
48	I dunno maybe specifically in the slide of power point by the

	lecturer hehe lol.
49	I like when we do Google meet or quiz like kahoot.
50	When lecture explain the material clearly, and know how to bring students interest the material even via online
51	discussion the material through virtual meeting and the lecturer give the summary about whole material given at previous day
52	I love all of it
53	When the lecture is patiently to explain much more to the participants
54	Study at home
55	So far, I like part of discussions in the command box. I like Google meeting too but sometime the sound is not clear and disjointed.
56	We can learn not only at home but also in other place.
57	No one
58	Meeting at Google meet
59	We can be more relaxed and free of expression at home
60	In the discussion part
61	Discussion
62	The part of online learning that I like the most is when we discuss together through Google meet and Google classroom where we can share knowledge and share opinions with each other.
63	Discussion
64	Discussion
65	Video call
66	Discussion and feedback together to understand the material
67	It's simple when we got some material by pdf and we not difficult to print out that material
68	Nothing
69	when the lecturer explains casually and does not give assignments in a hurry.

70	Students can more focus on doing assignments, and we can be more independent in various things.
71	Game part
72	More earned to do the task
73	Lecturer give us task and has time to do it
74	I like the part where the lecturer explains clearly, so that I can understand it not only giving assignments but also explaining it.
75	The flexibility of place
76	Discussion
77	The part of online learning that i like when we learn everywhere and everything
78	actually I like to learn online via Google Meet but it's limited by its short time, and so far I don't really follow it.
79	The assignments.
80	Study at home
81	Learning strategies, such as collaborations, reflection, games, roles, exploration, etc.
82	I like its relaxed learning process
83	Whatsapp
84	When the others group were presentation and I gave them a question
85	I like online learning because I can submitted my assignments without go to campus
86	When I understood listening lecture explained material but sometimes I did not understand when they explained
87	I like when we can do it everywhere, also while studying online we can eat at the same time and we don't need to take shower as simple as that.
88	I like when Google meet and quiz.
89	Using Google Meet / zoom
90	Varieties learning methods instead of just being in the classroom, now we are more flexible in learning from home.

91	Lecturers provide explanations, materials and assignments
92	In discussion class
93	System
94	When the connection of my network is supported, so that i can clearly listen what my lecture deliver during the online class
95	Meeting online is a part of online learning that I like, because we not only know about the subject of study, but also the people who teach us.
96	The timing is flexible.
97	I like when online learning, I can meet with my family everyday
98	Discussion class
99	When the lecturer explains the lesson, although it is a little bit, it can be understood.
100	Maybe, when the lecturer mentions the name of the student and he/she asked to answer questions
101	The virtual meeting is part that I like the most
102	We can study anywhere
103	When lecturer explain material in Google meet
104	Discussion
105	when the lecturer only provides material
106	Discussion
107	I can eat and drink during the class freely, sorry
108	just like it because from home
109	When the signal on my Smartphone is stable .
110	The other side that I like about online learning is that I can get to know more about applications that can be used for distance learning, such as Google Meet, Zoom, and so on. In addition, learning can be done at home so students don't have to pay for transportation to go to campus.
111	I think, when I not need to rush to attend my class, like when I have my morning class and where's my boarding house is a bit far from college, so in this online learning I can attend the class

	slow at my home.
112	when we send assignment without having to print out

Table 31: Students' comment on what they don't like about online learning

No	What students dislike about online learning
1	Assignment from Google classroom
2	When I got unstable internet connection
3	When we study by using zoom application
4	The material is hard to understand
5	when the lecturer only provides material and assignments without explaining it first
6	All, especially when the signal is very weak
7	I dislike in do the task
8	Video call
9	When lecture explain material, the connection is unstable
10	difficult to understand the material and about the data
11	unstable internet network
12	When the internet not stable and that situation I must attendance the class
13	When the signal is not supported, it causes less understanding of the material.
14	The most part that I dislike is when we just get the material without adding the explanation and then give us task immediately.
15	time is not permanent, less understand, need much money
16	The lesser understood lesson material
17	Sometimes the signal at my place is not too stable so I can't hear the lecturer's explanation via Google meet or zoom
18	When the connection is lost, because in my house the strength of the signal is unstable.

19	when the lecturer only explains the material without any questions and answers
20	When the schedule of the class in the night, so that it makes me sometime lost the class because asleep
21	The part when my signal is low so I cannot get all the material clearly
22	When the lecturer given material without explanation...
23	Discussion or questions and answers seasons
24	nothing
25	The signal unsupported the online classes
26	When the lecturer give assignment without explain
27	When the lecturer explains the material but the voice is not clear
28	I dislike if the connection internet so bad when we are getting the class
29	More Assignment
30	Unsupported signal me to do it.
31	When the signal not available and the teacher don't care about it.
32	When my lecturer sent me the material, but sometimes I reserve it late because of my signal and my quote not support me. Then I always late to attendance the subject. So I get absence
33	When lecturer always give me homework.
34	When signal is so bad and unheard for the explanation.
35	When the signal is poor
36	Given assignment without explaining the material clearly before
37	there is no
38	Too much assignments
39	When lecturer give us the material in short time.
40	Discussion on comments
41	when there is less signal
42	When I start study online suddenly i lost my signal
43	When one class is combined with the other class

44	When the lecturer explained and I lacked a data package, the explanation was intermittent, and when the lecturer gives assignments but the instructions are not very clear.
45	when the teacher give me assignment and I don't understand the material about
46	When the online learning' times is limited
47	Quiz
48	we sometimes didn't know what time the lecture will be over and sometimes some of us always sleep during the online class.
49	When the lecturer just give the assignment without explanation or example of it.
50	1. When lecture explain the important material but signal or network not relate. 2. Lecture just give much material without explanation 3. Lear at night (21.00 pm), almost students that live at village have problems with the signal or network at night, so we can hear clearly when lecture explain the material
51	I'm quite dislike when the lecturer give much material to be read where its requires students to read whole material but mostly we cannot understand whole the contents.
52	I don't have it
53	When the data is empty and I lose the chance and information
54	When the lecturer explain the materials, because sometimes it not clear enough.
55	Mmmm, so far is nothing
56	When online class has interruption with internet data and quota at the time.
57	All part of it
58	When meet and signal poor
59	Network error and least time allotted for mastering the material in PDF.
60	In the question part
61	Analysis

62	The part of online learning that I don't like is, when the lecturer rarely enters and once entered, he is given multiple assignments without explaining to students the material.
63	Do assignment with short time
64	Exercise
65	Nothing
66	Bad network and disturbed the learning process
67	When I've bad signal and the class began with Google meet, so i lose the material
68	Unstable network
69	When the signal is bad, when there is no quota, when the lamp is off, and when a compact lecturer provides a task in the adjacent dead line.
70	Lack of internet quota and demands from each lecturer who usually only give students very heavy assignments and the compulsion of students in attending class meetings.
71	If I'm not have quota
72	Poor connection
73	Face to face with video online
74	When the lecturer only gives assignments without giving an explanation, it makes us confused
75	Too much distraction at home, I find it difficult to be focus to study
76	Google meet. Because we have problem in internet connection.
77	When I don't have data connection and also poor connection
78	It's not that I don't like online learning, but because the name is also through social media we learn, if the quota is limited, of course taking part in learning will also be limited.
79	Teaching and learning process.
80	Unstable signal
81	The educational model,
82	I don't really like when we should finish a complicated

	assignment, especially when the instruction given isn't so clear.
83	Zoom, schoology
84	When the other group gave my group a question
85	When the signal is unstable and no quota
86	When lecture explained but I did not understand, many duties than usually, and Use online learning sometimes make me panic when studying but the quota run out .
87	When we were given an assignment and the level is little bit higher so I think we need explanation by face to face not online class. And the most crucial is bad signal which make us annoyed and certainly it's need quota but sometimes we don't have enough money for buy.
88	I dislike when the lecturers just give an assignment but without explanation.
89	Using file without explanation.
90	tasks that come in a number of days,
91	Weak signal
92	If there is quiz or assignment and i don't understand it
93	Signal
94	When I have a poor connection, because i couldn't listen clearly about the material and then i often didn't catch any point at all
95	I think when the lecturer just give the material and assignment without meeting or any explanations and when we should make a group for doing the assignment, because in fact it only one person doing the task and another people like don't believe with their skill or ability.
96	When I didn't understand about the lesson, and about the connection, because in my village the internet sometimes unstable
97	When lecturer just share material and not explain it
98	Too much assignments

99	when the lecturer gives an assignment without any explanation.
100	When the signal suddenly disappears or the quota suddenly runs out
101	The due of assignment which is very short
102	When the signal is poor. And I can't join the meet. It makes I'm absent
103	When we gmeet but connection internet not available
104	Exercise without explanation
105	overworked
106	Watching video
107	Too many assignments, and lack of knowledge. Many assignments I did, but don't understand anything. except for meeting conference through Google meet. I can understand some of the materials that were explained
108	Unconnected data, limited signal and so on.
109	When the signal unstable and we required to always be present but the lecturer does not understand the student's situation.
110	the other side that I don't like about online learning is the limited explanation from the lecturer which causes difficulties in understanding the material. Apart from that, the signal barrier disappeared when carrying out learning.
111	When I have attend class but my balance and my internet access is not in good timing, the tasks are too much more than when I attend the offline class, and the due date of the tasks are too short.
112	When we have poor signal

I. Students' English Learning Resources

Learning resources is pivotal to support online learning. In face to face learning, teachers have been ready with copy of materials as well as other supplementary books to be read and finished by the students. However, it becomes problematic when it goes to online

learning. Teachers find it difficult to distribute the materials, assignments as well as supplementary materials because students my complaint due to the overloaded assignment. As consequence, teachers should be creative and rich with e-resources that can openly be accessed by the students. In addition, students need to be more active in looking for references and resources to finish their assignment as well as support their practice.

The current research found that students in urban and rural setting mostly access resources and practice their English from Youtube. In their response, they said that they were able to improve their listening skill as well as pronunciation when learning through Youtube. Furthermore, social media such as Instagram, twitter, WhatsApp, Facebook and TikTok is also considered as one of beneficial learning resources. They tend to learn from English article or short video shared or posted in the social media platform. Another resource when learning from home is movies and TV programs. Students practice their listening and increase their vocabularies through subtitle movies.

Table 32: Urban and rural students’ learning resources at home

No	Learning Resources	Percentage
1	Movies and TV Programs	18%
2	F2F Practice	4%
3	Games and Application	5%
4	Google Translate	5%
5	Song	7%
6	Social Media	21%
7	Youtube	40%

Table 33: Students’ comments on English learning resources

I like to learn from social media
Watch a video on YouTube, if there is a meaning that I don't understand, I'll pause it then open the translation and see what it means
I didn't learn it, but did it right away. If there is a vocabulary that I do not understand, I immediately search on Google translate.
Usually I read English stories on Wattpad, watch videos on YouTube and look for references on Twitter
I often watch English videos, both movies and YouTube videos
Yes, I often learn English through TV programs, YouTube videos, movies, and social media
YouTube and Disney channel on TV
Yes, I usually see English text from social media
I learn English more often through social media and YouTube because most of the channels I follow are also in English
Yes
I usually learn English through watching movies
Usually I watch YouTube or listen to English songs and English films.
Yes, I learn English through the YouTube Video program and also TikTok (but just sometimes)
Yes, while at home during the pandemic I watched a lot of movies in English and listened to songs in English.
Yes, YouTube and other social media
Movies and social media (instagram, you tube, games and more)
Movies, yt, instagram
Yes, I also learn through the media
Watch movies and via youtube
Usually through movies
Yes, I think it helps to improve reading and speaking.

I learn through youtube
I learned through an application where there are already videos, explanations, and we will be given a quiz on how to write, how to read to practice our knowledge.
I will watch videos on youtube and instagram
By viewing videos on YouTube or through other social media
watch foreign youtubers like kylie jenner to learn how to use english
yeah
I learn English usually through YouTube videos and other social media that can help me learn English.
Yes. I mostly watch strangers YouTube without using subtitles. I did not translate the words one by one, I was more at the core of what was said in the show. Sometimes I also translate them one by one
Yes
learn through movies, youtube, and people out there
Of course, especially songs that I think are fast for us to know English.
through games and videos
I learn through the internet like google translate, when I hear a word in English then I will find out what it means, when I want to compose a sentence like what, then I learn to use YouTube to quickly understand how to arrange words in English into a complete sentences so I can pronounce them. Thanks :)
watching movies, listening to songs, watching videos and reading people's tweets on social media, and reading short stories in English.
the first one set my main goal to learn English then i also often watch movies and listen to songs without using subtitles then I also like to read books although now it's a bit rare because I prefer to read articles through mobile phones and the last one I learn English through social media.
Yes, I learned through social media

Yes, I learned from YouTube. A simple and effective form of improving English is by watching movies. We can choose the themes of foreign films that we like or like. We choose, whether films with American English or British English accents. In general, English learning activities that are often used tend to be American English.
Ruangguru program, sometimes YouTube
Yes, I'm learning English through TV programs, movies, YouTube videos and songs
Sometimes when an advertisement or video appears on my Instagram homepage in English, I usually learn English vocabulary little by little from there. I also follow several accounts of learning English on social media as my teaching materials.
I'm learning English through movies, TV, YouTube and all social media platforms
Yes
Yes, I learn English through films or videos that tell something in English
To practice pronunciation/pronunciation, I prefer to watch YouTube content and social media of people who are not native speakers, such as Indians, Arabs, Japanese, Germans, etc., because I think their pronunciation is easier to understand/clearer than native speakers.
Yes all right.
I studied with my brother, he can speak English so I communicate using English to him, if there is an error or something I don't know, I will immediately ask. I also watch movies/videos on YouTube, netflix etc using English, so I can get used to it
Yes, I think social media is the good choice

In addition to students' problems in online learning, constraints experienced by senior high school students whose school in urban and rural has been investigated in the author's preliminary

study. Survey study involved students in senior high school with urban and rural school setting in West Nusa Tenggara province.

Students in urban school setting frequently find problems in term of practice. They feel learning online is ineffective because they do not have partner to speak with, while, in some occasion, they need someone correct or check their pronunciation and grammar. Another significant problem faced by them is internet access due to unstable signal. This technical problem does not only occur in rural school, but it is also experienced by those urban school students.

In terms of understanding on content of the lesson, students claimed that they found it difficult to understand teachers' explanation on certain material or assignment. It might happen in online learning as the technical problems potentially contribute to ineffective learning. The following table reveals the result of preliminary data analysis on problems found by the students both in urban and rural school setting.

Table 34: Urban school setting students' problems during online learning

No	Type of problems	Form of problems	Percentage
1	Distraction	Cannot manage	0%
		Less focus	2%
2	Interaction	No partner	23%
3	Motivation	Lazy and boring	9%
4	Financial	Expensive	4%
5	Internet access	No quota	7%
		Bad signal	16%
6	Understanding	Assignment	2%
		Explanation	7%
		Material	23%
		Speaking	5%
		Vocabulary	4%

In contrast with students in urban school, lack of internet access, bad signal and lack of understanding on material explained by the teachers tend to be crucial problems. In their response, they said that sometimes teachers explain the materials shortly that make the class ineffective. In terms of internet access, it is actually the real problems faced by the students because many of them come from low-middle income family who needs to struggle getting money even to buy an internet quota.

Table 35: Rural school setting students’ problems during online learning

No	Type of problems	Form of problems	Percentage
1	Distraction	Cannot manage	3%
		Less focus	5%
2	Interaction	No partner	8%
3	Motivation	Lazy and boring	8%
4	Financial	Expensive	5%
5	Internet access	No quota	18%
		Bad signal	10%
6	Understanding	Assignment	5%
		Explanation	5%
		Material	18%
		Speaking	13%
		Vocabulary	5%

In addition, the following table includes students’ expression or perception on the challenges they have found during online learning. It can be seen from the table, in general, students experienced two kind of problems. First problem deals with technical problems. Second problem refers to the level of students’ understanding on the content or lesson delivered by the teachers.

Table 36: Students' comment of technical problems in online learning

Feeling lazy to read material and do assignments
It's not there yet, but I'm still confused about the placement of a word like "just" and "only" duhh
Signal
If you ask, feel free to chat and often clash with extracurricular activities with lots of assignments
Not fun, because I prefer to interact directly while studying
Slightly more difficult to understand, and long internet loading
Don't understand the material and waste of quota
It's difficult because there are no friends or teachers who can help correct me when I speak English
Networks and maybe e-learning systems that are too rigid so that some students don't understand the material given
A lot of work, a little practice
My problem when studying online is that my quota runs out quickly and e learning often has errors
It is more difficult in terms of practicing English because there is no teacher who guides directly.
Cannot interact directly with the teacher
There is not any.
Feeling less effective and not optimal and there are still many other obstacles that make me really don't like learning during the pandemic
The lesson is a bit hard for the brain to accept
Yes, there is no further explanation, what is given in elarning, that's all.
Lacking in getting an explanation
The material being taught is difficult to enter the brain
No fun there

Can't socialize freely
Internet and social barriers
Signals and quotas are only because online schools are related to signals, usually signals are very bad at times of crisis, and internet quotas as we know the current state of Indonesia, we are also affected by the economy, especially online schools really need lots of quotas.
I find it very difficult to understand the lessons given
It is difficult to understand the material because it is not explained directly by the teacher and the assignments given are many and difficult
There is not any yet
Nothing, nothing.
Sometimes I can't understand the lesson well.
There are so many obstacles that I face when studying online, especially with the quota running out, I can't study well and sometimes I don't understand the explanations from my seniors and coaches, and much more
Not fluent in speaking the language, many things are often forgotten
The obstacle I face is when the internet is not stable so it makes my online learning very disturbed
Difficulty in action or speaking directly in English, because it is really needed.
Do not understand
Lack of understanding of the material is due to the absence of direct learning videos from the teacher, and only assignments that we get. The video is there... But what I expect is a direct learning video from the subject teacher, so we understand better and can ask the teacher directly, on the one hand there is material in pdf form, but for me lessons such as counting are not suitable in pdf form because we as students do not understand. Thanks :)

Did not understand the material because they could not directly ask the teacher.
So far there is none, because from the start I have loved to love English, so I like to do the assignments given by the teacher"
Sometimes because I'm not very good at English I sometimes have trouble understanding the meaning
Every teacher who teaches English lessons does look easy but if it is difficult to apply first for students
It's not free to ask if there's something you don't understand
Not too focused and feeling lazy when at home/online, different from school because we can learn to be more focused and active
Sometimes the problem is that, for example, we meet vocabulary that we don't understand, both in terms of meaning and pronunciation.
Feeling bored quickly, tired, less productive
I don't know if I'm wrong or not
Difficult to catch/understand the lesson
The biggest obstacle is that I don't have any friends to talk to at home, I only practice speaking in front of a mirror, and the second problem is that I often forget vocabulary, even though I remembered it yesterday.
Not being able to practice the new words/phrases that I got.
So far nothing
I cannot interact and ask directly to friends and teachers"
Inadequate wifi/internet connection for online activities
Internet connection/network
I want to practice speaking, but I'm afraid my parents say don't act like English, usually the expression is like that
A lot, not too serious so it's learning
I learn through TV programs, Youtube or other social media

A little difficult to find someone I want to speak English with/correct my English mistakes.
Sometimes I don't understand the words when I ask Goggle sometimes it's wrong, so it's better when I ask directly
Do not understand the material
Just don't practice right away, and practice, because if you're alone, you're not very enthusiastic, gt
Internet network
There is not any
Unsupported cell phone
Can't interact

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SYNOPSIS

This book is part of an effort to connect theory of technology integration in English Language Teaching (ELT) and its practice where technology tools are incorporated with some valuable purposes. Many studies found the positivity of technology integration not only from teachers' perspective, but also students' point of view. Technology tools ease teacher toward effective learning, especially during such critical time in Covid-19 pandemic. Students also believe that the utilization of technology in teaching and learning activities increases their motivation to learn as well as help them understand the content of the lesson. In addition, technology also enables students to engage in more meaningful and intellectually authentic and interactive learning environment. This book aims to provide theoretical support of the incorporation of technology in ELT by presenting review of previous studies, the preliminary data from a survey study as well as list of recommended platforms. It further discusses the implementation of technology in the English skill development: speaking, writing, listening and reading. In addition, EFL Students' perception at English education department and junior high school students on the technology integration in ELT are also revealed in this book. This section does not only cover the benefits of using technology in ELT, but it also critically presents its negativity according to the students' responses in LMS. To conclude, the book also serves the reader through the availability of information on essential platforms, website, application, links etc. which were adapted from reputable sources.

GLOSSARY

Blended Learning

Learning which involves a combination of e-learning and face-to-face learning.

CAI

Computer-Aided Instruction

CALL

Computer Assisted Language Learning (CALL) is often perceived, somewhat narrowly, as an approach to language teaching and learning in which the computer is used as an aid to the presentation, reinforcement and assessment of material to be learned, usually including a substantial **interactive** element.

CALI

computer-assisted language instruction

CAT

Computer Adaptive Testing.

CBT

Computer Based Testing.

CELL

Computer-enhanced language learning

Chat

Real-time communication over the Internet.

CLT

This stands for Communicative Language Teaching

CMC

Computer-mediated communication (CMC) is an umbrella term that encompasses various forms of human communication through networked computers, which can be synchronous or asynchronous and involve one-to-one, one-to-many, or many-to-many exchanges of text, audio, and/or video messages.

Communicative Language Teaching

An approach concerned with the needs of students to communicate outside the classroom; teaching techniques reflect this in the choice of language content and materials, with emphasis on role play, pair and group work, among others.

Content Management System (CMS)

A web-based software system allowing for the management of large quantities of content (documents, multimedia, etc) and the collaborative creation of documents.

EFL

English as a Foreign Language – English language programs in countries where English is not the common or official language. It is used in American university programs where international students study English although the use of the word “foreign” is now avoided in some schools because of its xenophobic connotations.

ESL

L2: English as a Second Language. The field of English as a second language; courses, classes and/or programs designed for students learning English as an additional language.

ESOL

English to speakers of other languages; refers to learners who are identified as still in the process of acquiring English as an additional language; students who may not speak English at all or, at least, do not speak, understand, and write English with the same facility as their classmates because they did not grow up speaking English (rather they primarily spoke another language at home).

ESP

English for Specific Purposes; e.g., for business, science and technology, medicine among others.

EAP

English for Academic Purposes – The study or teaching of English with specific reference to an academic (usually a university- or college-based) course

ELT

English Language Teaching

ICT

Information and Communication Technology

IELTS

International English Language Testing System. Managed by UCLES, the British Council and IDP Australia for academic and vocational English.

L1

First language

L1

The mother tongue.

L2

A term used to refer to both foreign and second languages: See foreign language; second language

Learner Management System (LMS)

A learning platform within which students can work together online.

MALL

Mobile-assisted language learning

PLATO

Programmed Logic For Automated Teaching Operations.

TEFL

Teaching English as a Foreign Language – a term that refers to teacher training programs in EFL.

TESOL

Teaching English to Speakers of Other Languages – a term that is used to distinguish English language teaching as a professional activity that requires specialized training. Also refers to the teacher examinations developed by Trinity College London (Cert.TESOL and LTCL.Dip.TESOL).

TESL

Teaching English as a Second Language, Canada – national federation of teachers and providers in Canada.

TELL

Technology Enhanced Language Learning). Derived from the

term CALL, this is an approach to language teaching and learning which uses a range of technology and electronic media.

Video Conferencing

A meeting between people who are not physically present, via computers connected to the Internet, using technologies such as video cameras and audio tools, simultaneously.

Virtual Learning Environments (VLEs)

A software system designed to help teachers manage online educational courses. VLEs generally include course content, communication tools, grading tools, student tracking, grouping facilities and control over who accesses the course. VLEs are also known as 'platforms Managed Learning Environments (MLEs), and Learner Management Systems (LMSs).

Vlog

Short for video blog.

Vodcast

A video podcast.

Recommended Educational Technology and Reading Journals

1. American Educational Research Journal
2. American Journal of Distance Education
3. American Annals of the Deaf
4. Association for the Advancement of Computing in Education
5. Behavior Research Methods, Computers and Instrumentation
6. Children's Literature in Education
7. Communication Disorders Quarterly
8. Computer Science Education
9. Computers in Human Behavior
10. Computers in the School
11. Computers & Education
12. Contemporary Educational Psychology
13. Disability and Rehabilitation
14. Distance Education
15. Economics of Education Review
16. Education and Information Technologies
17. Education Policy Analysis Archives
18. Educational Psychology
19. Educational Psychologist
20. Educational Technology & Society
21. Educational Technology Research and Development
22. Electronic Journal for the Integration of Technology in Education
23. Elementary School Journal
24. E-learning
25. E-Learning and Education
26. Human and Computer Interaction
27. Human Factors
28. Information Technology, Learning and Performance
29. Interactive Learning Environments

30. Journal of Asynchronous Learning Networks
31. Journal of Adolescent and Adult Literacy
32. Journal of Applied Psychology
33. Journal of Computer Assisted Learning
34. Journal of Computer Mediated Communication
35. Journal of Computers in Math and Science Teaching
36. Journal of Computing in Childhood Education
37. Journal of Distance Education
38. Journal of Distance Learning
39. Journal of Education Technology Systems
40. Journal of Educational Computing Research
41. Journal of Educational Computing, Design & Telecommunications
42. Journal of Educational Media
43. Journal of Educational Psychology
44. Journal of Educational Research
45. Journal of Educational Technology Research and Development
46. Journal of Experimental Child Psychology
47. Journal of Experimental Psychology
48. Journal of Information Technology Education
49. Journal of Interactive Media in Education
50. Journal of Interactive Learning Research
51. Journal of Interactive Online Learning
52. Journal of Learning Disabilities
53. Journal of Literacy Research
54. Journal of Reading Behavior
55. Journal of Research in English
56. Journal of Research on Technology in Education
57. Journal of Teaching, Learning and Assessment
58. Journal of Technology Education
59. Journal of Technology Studies
60. Journal of the Learning Sciences

61. Language, Learning, and Technology
62. Language and Learning with Technology
63. Learning Disabilities: Research and Practice
64. Learning and Instruction
65. Learning and Leading with Technology
66. Journal of Special Education Technology
67. Open Education
68. Reading Online
69. Reading Psychology
70. Reading Research and Instruction
71. Reading Research Quarterly
72. Reading and Writing
73. Reading and Writing Quarterly
74. Research in Education Education
75. Scientific Studies of Reading
76. Technology and Learning
77. TechKnowLogia: International Journal of Technologies for
the Advancement of
78. Knowledge and Learning
79. The Reading Matrix.

RECOMMENDED PLATFORM/WEBSITE FOR TEACHING AND LEARNING ENGLISH

The present table provides information on platforms, its specification and its features. The presentation of these recommended platform aims to provide an initial idea from the teachers to integrate one of the platform in their teaching. The entire recommended platforms and their description are adapted from Amazing Talker (2021).⁹⁶

Platforms	Specification	Features
<u>USA Learns</u>	Suited for: Beginner and intermediate English Price: Free!	USA Learns is a really popular and comprehensive website for adults in America. You can learn how to use English in an elementary level. If your goal is to become a U.S. citizen, it is highly recommended for you to take the class. You could also learn how to get used to living in the U.S. as well as practice English reading, writing, listening, speaking, grammar and vocabulary on this website.

⁹⁶ Amazing Talker, “Top 10 Best Online English Courses for 2020 | For Adults & Beginner,” last modified 2020, accessed June 1, 2021, <https://aac.co/en-us/en-eng/online-english-classes/9584/>.

<p><u>BBC 6 Minutes</u> <u>English</u></p>	<ul style="list-style-type: none"> • Suited for: Intermediate & advanced level • Price: Free! 	<p>You must have heard of BBC News. It is a well-known news media based in the UK. BBC releases hundreds of news pieces every day. But have you ever heard about the BBC 6-minutes English program? This is my favorite online English learning program so far. You only have to spend 6 minutes every day to learn. It is structured like a radio program and you can enjoy the two hosts talking about various topics. In the beginning of the program, one of the hosts would ask you an interesting question. Maybe about science, data, or even animals. And the two host would then start to discuss today's main topic. During the program, they would incorporate some real-life interview and it is great for getting used to different accents in the UK. Useful vocabularies would be highlighted for</p>
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		<p>each episode and you would also be taught how to make a complete sentence.</p>
<p><u>ESL POD</u></p>	<ul style="list-style-type: none"> • Suited for: intermediate learners • Price; free 	<p>ESL POD is an online audio English learning program. Just put on your headphones and start practicing English. ESL covers a variety of daily topics. The speaking speed is quite slow so you won't have to worry if you are not able to catch up. All you have to do is choose the topic you are interested in. Try your best to repeat what you hear. By practicing on ESL POD, not only could you simply learn English, but you could also learn the so-called "cultural English". The topics include the American culture and history, as well as more than 2000 other themes. For example holidays and festivals, American writers and artists, famous places and cities.</p>

ENGLISH CLASSES – MOOCS 9 MASSIVE OPEN ONLINE COURSES

1. Alison

- Suited for: All levels of English learners
- Price: Free!
- Features:

Alison has been around since 2007. It is a website dedicated to sharpening people's professional skills and help them perform better in the workplace. Now there are over 1,000 courses available for free. English courses are offered as well! You can choose basic English grammar or perhaps English for tourism. It all depends on your requirement!

2. MOOEC

- Suited for: Beginner/intermediate/advanced English learners
- Price: Free!
- Features:

Yes, you might have notice the “E” slipped inside. As you might have guessed, the “E” stands for English. This is a website totally for English learners. They have four categories of short classes (speaking/writing/reading/listening) designed specifically for English learning. This Australia-based website is definitely worth a try if you have little chance to access an all-English environment.

3. FutureLearn

- Suited for: Beginner, intermediate, business English, academic English
- Price: Free!
- Features:

FutureLearn is not like any normal MOOCs as you will experience more interactions in the class. You can leave your comments on every lesson and people would gladly reply. The “**English for the workplace**” course is highly recommended if you want to speak fluent English at work. The courses contain both short courses and in-depth program. You can choose to join whichever you prefer. It is worth mentioning that you can learn with many leading universities or business schools such as the University of Bristol here. They also work with famous institution like the British Council or UNESCO.

4. **EDX**

- Suited for: Intermediate level and above
- Price: Free!
- Feature:

Edx is created by the MIT and Harvard. It hosts several online university-level courses on a wide range of disciplines. Some courses are even offered for free. You can find different kinds of English courses available on edX. Although some of them are not free, it is still way cheaper than taking most courses in college.

5. **Openlearning**

- Suited for : Beginner or intermediate English learner
- Price: Some courses can be enrolled for free
- Features:

Openlearning does not have as many courses as other MOOCs mentioned above. But you can still search for English course here. They also have a solid learning community and you can see the number of students who took the same class as you!

6. **Udemy**

- Suited for: All levels
- Price: Some courses are free.

- Features:

Udemy is an all-dimensional online learning platform and you can definitely learn English on this website. But be careful before choosing the courses, Not all of them are offered for free. Udemy primarily uses video lectures. Some courses contains quizzes or learning document to help you learn more efficiently.

7. **Coursera**

- Suited for: Intermediate level and above, business English.
- Price: Free!
- Features:

Coursera also offers a variety of courses and of course some English ones. There are usually 4-10 lessons in one course. You can filter courses by the institutions offering them. Some courses are for specific topics such as email writing or career development.

8. **World Education University**

- Suited for: Intermediate level and above
- Price: Free!
- Features:

WEU aims to offer vocational training to people in need. There are multiple subjects you can choose to learn from. English courses are one of them. Although the courses offered is not as numerous and complete as the other MOOCs, you could still try to hone your your professional English skills!

9. **Saylor**

- Suited for: Beginner/ intermediate learners
- Price: Free
- Features:

Saylor cooperates with many Colleges and offers some credits and certificate free of charge. If you are a beginner in English learning, you should try their featured course: Beginner English!

Although it's not guaranteed to change your life, it will definitely improve your English reading and writing skills.

A. Popular Online English classes

1. Perfectly Spoken

- Suited for: Beginning , intermediate level, advanced level
- Price: Free!
- Features:

Perfectly Spoken offers part of its package for free. Each level contains 60 classes and each program is taught by different teachers. You can also test your English level before starting the class. The free program is enough for you to improve your English skills. You can also opt for the premium program for more resources.

You can choose the level you want to reach, as well as see your learning progress. I personally felt quite confident and satisfied when I completed my A2 program!

2. ESOL Courses

- Suited for: All levels.
- Features:

ESOL courses is a free online English lesson website. You can practice your English with interactive listening lessons, reading exercises, quizzes and games. I especially like their quizzes after viewing a practice video. You can review the content and quickly remember what you were just taught. The questions are not very hard and you will be corrected immediately after choosing the answer. One of the advantages of this website is that it contains a amount of learning materials than other sites.

3. ABA English

- Suited for: All levels, Business
- Features:

ABA English is also an website for online English classes. The courses are divided into 5 parts: Film, speaking, lessons, vocabulary and assessments. You can practice your listening by watching the video or the film. Or maybe you want to improve your pronunciation. In this case, you can try to mimic the audio. You have to complete previous 4 parts before doing the assessment (test/quiz). This is a meaningful and useful process, in case you missed some important notes.

4. **EnglishClass101**

- Suited for: All levels
- Features:

EnglishClass101 is also one of my favorite English classes online. First, you have to register by your email (or Facebook), then you can enjoy over 1,000 lessons from your smartphone or computer. You can always find new and fun lesson for you. If you like the experience, then I recommend you to sign up for the paid version. You will find a lot more lessons and some quizzes to test your learning results.

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This book is part of an effort to connect theory of technology integration in English Language Teaching (ELT) and its practice where technology tools are incorporated with some valuable purposes. Many studies found the positivity of technology integration not only from teachers' perspective, but also students' point of view. Technology tools ease teacher toward effective learning, especially during such critical time in Covid-19 pandemic. Students also believe that the utilization of technology in teaching and learning activities increases their motivation to learn as well as help them understand the content of the lesson. In addition, technology also enables students to engage in more meaningful and intellectually authentic and interactive learning environment. This book aims to provide theoretical support of the incorporation of technology in ELT by presenting review of previous studies, the preliminary data from a survey study as well as list of recommended platforms. It further discusses the implementation of technology in the English skill development: speaking, writing, listening and reading. In addition, EFL Students' perception at English education department and junior high school students on the technology integration in ELT are also revealed in this book. This section does not only cover the benefits of using technology in ELT, but it also critically presents its negativity according to the students' responses in LMS. To conclude, the book also serves the reader through the availability of information on essential platforms, website, application, links etc. which were adapted from reputable sources.

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