CHAPTER II
REVIEW OF RELATED LITERATURE

A. Theoretical Description
1. Technology-Based Learning

Technology-Based Learning is content learning through all technologies that require electronics such as the internet, intranet, satellite broadcasting, video, and audio recording, audio and video conferencing, internet-based conference, chatting room, electronic bulletin, webcasts, CD-ROM, and computer-based instructions.[1] Technology-Based Learning includes terms, such as web-based learning and online learning which include learning which is using computer-based learning and is limited to learning using a computer and the Internet. E-learning is similar to Technology-based learning and most of it is replaced in scholarships and industry based on personal choice. Therefore, reports use these terms interchangeably.

Technology-based learning is different from distance learning or technology-delivered learning. Technology-Based Learning belongs to a methodology where teachers and learners are in the same room and there is no distance. Besides that, Technology-based learning is defined more narrowly because it excludes text-based learning and courses conducted through writing correspondence to be covered by distance learning or technology-delivered learning. In addition, technology that improved learning defines a methodology in which technology plays a general role and serves to elaborate and enrich traditional face-to-face classes.

Technology-based learning also can be defined as learning which takes place in part or in full through electronic technology. This includes Intranet sites, online and Web-based education, Internet chat rooms, audio and video conferencing, electronic games, simulations, CD-ROMs, and various mobile options.

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[1] Vinz Koller, et al., *Technology-Based Learning Strategies* (Washington: Social Policy Research Association), 4.

a. Review of TBL Concepts

Due to the diversity of technologies and the breadth of applications, there is no definitive characterization or definition of TBL. This section shows the main definitions in the literature to serve as a basis for further examining the use of technology for learning. In short, The simplest and most common way to characterize the TBL model is by how integral the technology is to the learning process: The TBL model may be completely dependent on technology for learning; Can balance the usage of technology and classroom learning, or maybe incorporate some lower use of technology into especially class-based settings. Then, in this continuum, the TBL model is characterized by how technology structures the learning process over time and space. Finally, the more advanced characterization of TBL is considered. While many of these dimensions often overlap, each is clear. It defines variations in the TBL model and has important implications for learning.

b. A Continuum of Technology Use

TBL can be characterized by the extent to which technology is the main source of learning. This is the most common characterization of TBL in literature. In this simple concept, one can imagine a continuum of models based on the relative number of technologies used. The continuum of technology-based learning will be explained in a picture as follows:

Picture 2. 1. The Continuum of Technology-Based Learning

Technology Only — Blended — Traditional

From a definition perspective, the learning models in this review are characterized as technology-only, blended, or traditional based on a proportion of technology-dependent learning.

1) In one situation only use technology, where all the learning media is using electronics. A common example is a course that is completely online and fast-paced.
2) The other end is traditional learning, where neither teacher nor learners use technology. An example is a paper-based test.
3) Between extremes of technology-specific and traditionally blended class-based models, or hybrid, models. Mixed models, which represent the dominant paradigm in TBL, are where instruction is delivered both using technology and in traditional classes.[2]

In some literature, technology-only, mixed, and traditional approaches are not discrete categories but more precisely the points along the continuum. More complicated definition, models are often categorized based on how the contents are delivered (not accepted) and the boundaries between technology alone and the blend vary in the literature. For example, experts have various characteristics in their online learning models, which are similar to technological approaches, based on the number of instructions delivered online. Measuring the amount of content submitted or submitted is a simpler measurement task than measuring the most effective medium for it. content (that is, learning). A national survey of online courses in post-secondary institutions prescribed technology-specific courses such as those in which instruction is fully online; A blended course is one in which a combination of online teaching and classes is used and the use of technology reduces sitting time. Instead, Arbaugh reviewed 15 years of research. on online and blended learning in the management discipline, defines a technological model as those that have at least 80

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[2] Rockvile and Alexandria, *Technology-Based Learning (TBL) in Workforce Development and Education: A Review of The Research Literature,* (Washington: ABT Associates), 5-6.

percent of content and activities delivered online and this model is mixed because it has between 20 and 79 percent of content and activities delivered online.

c. Advanced Forms of TBL

The rapid evolution of technology coupled with a more sophisticated understanding of learners' needs has led to an advanced dimension of TBL that goes beyond basic instruction and content delivery. Technology, in particular, has the potential to expand pedagogy through its ability to facilitate learners. Interaction with the content and the individualization of the content. In addition, it has the potential to change how learners interact with other learners and instructors.

Traditional passive learning relies primarily on static content versus active learning engagements that ideally use flexible materials shaped by the needs of each learner. Early distance learning opportunities that were notoriously passive with technological components were often limited to reading on a computer monitor, not a book. As communication technologies and delivery platforms evolve, so do opportunities for more active learning that make it possible to apply knowledge, solve problems, practice skills, and receive feedback on progress. TBL can focus learning on content (such as at the beginning) of an online course) or on learners with content individualization. Below are some of the ways, described in a sense, Bakia, and Murphy's review, where TBL can be designed to meet the needs of underprepared adult learners:

1) The use of spaces, rapid assessment of learning, and cumulative, comprehensive exams;

2) Includes practice assessment items that require students to produce answers and provide feedback as quickly as possible;

3) Provide feedback that addresses the nature of student misunderstandings and includes tips for remediation; and

4) Apply the principle of "Goldilocks" in selecting the difficulty of the [appropriate] problem.[3]

For example, non-linear TBL techniques seek to more fully engage students by trying to inject elements of "spontaneity," personal preference, and interest into the process. The use of hyperlinks in web-based content is an example of this strategy everywhere. More advanced tools are designed to give students ample opportunities to understand certain subjects; Students can vary their learning activities based on individual preferences, skill levels, and educational needs.

Clearly these technological advances have resulted in a series of diagnostic, teaching, learning, and delivery opportunities that go beyond the original component of distance learning. Nevertheless progress, however, one common consideration underway includes the growing field of TBL: the role and intensity of interpersonal support. While interpersonal interactions are largely given in traditional, mixed, and synchronous models, TBL varies in the inclusion of interpersonal interactions and support with additional challenges to interactions in asynchronous or simply technological models.[4]

TBL's literature is largely unambiguous, however, about the importance of interaction, both between the two. students and among students and instructors Abrami, Bernard, Dunham, et al, Sher, Woods Jr., and Baker. In their report on their TBL training program, Dunham et al. found that "effective communication and interaction between participants and between participants and their instructors are considered an important pedagogical practice by instructors in various TBL programs." Thus, the main criticism of TBL is the absence of face-to-face interaction between instructors and learners in such a way that learning is hampered. Thus, the main

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[3] Rockvile and Alexandria, *Technology-Based Learning,* 7.
[4] Rockvile and Alexandria, *Technology-Based Learning,* 7.

criticism of TBL is the absence of face-to-face interaction between instructors and learners in such a way that learning is hampered. Bakia, and Murphy point out the following two ways in which TBL can meet the needs of underprivileged learners:

1) Harnessing the power of peer-to-peer collaboration and
2) Create a sense of instructor presence and responsiveness.

d. The Strengths and Limitations of TBL

Underlying the development and diversity of TBL are core considerations relating to the effectiveness of learning, the delivery of learning opportunities, and access to such opportunities. This section discusses the vast strengths and limitations of TBL as it has evolved in the 21st century. These discussions were held around several factors including TBL's built-in capacity to monitor student engagement, adapt learning to learners' needs, promote interpersonal interaction, promote cost savings, and improve access and readiness for learning.

Before studying these factors, it is worthwhile to note five overarching issues that are central to understanding how and where these forces and limitations apply:

1) TBL is Varied

As mentioned earlier, "technology-based learning" is a very broad "umbrella".terms covering a wide range of applications, technologies, instructional strategies, infrastructure needs, and learning platforms. Thus, measuring the limitations and strengths inherent in TBL should take into account this significant diversity more.

2) The context of learning is important.

For example, the convenience and flexibility provided online. Web-based technologies can improve accessibility to instructional and learning content for working

adults who have significant constraints on their time. Instead, they may be less important in the context of class K-12.

3) There is duality in the strength and limitations of TBL

For example, online and Web-based education allows learners the flexibility to access learning content from home and at their own pace. However, that flexibility can also be attributed to isolation which can reduce personal interaction and engagement with content.

In one study, participants reported that the use of laptop computers allowed flexibility in both time and place, but the participants also noted that too much independence could prove problematic; some structures ensure that they stay on task.

4) Some considerations may conflict

Reconciliation or balancing conflict considerations can be part of adoption decisions. For example, more accessible and cheaper modalities such as online courses can be associated with weaker knowledge and skills. higher student retention or friction rates than in traditional programs. How TBL programs and courses use available technology and negotiate their strengths and limitations contributes to their effectiveness.

5) TBL is growing rapidly

Just as the mobile and Web-based technologies they are located in are built, TBL applications and platforms are evolving very quickly. Thus, any discussion of the strengths, limitations, and challenges of technology-based learning must be prepared Know that analytics is a fast-moving target.[5]

Every method has some strengths and limitations. We should understand what are they so

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[5] Rockvile and Alexandria, *Technology-Based Learning,* 8-9.

that we can choose the appropriate methods when we face some phenomena in teaching English that is unpredictable. Here are the strengths and limitations of TBL:

1) Monitoring the Learners Remotely

The biggest challenge for TBL is the activeness of students. Literature found that the activeness of students is still low. Dropping out of school, simple business, or "social bread", cheating, as well as student isolation are real and common concerns for TBL. Thus the use of technology can present challenges for, as well as facilitating, student engagement, and finally, TBL instructional effectiveness.

One common hypothesis about instructional effectiveness is learners are more active in learning if they are monitored for their learning. This worry thing in TBL is related to the asynchronous education model, where teachers cannot see and monitor their students. The process of monitoring students is easily done in the classroom, different from asynchronous that difficult to monitor the activeness of students. The online situation limits the opportunity to supervise, track, and verify student progress. Without direct monitoring, learners are likely to become uninvolved.

In response to this situation, the subject manager and teacher have begun using technology to address these concerns. Low activeness of and engagement with student issues can now track how long a learner spends on certain tests or even individual test questions. Technology more generally allows easy data collection to monitor student progress and engagement.

A related worried is about learners can easily cheat because they can take the source without any detection fin from the instructor. However, technology is used to minimize the

worry of cheating in some situations. For example, in online courses, innovators come up with methods and apply techniques such as biometric keystrokes to identify learners, requiring them to present their ID before they take the test, and use virtual camera monitoring.[6]

2) Adapting Learning to Individual Needs

The challenges associated with the effectiveness of instruction made by TBL are consistency and less individualization. On the one hand, pre-recorded lessons provide a greater degree of control over what content is sent, thus, a higher level of consistency (and potentially quality and efficiency) exists across the multiple instructors involved in delivering the content. However, this content-centric uniformity of TBL can also pose challenges in delivering material to diverse groups of learners. While traditional classrooms allow feedback from responsive instructors, content-centric TBL is limited to delivering pre-recorded or programmed material. Not only do these forms of TBL not monitor student engagement, but they are also unable to monitor and respond to students' questions or variable levels of their understanding, interests, or needs.

On the other hand, technology can also offer unprecedented opportunities to contextualize and individualize instruction and learning content. In a technology environment, learners can:

a) Repeatedly access and reflect on the content that they think is challenging.
b) Receive the appropriate format for them such as video, audio, and text.
c) Interact with the student even makes the learning material such as in the discussion form, Wiki, Google Form, and others.

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[6] Rockvile and Alexandria, *Technology-Based Learning,* 10.

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d) Receive the digital assistance that is in the systems.

While the new learner in this situation needs more guidance, literature found that more benefits in autonomy and individualization, so the "motivation to engage is a cognitive disposition that learners bring with them when they enroll in adult literacy classes"

In addition, data collection and appropriate adaptive software technologies can automatically make problem practices and other learning substances according to the needs of learners. For instructors, TBL online can be constantly updated and Content development is determined by the needs and/or preferences of learners.

As a result, TBL may be flexible in content. Then the TBL model, in which content is flexibly applied to individual needs and interests, is consistent with concept learning pedagogy. Learning can be changed to the best settings based on learning styles, basic skills, and individual interests. These models that can be encouraged by learners or instructors encourage active and participatory learning in which individuals build their knowledge.

Arguably the biggest advantage found in TBL is workforce training, especially in the flexibility of time and place. There is no disadvantages research related to the flexibility and convenience applies to working, low income, unemployed, where their place doesn't have a suitable location, and those who have physical disabilities. In addition, These models appear for them to follow the learning.

3) Promoting Interpersonal Interaction

Particularly in TBL, The designer of the program may find some difficulties to blend the appropriate substitutions to interact and students' collaboration. Research shows this is an important part of the learning process, especially

for adults. For teachers may be more difficult to develop the connection and direct interaction with learners.

However, technology can improve interpersonal interaction. The mixed model may represent a useful option because serving the synchronous interaction. Alternatively, some programs of TBL mix some technologies that can facilitate or at least give effective communication. For example, online discussion platforms, virtual conferences, and other tools can provide and promote collaborative learning. The instructor can support the interaction through video conferences with other participants. In a working environment, Intranet and chatroom can facilitate the distribution of ideas from one worker to others. Finally, mixing the learning community in TBL can summon collaborative learning, also it can support the student who needs online learning.[7]

4) Saving Costs and Resources

Time and cost is the main consideration in employing the TBL. These costs can include content development, integration between content and technology, training instructor, programming, implementation technology, personnel, and infrastructure. For the labor system, in particular, Gan found that one of the biggest concerns or barriers to implementing TBL is cost. These costs are becoming more burdensome, the more TBL strives not only to broadcast and archive content and material delivered in traditional classes (e.g., asynchronously accessible pre-recorded Webinars), but to engage learners more actively. In this case, the teacher needs more time, training, and supportive thing to make students engaged.

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[7] Rockvile and Alexandria, *Technology-Based Learning,* 11.

The associated cost issue is a problem related to hosting or accessing content. Technology requires infrastructure such as computer laboratories, and broadband access. In the workplace, employers get the additional cost to build the infrastructure technologies, and network to make a collaborative workplace.

However, if the infrastructure has been built, then already familiar with the infrastructure, the advantage of TBL is scalability and the cheap shipping cost. After being developed, TBL materials can be easily and efficiently made, updated, and simplified. This saving is especially for the unreachable student. Additionally, cloud technology serves alternative way that can reduce the cost of infrastructure supply. Infrastructure and data can be reached from everywhere with the dave way.[8]

5) Strengthening the Access and Readiness

Another issue related to the effectiveness of supporting technology to the student. While technology already made education and basic training easily accessed by adults. The divides digital minimizes the access of people. Digital divides refer to they who has the technology or not. However, this also refers to the accessibility and differences in literacy between those who are already familiar with technology and unfamiliar with technology.

This problem appears to both learner and teacher. The results of access and readiness for technology are relevant to students. The impact of instructor access and readiness is a little less pervasive, but it impacts any TBL that requires personal interaction between TBL and learners. Effective use of TBL may require not only technical support but also instructors who effectively use and interact with TBL products or

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[8] Rockvile and Alexandria, *Technology-Based Learning,* 12.

curricula so that they can guide learners through the materials and complement the TBL. Students and instructors with low-tech levels of literacy and comfort often become frustrated when trying to use technology, or when they experience technical difficulties. Instructors, as well as learners, often feel challenged. Without adequate training or support.

To solve this problem, some programs provide initial training support such as orientations, assistants, and courses) to familiarize instructors and learners with technology or to provide instructors with effective technological pedagogical practice. For Students with Study and physical disabilities, the TBL program offers a wide selection of Arabic Aid technology. For example, the program Can provide screen readers and closed information for online videos. Screen readers, such as iPhone VoiceOver or TalkBack Android 4.0, are used by individuals who are blind or have learning disabilities, for example, dyslexia, dysgraphia, and attention deficit disorder).[9]

2. Listening Skill

a. Definition of Listening

Listening is basic competence in learning a language that must learn by the learner it is a receptive skill that means new language learners get the new words based on what they herd. Their ability to receive will affect what they make. If they are good at listening, they will be good at competence too.[10]

According to Brown listening is an oral written response of students who demonstrate correct (or incorrect) hearing processing. To

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[9] Rockvile and Alexandria, *Technology-Based Learning,* 12.

[10] Nurmala Hendrawaty, *Loquen English Studies Journal*, Vol 12, No 1 (2019), 57.

become better listeners, learners must think actively when they listened. Listening is involved in a lot of language learning activities, both inside and outside the language classroom. The improvement in listening will provide a basis for the development of other language skills.[11]

According to Merriam Webster Online Dictionary, the word listening is taken from the word listening, which is a form of a verb that defines hearing something with thoughtful attention or as a form of giving consideration. Purdy as quoted in Deveci defines listening as a process Receive and answering messages both verbally and nonverbally. According to Rost as quoted from Gilakjani, listening has a great contribution to Communication is successful and is a very important element in capturing and Understanding a message. It can be concluded that listening is a skill in identifying and understanding what the speaker is saying.

b. Definition of Listening Skill

Listening skills are the key to all effective communication. Without the ability to listen effectively, the message is easily misunderstood. As a result, the communication is broken and the sender of the message can it is easy to become frustrated or irritated.

According to Vishwanath Bite, Listening skills can use as the key to receiving messages effectively. It is a combination of hearing what the other person is saying and psychological involvement with the person who speaks.[12]

According to Herbert J. Walberg Listening skills are essential for learning because it allows students to acquire insights and information, and

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[11] H Douglas Brown, *Language Assessment Principles and Classroom Practice* (New York: Pearson Education, 2004), 118.

[12] Vishwanath Bite, *Listening : An Important Skill and Its Various Aspects* (2013): 1.

to achieve success in communicating with [13]others.[14]

Listening skills lead to an understanding of pronunciation, vocabulary of the speaker, correct grammar, and the meaning the speaker intended it means that listening is very important. Wovin and Coakley Quoted in Wolvin argue that listening has been identified as one of the most important communication skills that are widely used and most important for personal, academic, and professional use. Wolvin also added that listening is a multidimensional construction. It consists of processes that motivate people to pay attention to others, such as responding to them with verbal or nonverbal feedback with behavioral processes and interpreting relational messages and speaker content with cognitive processes.[15]

Based on the above definition, it means that listening is individual competency that can be identified directly but not all people on the earth can listen to English except those who are native speakers of English.

3. **Covid-19 Outbreak**

The beginning human case called COVID-19, a disease caused by the new coronavirus that caused COVID-19, later Sars-CoV-2 was first reported by officials in the Chinese city of Wuhan in December 2019. Retrospective investigations by Chinese Researcherities have identified human cases with the onset of symptoms as early as December 2019. While some of the earliest known cases have links to wholesale food markets in Wuhan, some do not.

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[14] Herbert J. Walberg, *Teaching speaking, listening and writing* (IAE Educational Practices Series, 2004), 14

[15] Aulia Hamidah Arief, "Improving Students' Listening Skill through Know Want to Know-Learned (Kwl) Strategy" (Skripsi, UIN Syarif Hidayatullah, 2021), 7.

Many patients at the beginning of Covid-19 are the owner of the stall, employees of the market, and market visitors, These samples were taken from the market in December 2019 and tested and reactive with the coronavirus, further suggesting is the Wuhan market is the source of this outbreak. Finally, the market is closed on January 1, 2020.

SARS-CoV-2 was identified in early January and its genetic sequence was shared publicly on January 11-12. The complete genetic sequence of SARS-CoV-2 from ancient human cases and the sequence of many other viruses isolated from Human cases in China and around the world have since shown that SARS-CoV-2 has an ecological origin in bat populations. All the evidence available to date suggests that the virus originated in natural animals and not from natural animals. Manipulated or constructed viruses. Many researchers have been able to look at the genomic features of SARS-CoV-2 and it has been found that evidence does not support that SARS-CoV-2 is a laboratory construction. If built inside the virus, its genome sequence will show a mixture of known elements.[16]

4. English Learning During Covid-19 Outbreak

In the middle of 2020, the Indonesian government announced that the learning model in Indonesia must be replaced with online learning. This happens because the spreading of covid-19 in Indonesia are can not be controlled and this happens to minimize the spreading of covid-19 in Indonesia.

According to George Orlov et al When the COVID-19 pandemic arrived in the United States in the spring of 2020, most colleges and universities are moving from direct teaching to distance instruction, as the pandemic continues to spread, even institutions that

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[16] "Coronavirus disease 2019 (COVID-19) Situation Report – 94", (2020), https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/update-28-covid-19-what-we-know.pdf?sfvrsn=62ebd9ab_2.

bring students back to campus in autumn 2020 should offer a large number of online courses. For many institutions, this transition to online learning is done in a short period, with little planning or advanced experience to guide the transition. For educational institutions to succeed in providing students with the best learning experience in this new environment, it is very important to understand which aspects of pedagogy are proven to be most effective and whether a particular group of students is more vulnerable to forced switching to remote instruction, so they can provide with additional support.[17]

In response to the outbreak of covid-19 which resulted in learning activities that initially took place face-to-face, the system must be replaced with *daring* or it can be called online learning. By using an online way, the teacher can deliver the material through online groups that students will learn. It hopes that they don't lag behind the material they should get. In this case, teachers and lecturers also must look for the appropriate methods that will apply in their way of teaching online learning or E-learning. [18]

Talking about covid-19 it is supposed to be good also when we know the definition of online learning or E-learning. The definition of E-learning will deliver as follows:

a. E-learning

E-learning is an ICT that is used as activation of students to be able to learn in any education and anywhere. E-learning is also defined as a type of learning that can convey material to students through the Internet, Intranet, or other computer networks.[19]

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[17] George Orlov et al, "Learning during the Covid-19 Pandemic: It Is Not Who You Teach, but How You Teach,"

[18] M. Akmalun Ni'am Zam Zami and Ulin Nuha, "The Efforts to Create an Official Online Learning,"Britania, 16, diakses pada 18n Mei 20022 https://journal.iainkudus.ac.id/index.php/Britania/article/view/10140.

[19] Romi Satria Wahono, *"Pengantar e-learning dan Pengembangannya",* (LIPI: 2008) page 2

According to Michael Allen E-learning is learning made to support learning with the internet media.[20]

E-Learning is a way to produce a dynamic, vibrant, and interesting learning process to get new things and gain an understanding of a concept.

E-Learning is all that relates to learners, knowing learners with a ha; Special ones are prepared to meet their needs that are made following each student's ability to learn as well as provide a comfortable learning environment for students.[21]

Some of the things that are requirements of e-learning are:

1) Teaching activities are carried out through the use of networks, such as the use of the internet.
2) There is support for other learning services that can be utilized by students, such as External Hard drives, Flash disks, CD-ROMs, or even printers.
3) The availability of a guide who can help overcome student problems if they have difficulties.

On the other hand, some requirements can be added, including:

1) There is an organizing agency that manages e-learning activities
2) A positive response from students and teachers to things related to electronic learning
3) Learning plans that students can learn and know
4) Evaluation of student learning progress or development

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[20] Michael. Allen, *"Guide To E-Learning"*, (John Wiley And Sons, 2013), page 27.

[21] Diana Ariani, *"Komponen Pengembangan E-Learning",* (Jakarta: UNJ, 2018), page 59

5) Feedback attitude by the organizer towards students.[22]

In addition to the requirements and characteristics there are also functions of online learning according to Siahaan, the function of online learning will classify as follows:

1) Supplements

If the student has the freedom to choose, whether he or she is willing to take advantage of additional classes online or not to take advantage of them. Here students do not have mandatory demands to take online classes but are only limited to their own will to want to add online classes or not.

2) Complement

That is if online learning is used as material add-on material received by students in the class. It is made for remedial for students who take part in face-to-face learning.

3) Substitution

If something happens that allows for obstacles to the implementation of face-to-face learning activities, then this replacement can be done. Where this replacement function is currently being implemented to break the covid-19 chain.[23]

B. Theoretical Framework

Teaching listening in online learning must have a good strategy to teach the appropriate way so that the teaching will run well. It is can not deny that using the traditional method is quite easy than online learning. But there are still some disadvantages that must be corrected. In this research, the researcher comes closer to the lecturer and student and gives some questions to gain information, especially in the use of a

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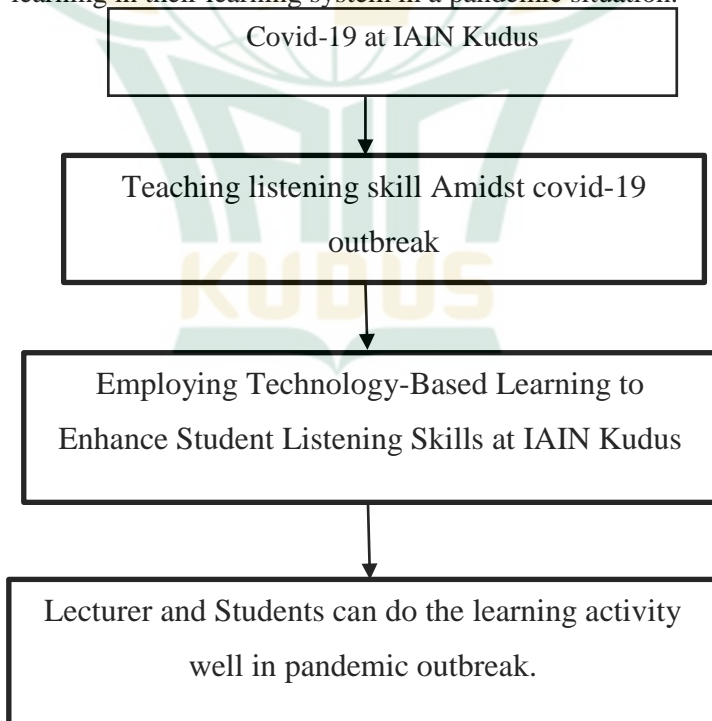[22] Wiwin Hartanto, *"Penggunaan E-Learning Sebagai Media Pembelajaran"* (Jember: UNEJ,2012) page 4-5.

[23] Nur Hadi Waryanto, *"Online Learning Sebagai Salah Satu Inovasi Pembelajaran"* (Yogyakarta: Universitas Negeri Yogyakarta, 2006), page 12-13.

smartphone as technology in teaching English listening. By using a smartphone, students will feel curious and start to be interested in the method applied by the lecturer.

As we know learning is a process of changing behavior, knowledge, attitude, and positive values of human life. And the definition of learning according to Ruhimat is a change, and this change is due to the activity of responding to the environment. Ruhimat also stated that from the many discussions regarding learning, there are some similarities in the substance of learning, i.e. basically a change in behavior that includes knowledge, attitudes, and skills as a result of interaction between learners and the learning environment.

To face the pandemic era, especially in the academic environment, lecturers do technology-based learning in teaching English listening skills. After that, lecturers and students can face the pandemic by using technology-based learning in their learning system in a pandemic situation.

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C. Review of Previous Studies

1. Like Alfando (2020) tried to do the research that is related to this research. The research is about using WhatsApp as a learning medium as a solution to teaching during a pandemic. Learning for the Covid-19 era is to implement Social Distancing so that learning that was originally conventional face-to-face turned into distance learning. The learning process is carried out from home using technology and internet media. This learning system is called Online Learning (In-Network). at MI Ma'arif Ngrupit in class, VI-B using the Google Classroom application, but student learning outcomes have not been maximum. This is because there are students who cannot use this application. Then, the need for alternative uses of other applications such as the WhatsApp Application. Previous application WhatsApp is already used in class VI-B for dissemination related to learning information. So all students can already use this application and are expected to improve learning outcomes.[24] This research is similar to this research but there is an additional platform called Google Classroom that is used by the teacher in teaching, then this research uses a virtual classroom that is served by the university for the lecturer in controlling their class.

2. Febri Yanti Irwan (2020) Zoom Application Usage Analysis as a Media of Sociology Learning at SMA Negeri 18 Makassar. This study uses the theory of behaviorism. The results of this research are regarding the experience from the use of zoom applications. as a medium of sociology learning among students and teachers the application this zoom is not effective because most students use it. This application in teaching and learning has difficulties in understanding the lesson, not all often students also cheat when the teacher wants to test their skills by doing quizzes, they just walk out of the

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[24] Like Alfando Argadia Sari, "Pemanfaatan Aplikasi Whatsapp Sebagai Media Pembelajaran Daring Di Masa Pandemi Covid-19 Dalam Meningkatkan Hasil Belajar Siswa (Studi Kasus Di Mi Ma'arif Ngrupit)", (Skripsi, IAIN Ponorogo).

meeting to avoid questions from the teacher.[25] This research was done by Febri Yanti in 2020. The difference between this research with the research that the researcher does are the use of platforms in teaching, this research uses the Zoom application in teaching and learning, different from the researcher one, the researcher uses WhatsApp and google meet to teach the listening skills. The subject is also different from the researcher one.

3. Sri Wahyuni et al (2020) use Google meet online networking as media on courses speaking II. Considering that in the speaking course students are required to do communicating orally using English, so google meet becomes the right choice because the google meet application is a video conference application that allows direct interaction between students and Lecturer even through video. Based on the results of the analysis by using paired sample t-test using the SPSS22 application obtained value t = 10.806, p<0.00 (N = 20). From the results of the analysis can be concluded there are significant improvements in the value of speaking II before and after using the media application Google Meeting.[26] This research is similar to the researcher's study but, the subject is different, this previous study focuses on speaking but the researcher's study is focused on listening study.

4. Lia Herliana (2017) used Blog as one of the technologies that are used in teaching English, especially in writing. In this part, the problem of students is a lack of motivation in writing so, the skills of writing in English still need more improvement. By using this method the interest of student become up. Based on the results of research. There are improvements in using the blog as a part of the

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[25] Febri Yanti Irawan, Analisis Penggunaan Aplikasi Zoom Sebagai Media Pembelajaran Sosiologi di SMA Negeri 18 Makassar, Skripsi, Universitas Muhammadiyah Makassar.

[26] Sri Wahyuni. Kurnia Febianti, Pengunaan Media Pembelajaran Online Google Meet Pada Mata Kuliah Speaking di Prodi Bahasa Inggris STKIP Muhammadiyah Pagar Alam, (Pagaralam: STKIP Pagalaram)

way to improving the writing skills of the student. [27] This research focuses on the use of blogs to improve writing skills, different from the researcher's study that uses WhatsApp, google meet, and also virtual classrooms as media in teaching English listening skills. Instead of using the application, this previous research focuses on blogs as a technology to improve writing skills. Besides that, the subject of this previous research is also different from the researcher's study which focused on listening skills.

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[27] Lia Herliana, Penggunaan Media Blog dengan Pendekatan Konstruktivisme untuk Meningkatkan Keterampilan Menulis Teks Eksposisi Siswa, SMK Negeri Samarinda, 2017.