ENGLISH PRE-SERVICE TEACHERS' PREFERENCE IN TECHNOLOGY-INTEGRATED LESSON PLAN TO FACILITATE STUDENTS' DIGITAL LITERACY SKILLS

THESIS

Submitted in partial fulfillment of the requirement for the degree of Sarjana Pendidikan (S.Pd) in Teaching English



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ABSTRACT

Nurcahyo, Nurcahyo. (2022). English Pre-service Teachers' Preference in Technology-Integrated Lesson Plan to Facilitate Students' Digital Literacy Skills. English Language Education Department, Faculty of Tarbiyah and Teacher Training, UIN Sunan Ampel Surabaya.

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The obligation to have an emergency remote learning due to the pandemic covid-19 results in a limitation in conducting effective and supportive learning process and Teachers' teaching competence which demands considerable numbers of concerns. Fortunately, this also leads to Educational transformation by the help of digital technology and the growing importance of digital literacy skill during distance learning. Thereby, this qualitative study aimed to describe how English pre-service teachers of UIN Sunan Ampel Surabaya decided to choose and use digital technology to facilitate students' digital literacy skill in their lesson plan as well as the reasons behind it. This study used document analysis, questionnaire, and interview guidelines as the instruments to collect the data. The findings shown that all of the English pre-service teachers of UIN Sunan Ampel Surabaya had already planned to use digital technology, which was quite varied but not really distinguishable, to facilitate students' digital literacy skills within a relevant instructional activity and in accordance with the goals of the teaching and learning activity. It could be seen by how well-organized the instructional activity which involves the elements of digital literacy skills construction, namely carrying out the task digitally, organizing data critically and creatively, participating in digital communication and collaboration, and even supporting and developing others in digitally rich settings. This study also found that English pre-service teachers had several considerations to take, such as the accessibility, the interactivity, the function and feature, and the possibility to significantly facilitate students' digital literacy skills. These considerations were reported in accordance with what goals of the teaching and learning process would be achieved, and what instructional activity would be conducted, so that the construction of digital literacy skills of their students will be facilitated optimally.

ABSTRAK

Nurcahyo, Nurcahyo. (2022). English Pre-service Teachers' Preference in Technology-Integrated Lesson Plan to Facilitate Students' Digital Literacy Skills. Program Studi Pendidikan Bahasa Inggris, Fakultas Tarbiyah dan Keguruan, UIN Sunan Ampel Surabaya.

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Kata kunci: Guru Prajabatan Bahasa Inggris, RPP, Teknologi Digital, Keterampilan literasi digital

Kewajiban pembelajaran jarak jauh darurat akibat pandemi covid-19 mengakibatkan terbatasnya pelaksanaan proses pembelajaran yang efektif dan mendukung, serta tuntutan kompetensi mengajar Guru yang menjadi lebih besar. Untungnya, ini juga mengarah pada transformasi pendidikan dengan bantuan teknologi digital dan semakin pentingnya keterampilan literasi digital selama pembelajaran jarak jauh. Oleh karena itu, penelitian kualitatif ini bertujuan untuk mendeskripsikan bagaimana guru prajabatan bahasa Inggris UIN Sunan Ampel Surabaya menerapkan teknologi digital untuk memfasilitasi keterampilan literasi digital siswa dalam RPP mereka serta alasan penerapannya. Penelitian ini menggunakan analisis dokumen, kuesioner, dan pedoman wawancara sebagai instrumen untuk mengum<mark>pulkan data. H</mark>asil penelitian menunjukkan bahwa semua guru prajabatan bahasa Inggris UIN Sunan Ampel Surabaya sudah merencanakan untuk menggunakan teknologi digital yang cukup variatif namun tidak terlalu berbeda secara signifikan, untuk memfasilitasi kemampuan literasi digital siswa dalam kegiatan pembelajaran yang relevan dan sesuai dengan tujuan kegiatan belajar mengajar. Hal ini terlihat dari terselenggaranya kegiatan pembelajaran yang melibatkan unsur-unsur konstruksi keterampilan literasi digital, yaitu melaksanakan tugas secara digital, mengorganisasikan data secara kritis dan kreatif, berpartisipasi dalam komunikasi dan kolaborasi digital, bahkan saling mendukung dan mengembangkan dalam pembelajaran, pengaturan kaya digital. Studi ini juga menemukan bahwa guru bahasa Inggris prajabatan memiliki beberapa pertimbangan, seperti aksesibilitas, interaktivitas, fungsi dan fitur, dan kemungkinan memfasilitasi keterampilan literasi digital siswa secara signifikan. Pertimbangan-pertimbangan tersebut dilaporkan sesuai dengan apa tujuan dari proses belajar mengajar yang akan dicapai, dan kegiatan pembelajaran apa yang akan dilakukan, sehingga pembinaan keterampilan literasi digital siswanya akan terfasilitasi secara optimal.

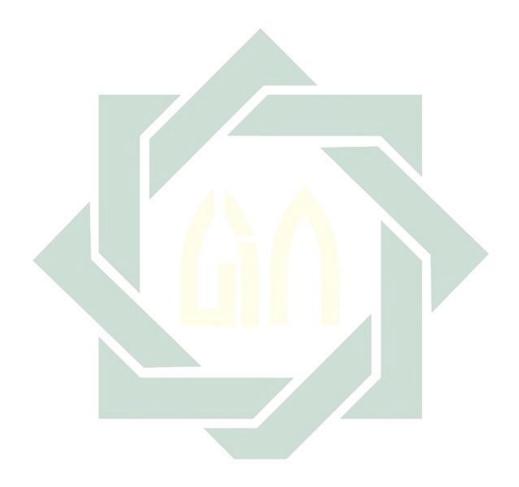
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LIST OF ABBREVIATION

ELT = English Language Teaching

ICT = Information and Communication Technology

LMS = Learning Management System



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CHAPTER I

INTRODUCTION

In this chapter, the researcher reports the theories related to the area of English Pre-service Teachers' Preference in Technology-Integrated Lesson Plan to Facilitate Students' Digital Literacy Skills that will be investigated into some subheadings: (1) background of the study, (2) research questions, (3) objectives of the study, (4) significance of the study, (5) scope-and limitation, and (6) definition of key terms.

A. Background of the Study

Teachers' pedagogical competence is undergoing a considerable concerns in which demanding technological-supported integration in the present-day knowledge during the teaching and learning processes¹. This competency is completely understood to have a relation with the framework design that the 21st century teachers should master in their technological and pedagogical teaching practices due to some advanced and systematic knowledge needed by the students. The framework design or commonly known as lesson plan become the focus issue on how the teachers generate their teaching competence, beliefs, and preference into a written concept for the goodness sakes of the students' needs.

Some researchers have conveyed that what 21st century students need right now is expressing idea in digital media and be proficient in operating technological-based tools to complete sophisticated tasks, or simply called as digital literacy skills². This digital literacy skill consists of six elements namely Ability of ICT (functional competences), Information-data-media literacies (critical utilization), Digital invention, problem-solving and regeneration (Creative output), Digital relation, cooperation and involvement

¹Minna Lakkala, Jiri Lallimo, And Kai Hakkarainen, "Teachers' Pedagogical Designs For Technology-Supported Collective Inquiry: A National Case Study," Computers & Education 45, No. 3 (November 2005): 337–56, Https://Doi.Org/10.1016/J.Compedu.2005.04.010.

²Mark Frydenberg, "Achieving Digital Literacy Through Game Development: An Authentic Learning Experience," Interactive Technology And Smart Education 12, No. 4 (January 1, 2015): 256–69, Https://Doi.Org/10.1108/ltse-08-2015-0022.

(Participation), Digital science and construction (Development), as well as Identity of digital and welfare (Self-actualizing).³. Those six elements are defined and built the so-called digital literacy skill which is significant in this well-developed digital era.

Nowadays, the application of digital literacy in real life situations has become more noticeable compared to the past few decades. By having a sufficient comprehensibility of digital literacy, it enables ones to understand, operate, create, and share a various numbers of technological-based information and communication tools in both real-life situation and social networks⁴. Those possibility may happen due to the critical components involved within the skills called digital literacy, namely digital devices understanding and use, critical and digital problem-solving ability, and activeness and cooperative skill⁵. It points out how important the chosen technology is in order to facilitate students' digital literacy skills in this present day. Therefore, the teachers are highly required to provide a whole throughout understanding about digital resources and communication tools from the growth of digital culture in this twenty first century⁶. In addition, the consideration in choosing such technology plays an important role for teachers either the licensed teachers or the student teachers.

Though the benefits of the technological-integration in classroom activity are quite varied, the schools and the teachers cannot just apply it as they

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Jisc. (2017a) Building Digital Capability: The Six Elements Defined, Joint Information Systems
 Committee, Bristol. Http://Repository.Jisc.Ac.Uk/6611/1/Jfl0066f_Digigap_Mod_Ind_Frame.Pdf
 Krish Chetty Et Al., "Bridging The Digital Divide: Measuring Digital Literacy," Economics 12, No. 1
 (December 1, 2018): 20180023, Https://Doi.Org/10.5018/Economics-Ejournal.Ja.2018-23.

⁵Elizabeth Kazakoff Myers, "Technology-Based Literacies For Young Children: Digital Literacy Through Learning To Code," Young Children And Families In The Information Age: Applications Of Technology In Early Childhood, December 1, 2015, 43–60, Https://Doi.Org/10.1007/978-94-017-9184-7 3.

⁶Siu-Cheung Kong, "Developing Information Literacy And Critical Thinking Skills Through Domain Knowledge Learning In Digital Classrooms: An Experience Of Practicing Flipped Classroom Strategy.," Computers & Education 78 (September 30, 2014): 160–73, Https://Doi.Org/10.1016/J.Compedu.2014.05.009.

pleased⁷. It is all due to the objectives that the schools or institution as well as the teachers want to achieve by considering students' needs, teachers competence and their capability in accessing and operating such digital technology.

Recently, however, the regulation regarding a recommendation and obligation to have an emergency remote learning due to the pandemic Covid-19 results in a limitation in conducting effective and supportive teaching and learning processes. The teaching practice during distant learning meets various difficulties, constraints, and challenges⁸. Hence, relevant pedagogical models which in accordance to technological understanding are extremely required to support students' digital literacy skill in teaching and learning processes. Fortunately, one of the positive impacts brought by the emergence of the pandemic Covid-19 as well as the policy of having a distant learning is an educational transformation which increases significantly through the optimization of sophisticated technology in educational context. As a result, teachers are demanded to have an appropriate and sufficient pedagogical and technological understanding.

Speaking of pedagogy and technology understanding, one of the prior studies proved that teachers' preference in determining technological used during this technological-based teaching and learning is significantly affected by their self-efficacy as well as their awareness, openness, and readiness⁹. Though the vast majority of teachers have familiarity and confidence in accessing technology, most of them are pragmatically slow-integrated, which is also significantly influenced by their pedagogical beliefs

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⁷"Examining The Impact Of Instructional Technology And Material Design Courses On Technopedagogical Education Competency Acquisition According To Different Variables," Educational Sciences: Theory & Practice, 2017, Https://Doi.Org/10.12738/Estp.2017.5.0322.

⁸Maria Assunção Flores And Marília Gago, "Teacher Education In Times Of Covid-19 Pandemic In Portugal: National, Institutional And Pedagogical Responses," Journal Of Education For Teaching 46, No. 4 (August 7, 2020): 507–16, https://doi.org/10.1080/02607476.2020.1799709.

⁹Yaoran Li Et Al., "Predicting High School Teacher Use Of Technology: Pedagogical Beliefs, Technological Beliefs And Attitudes, And Teacher Training," Technology, Knowledge And Learning 24 (September 1, 2019): 1–18, Https://Doi.Org/10.1007/S10758-018-9355-2.

and competence in integrating technology. ¹⁰ It shows that what they believe and what they are actually capable of are not the same.

Several researchers have conducted similar studies about the topic being discussed in this current study, either about their teaching beliefs and competences, their lesson plans, their technology-integration in their classroom processes, or even about students' digital literacy skill. For instance, related to the teaching beliefs, competence, and preference, the study of Ismail & Jarrah and Ibrahim Gokdas, have investigated the impact of teaching practice on pre-service teachers' perceptions toward their pedagogical preferences, teaching competence and motivation¹¹. However, their study focused on exploring the perception of pre-service teachers after having a teaching practice, not about their lesson plan as well as the rationale behind it during their teaching practices. Other than that, Maria Assunção Floresa and MaríliaGago have just barely examined the teachers' pedagogical responses as a result of the schools and universities closure, but it can be noticed that it only focused on the general pedagogical responses in which there was no specific teaching and learning activity that the researchers focused on and how they try to comply the demand by employing the 21st technologies during the current situation¹². The current research may likely similar to the study of Minna Lakkala, Jiri Lallimo, and Kai Hakkarainen which examined teachers pedagogical design for technological-supported collective inquiry¹³. However, they only focused on the design created by the teachers without investigating the reasons behind such a framework being designed. Moreover, the other variables involved in the prior study was the

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¹⁰Haixia Liu, Chin-Hsi Lin, And Dongbo Zhang, "Pedagogical Beliefs And Attitudes Toward Information And Communication Technology: A Survey Of Teachers Of English As A Foreign Language In China," Computer Assisted Language Learning 30, No. 8 (November 17, 2017): 745–65, Https://Doi.Org/10.1080/09588221.2017.1347572.

¹¹Assoc. Prof., College Of Education, United Arab Emirates University, United Arab Emirates, Isadiq@Uaeu.Ac.Ae Et Al., "Exploring Pre-Service Teachers' Perceptions Of Their Pedagogical Preferences, Teaching Competence And Motivation," International Journal Of Instruction 12, No. 1 (January 3, 2019): 493–510, Https://Doi.Org/10.29333/lji.2019.12132a.

¹²Assunção Flores And Gago, "Teacher Education In Times Of Covid-19 Pandemic In Portugal."

¹³Lakkala, Lallimo, And Hakkarainen, "Teachers' Pedagogical Designs For Technology-Supported Collective Inquiry."

activity named collective inquiry, while the current study focuses on a musthave skill that the 21st century students need, that is digital literacy skill.

While related to technological-integration during teaching and learning activity, the study of Yaoran Li, Veronica Garza, Anne Keicher, and Vitaliy Popov explored teachers' technological self-efficacy on pedagogical teaching. 14 However, though the study has investigated the teachers' technological self-efficacy, it has not deeply analyzed how they express and formulate it in the form of a written framework focusing on students' particular skill. While the study of Limhas specifically studied how the communication tools of both synchronous and asynchronous learning take an important role during an online learning; however, it has not critically analyzed on why those types of communication tools were chosen to facilitate specific students 21st century skill. ¹⁵In addition, the study by Kubilinskiene and Dagiene explored the way information technology can effectively help for the betterment of teachers' lesson plan development by considering the situation that occurred at that moment. 16 Nevertheless, it focused on creating a new template of technology-based lesson plan, not focusing on analyzing stages within lesson plan to discover the use of digital technology to facilitate students' digital literacy skill.

Whilst related to digital literacy skill, the study of Perdana, Yani, Jumadi, and Rosana focused on examining students' digital literacy level in one of the senior high schools in Yogyakarta¹⁷. But the digital literacy in this study will mainly function as the criteria to analyze and gain the main data and as the consideration behind the English pre-service teachers' preference in choosing

¹⁴Li Et Al., "Predicting High School Teacher Use Of Technology: Pedagogical Beliefs, Technological Beliefs And Attitudes, And Teacher Training."

¹⁵Francis Pol Lim, "An Analysis Of Synchronous And Asynchronous Communication Tools In E-Learning," 2017, 230–34, Https://Doi.Org/10.14257/Astl.2017.143.46.

¹⁶Svetlana Kubilinskiene And Valentina Dagiene, "Technology-Based Lesson Plans: Preparation And Description," Informatics In Education 9, No. 2 (October 15, 2010): 217–28, Https://Doi.Org/10.15388/Infedu.2010.15.

¹⁷Rikiperdana Et Al., "Assessing Students' Digital Literacy Skill In Senior High School Yogyakarta," Jpi (Jurnalpendidikan Indonesia) 8, No. 2 (August 5, 2019): 169, Https://Doi.Org/10.23887/Jpi-Undiksha.V8i2.17168.

particular digital technology in their lesson plan to facilitate students' digital literacy skill. Next, Dewi, Fahrurrozi, Hasanah, & Dj have also just investigated the significant factors that are involved in the digital literacy competence. Compared to this prior study, the current researcher would like to use digital literacy as the standard variables to specify researchers in analyzing the ELT lesson plan focusing on the use of digital technology to facilitate students' digital literacy skill. Last, the study by Rafi, JianMing, and Ahmad exposed students' digital literacy competence and technological skill in using database sources and searching online information. However, it was clearly not involving teachers' consideration as well as their lesson plan in teaching and learning activity.

From several numbers of prior studies mentioned above, it shows that the way pre-service teachers use digital technology to formulate their ELT lesson plan to facilitate students' digital literacy skill in their teaching and learning process in Indonesian context, was only a few examined and investigated. Hence, it raises several numbers of curiosities namely related to (1) the use of digital technology in ELT lesson planning to facilitate students' digital literacy skill as written in ELT lesson plan designed by English pre-service teachers of UIN Sunan Ampel Surabaya, and (2) their perspective in designing such lesson plan by integrating digital technology to facilitate students' digital literacy skill.

As prepared teachers, English pre-service teachers are still undergoing a set of training to shape their teaching pedagogical beliefs and competence which gives them a big chance to gain a correct and appropriate understanding due to the intensive supervision they received. Other than that, since they were born when the technology has been vastly promoted, it increases their chance to understand and integrate a variety of digital

¹⁸Fahrurrozi, U. Hasanah, And R. Dewi, "Integrated Learning Design Based On Google Classroom To Improve Student Digital Literacy," 2019 5th International Conference On Education And Technology (Icet), 2019, 108–11.

¹⁹Muhammad Rafi, Zhengjianming, And Khurshid Ahmad, "Technology Integration For Students' Information And Digital Literacy Education In Academic Libraries," Information Discovery And Delivery 47, No. 4 (November 18, 2019): 203–17, Https://Doi.Org/10.1108/Idd-07-2019-0049.

technology optimally which simultaneously and unconsciously increases their digital literacy skill through the process of collecting information in digital media.

Hence, the main aim of the present study was to describe the digital technology chosen to be integrated in ELT lesson plan to facilitate students' digital literacy skill as well as to investigate the reasons and beliefs of English pre-service teachers when designing a lesson plan in such a shape by focusing on the determination in choosing such digital technology to facilitate students' digital literacy skill. In brief, the current research will investigate English pre-service teachers' lesson plan including their reasons in utilizing suitable digital technology to facilitate students' digital literacy skill.

B. Research Question

There are two research questions on this study, namely:

- 1. What are the preferences of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill?
- 2. What are the reasons for preference of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated plan design to facilitate students' digital literacy skill?

C. Objectives of the Research

The current study aims to:

- To investigate the preference of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill.
- 2. To investigate the reasons for English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill.

D. Significance of the Study

The researcher hopes that this study has some significances:

1. For the other researchers

The result of this study can be used as one of the references for other further researchers who have similar topic interest. In particular, they may use it as the previous study of their own study to look for the gap that the current researcher has not covered yet, or even use it as the base to examine and validate the result of the current research.

2. For the English pre-service teachers

The result of this study can also be used as a reference for English preservice teachers when they want to enrich their pedagogical competence from other English pre-service teachers. To be more specific, they may enrich their pedagogical competence and beliefs in terms of digital technology-integration during an online learning to facilitate students' digital literacy skill.

3. For the lecturers

The result of this study can be used by lecturers who teach pedagogy-related subjects as reference to know their students' teachers 'perspectives toward the digital technology-integration to facilitate students' digital literacy skill within their ELT lesson plan. In this context, the lecturers of microteaching courses can understand to what extent their students' teachers are capable of designing a lesson which integrates digital technology to facilitate students' digital literacy skill. Other than that, if those microteaching-course lecturers are curious on why most of their English pre-service teachers use those particular digital technologies in their lesson plan as well as their teaching practice, they may look for the answers on the finding of the current research. In addition, after knowing the rationale behind those issues, the lecturers may likely give the appropriate feedback and advice based on their numerous and great experiences, competences, and perceptions to enrich English pre-service teachers' pedagogical understanding.

4. For the teachers

The result of this study can be used by English teachers when they want to compare their pedagogical beliefs with English pre-service

teachers related to the topic discussed in this study. They may be able to figure out how the current English pre-service teachers' preference in designing such a lesson makes them reflect and perhaps update their vision in using particular digital technology to facilitate students' digital literacy skill in their lesson. Although they have taught English for teens or even dozens of years, teachers need to always upgrade their pedagogical understanding as time goes by. It is all because as the era develops, the needs of the current students cannot be guaranteed to remain unchanged.

E. Scope and Limitation of the Research

The scope of this study was only the ELT lesson plan that integrated digital technology to facilitate students' digital literacy skill as well as the rationale in designing such a framework. The lesson plans that were analyzed were purposely for online-based learning which have high possibility in answering the research question of this study. Moreover, those were intended for senior high school students only who have already got sufficient understanding and ready to learn and operate technological-based educational devices in the most effective way. In addition, the researcher did not analyze the use of digital technology in their lesson plan only, but also investigated it on how they used it based on their instructional activity, their type of students, and the goal of their lesson within their classroom activity as written in their lesson plan to facilitate the digital literacy skills of their students.

This research was limited by only conducting the study with the topic mentioned, that was teachers use of digital technology in ELT lesson planning to facilitate students' digital literacy skills, to the 30 students teachers of English Language Education Department in UIN Sunan Ampel Surabaya who had finished Microteaching course in academic year 2020-2021. Those 30 students' teachers who participated in this descriptive qualitative study, have already created their own lesson plan which integrates technology either consciously or not to facilitate students' digital literacy skill. However, the researcher did not explore the reasons why the other

lesson plans, which were not chosen, didn't integrate any technology in their lesson. Other than that, the researcher did not report the originality of the lesson they have designed since they surely have their own consideration to use such a lesson. In addition, the current research might not directly give any impact of digital literacy on the improvement of teachers or even students' English competence, since only focused on teacher' preference in choosing digital technology to facilitate students' digital literacy skills. Nevertheless, this study would benefit them when they attempted to design a lesson plan in their English teaching and learning process to facilitate students' digital literacy skills.

F. Definition of Key Terms

There will be several terms that may be periodically found in this study. Therefore, the researchers decide to make it into key terms that have an operational meaning on this research, they are:

1. English Pre-service Teachers

English pre-service teachers are students who are undergoing a set of training under certain supervision in order to be a certified teachers²⁰. Preservice teachers in this study is university students in English language educational department of UIN Sunan Ampel Surabaya who have just finished their teaching practice in Microteaching class in academic year 2020-2021 in order to learn and train teaching English as the subject of the lesson before undertaking any real-teaching.

2. Lesson Plan

Lesson plan is a written outcome produced by teachers' pedagogical competence, beliefs, and preference which consists of clear description on how teachers will run their class based on a particular methodologically-based lesson in order to achieve the learning goals in the classroom

²⁰Georgioszacharis, "Investigating The Factors Influencing Pre-Service Teachers' Acceptance To Use Mobile Devices For Learning: The Case Of A Greek University," 2020, 183–208, Https://Doi.Org/10.4018/978-1-7998-1486-3.Ch010.

activities.²¹In this study, the lesson plans that were analyzed were 30 lesson plans designed by English pre-service teachers of UIN Sunan Ampel Surabaya in academic year 2020-2021 focusing on the use of digital technology to facilitate students' digital literacy skill.

3. Digital Technology

Digital technology is the integration of electronic tools, systems, devices, or resources that generate, store or process data for particular disciplines, in this context is education²². In the context of this study, it means the involvement of digital technology as either the main or supporting media in particular learning practice that are assumed to assist English pre-service teachers of UIN Sunan Ampel Surabaya in facilitating their students' digital literacy skill. It can be in the form of LMS (Learning Management System), web application, online game, social media, and Weblog.

4. Digital literacy skill

Digital literacy skill is a skill consists of the integration skills named critical thinking, creativity, ability to build and evaluate information, and ability to operate digital media effectively²³. In this study, the term named digital literacy skill will be used to define how English pre-service teachers use technology in their ELT Lesson planning to facilitate students' digital literacy skill. It is all due to the functional skills, critical use, creative production, participation, development, and self-actualization involved in digital literacy skills that will be facilitated using the chosen digital technology.

²¹K. Anders Ericsson, Ed., The Cambridge Handbook Of Expertise And Expert Performance (Cambridge; New York: Cambridge University Press, 2006).

²²Fouziehsabzian, Abbas Pourhoseingilakjani, And Sedighehsodouri, "Use Of Technology In Classroom For Professional Development," Journal Of Language Teaching And Research 4, No. 4 (July 1, 2013): 684–92, Https://Doi.Org/10.4304/Jltr.4.4.684-692.

²³David Buckingham, "Defining Digital Literacy - What Do Young People Need To Know About Digital Media?," Nordic Journal Of Digital Literacy 10, No. Jubileumsnummer (2015): 21–35, Https://Doi.Org/10.18261/Issn1891-943x-2015-Jubileumsnummer-03.

CHAPTER II

THEORETICAL FRAMEWORK

The second chapter addresses the theoretical framework and the previous study on the area of English Pre-service Teachers' Preference in Technology-Integrated Lesson Plan to Facilitate Students' Digital Literacy Skills that will be covered in some subheadings namely (1) Lesson plan of English pre-service teachers, (2) Digital Technology-Integration in Language Teaching, (3) Students' Digital Literacy Skill in this Present-day, and (4) Digital Technology-integration in ELT Lesson Planning to Facilitate Students' Digital Literacy Skill

A. Review of Related Literature

1. Lesson Plan of English Pre-service Teachers

Lesson plan is a design for teaching and learning based on the knowledge and beliefs which will be developed and applied to the students considering the needs and the principals. It is all because lesson plan takes an important role as providing description of methodically-based lesson²⁴. Therefore, it is significant to have sufficient and relevant teaching competence, beliefs, and practices in order to prepare effective teaching and learning²⁵. By having such sufficient and relevant competence, beliefs, and practices, teachers including English pre-service teachers, are able to achieve the goals of the teaching and learning process in a more effective way. However, during these uncertain days, teachers and teaching principals meet an issue within a teaching practice both the real practice and the ideal practice²⁶. Therefore, under this Covid-19 outbreak, the teachers are demanded to plan and conduct an effective online learning which utilizes the advancement of technology by following the common pedagogical provision.

²⁴Ericsson, The Cambridge Handbook Of Expertise And Expert Performance.

Assoc. Prof., College Of Education, United Arab Emirates University, United Arab Emirates, Isadiq@Uaeu.Ac.Ae Et Al., "Exploring Pre-Service Teachers' Perceptions Of Their Pedagogical Preferences, Teaching Competence And Motivation."

²⁶ Ibid

The lesson plan that have been designed and functioned as a guideline of teaching is created based on teachers' teaching beliefs and competence through a set of auxiliary works named preparing, organizing, and conducting the upcoming lesson²⁷. By reflecting those three experts' saying, the researcher also believes that teachers' beliefs, competence, consideration and preference in designing a lesson can be uncovered through the lesson plan they created. In addition, though teachers' pedagogical framework can be clearly noticed through the lesson plan they had designed, every process when they are thinking, (e.g visualizing, reading resources, or even daydreaming) is also considered as lesson planning.²⁸ Therefore, the current study did not merely analyze the lesson plans of English pre-service teachers, but also questioned the reasons behind such designs being created.

In designing a lesson, it is a must for teachers, in this context as English pre-service teachers, to at least include these 5 vital aspects which are suggested by Brown (2001), namely goals, objectives, activities, media, and assessment in order to manage their time, effort, and resources efficiently. First, a goal can be assumed as what students are able to do by the end of the lesson by considering the needs of the students and the principles applied. Second, objectives function as the elaboration of the defined goal in which stating what the learners do in every single activity in order to achieve the learning goal. To be precise, objectives are the operational action on how the teachers and the students achieve the goal of the lesson. Third, include a detailed elaboration of each activity that the teachers and their students are going to do during the learning process. In the current situation, it is oriented to not only deliver material but also construct 21st century skills of students through the integration of technology. Fourth, it should contain materials which involved practical

²⁷Tessa Woodward And Penny Ur, Planning Lessons And Courses: Designing Sequences Of Work For The Language Classroom, 12. Print, Cambridge Handbooks For Language Teachers (Cambridge: Cambridge Univ. Press, 2010).

²⁸ Ibid

and relevant theory which are arranged based on the objectives of the lesson²⁹. It may be from either created materials (e.g. textbooks, coursebooks, modules, etc), or authentic materials (e.g. novel, comics, magazines, youtube, or other IT resources).Last, it should describe the assessment which intended to evaluate students after learning a set of materials based on the indicators that have been determined and in accordance with the goals and objectives of the lesson.

2. Digital Technology-Integration in Language Teaching

In this technology-based developed era, teachers and principals are demanded to establish effective teaching and learning activity by using the advancement of technology. Technology-integration proposes various benefits in teaching practices, namely connectivity, extension, inquiry, personalization, publication, and scale³⁰. It points out that technological understanding in relation to teaching competence is important for teachers to have a technology-integrated learning environment which is able to cover those various benefits. In addition, it may broaden the scope of students in learning, well-monitors and control students' work, and increase students' opportunities to be more active.³¹ In other words, the integration of digital technology is able to optimize the concept of students-centered within the classroom activities.

Despite those benefits offered by the integration of technology, the implication of technology in teaching and learning process, particularly in online learning, is used to find and select appropriate and relevant projects, collect and analyze the collected data, and communicate with other people

²⁹State University Of Jakarta (UNJ) And Septe Albert Laia, "The Analysis Of English Teachers' Lesson Plans Through Objectives Theory," In Iceap 2019 (International Conference On Educational Assessment And Policy, Kementerianpendidikandankebudayaan, 2019), 64–68, Https://Doi.Org/10.26499/Iceap.V0i0.204.

³⁰Rebecca Ferguson. (2019). Pedagogical Innovations For Technology-Enabled Learning. Canada: The Commonwealth Of Learning

³¹"Examining The Impact Of Instructional Technology And Material Design Courses On Technopedagogical Education Competency Acquisition According To Different Variables."

involved³². In other words, this technology-integration learning during online learning is indeed crucial to give richer information, various ways of learning, and most importantly connect the far distance between students and teachers living through particular media. Here are the types of digital technology that have been classified based on their communicative and usability.³³

Table 2.1. Type of digital technology based on its communicative function

			Common
Communicat	77	T	software
ion tools	Usability	Limitation	application
			used
LMS	- Collaborative and meaningful discussion within a certain period of time - More time for reflection on the topic discussion - Easy to control the level of participation	 May lead into misinterpretation May take longer for feedbacks and dual 	Google classroomEdmodoSchoology
Web logs	- Essay to share ideas, comments, images and other types of documents - More time for reflection on the topic discussion - Provides documentation of student interaction	 May lead into misinterpretation May take longer for feedbacks and dual Require technical knowledge to operate the web logs 	- Wordpress - Blogspot - Blogger.com
Web application	Real-time interactionDemonstration and co-development of ideas and documents	 Depends on the internet connection Need to integrate either text-based or audio-based to 	Google DocumentMentimeterKahoot

³²Rebecca Ferguson. (2019). Pedagogical Innovations For Technology-Enabled Learning. Canada: The Commonwealth Of Learning

 $^{^{33}}$ Lim, "An Analysis Of Synchronous And Asynchronous Communication Tools In E-Learning."

		make it more effective	
Online games	InteractiveMentoring and monitoring purposesDocumenting student interaction	 Depends on the internet connection Need to provide an exact instruction to make it more effective 	- Wordgames - magnetic poetry
Social media	 Interactive Important announcements are easily noticed Mentoring and monitoring purposes Documenting student interaction 	 Both parties should be online to get immediate reply Not easy to control the participant Unnecessary and inappropriate information may come up since not for learning at the very beginning 	WhatsApp groupInstagramYoutube

On table 4.1 above, it has been classified that the digital technologies that are able to be integrated in teaching and learning activities are divided into five types, namely LMS (Learning management system), Web Logs, Web application, online game, and social media. HMS, such as Google Classroom, Edmodo, and Schoology, which intentionally is created for educational purposes, has a function as a place to conduct teaching and learning processes online, and enables teachers and students to interact, discuss, and even manage the forum well-thoroughly. However, as the interact-ability is based in a written form, it is not sufficiently attractive and interactive, and may lead to misinterpretation.

Secondly, there are weblogs which enable authors to provide lots of information and ideas. If the use of it is to the extent of accessing some information, it is pretty simple, yet to operate and manage it, requires sufficient technical knowledge. Some of the popular weblogs are Blogger, Wordpress, and Blogspot. Thirdly, there is a web application. As the name suggests, this type of digital technology is web-based accessible

³⁴ ibid

application and software. This mostly only enables users to provide one specific activity yet with various features. The use of this type of digital technology may be found in other non-web-based, yet it has richer attractiveness and interesting values. For example, Google documents which are probably similar to Microsoft Word, yet it has various features and even enables users to work together collaboratively. Fourthly, there are online games, specifically those who are intended for educationalrelated purposes and not for fun and entertainment only. Some examples of it are Quizizz and Kahoot, which are based on competitive-quiz games. This type of digital technology is interactive enough yet requires a clear instruction before using it. Lastly, there is social media, such as youtube, instagram, whatsApp, which are basically not for educational purposes. However, as this social media is very all-round, it enables the users to use it to collect information to educate them. However, it will be difficult to control the participants since unnecessary and inappropriate information may come up unintentionally.

By considering the current situation, the modern social environment which technology function as the key point of online-based learning, requires highly educated, independent thinkers, sufficient professional competence, relevancy to meet the requirements, and a new approach to suit the personality³⁵. It emphasizes that by having such understanding, teachers are able to do whatever they want which is beneficial for them as well as their students when conducting an online learning.

In choosing the appropriate technology to be integrated in the lesson teachers may take some consideration which is divided into two that is general and specific consideration. The general consideration involved these factors:

a. Development and learning barriers which involved fund, facility and stuff, available times, and available sources.

³⁵Murodovbehzod And Omonovasadokat, "The Role Of Pedagogical Technology In Team Building And Creative Activities," Science And Education 1, No. 1 (N.D.): 4.

- b. Content requirement, assignment, and types of learning that the school wants to achieve and students need to be able to do.
- Barriers from students considering their basic skill, such as reading, typing, operating digital devices, and their characteristics.
- d. Preference of the institution, teachers, and students as well as its effectiveness.
- e. Ability to accommodate the stimulus presentation (visual and/or audio) and students' responses³⁶.

While for the specific consideration, the teachers should report:

- a. Learning objectives and indicators
- b. Characteristics of the materials
- c. The development and characteristics of the students
- d. Teachers technological competence, beliefs, and preference
- e. The intractability and availability of the media
- f. Time availability
- g. The expected condition occurred when the media being used
- h. Classroom organization (individual, small group, or big group)³⁷
 There are several numbers of significant characteristics of technology that can be integrated in teaching and learning activity, as follows:
- a. In line with the basic competence/learning objectives
- b. Consider the characteristics of the learners
- c. Maximize the interaction between teacher and students, and among students
- d. can be accessed individually
- e. Integrate several interactive media
- f. Approach the learning positively
- g. Provide various number of feedbacks
- h. Suitable with the learning environment, condition, situation
- i. Able to assess the skill trained and material delivered properly

³⁶Azhararsyad. "Media Pembelajaran". Pt Raja Grafindopersada, 2011, Vol 140, Page 10.

³⁷ Ibid, 69-71

- j. Use the sources appropriately and maximally
- k. Designed and able to be implemented along with the principal of learning design
- 1. Have been evaluated and guaranteed to be effective and worthy.³⁸

By taking into account those 12 characteristics of "doable" technology in classroom activity, it can be said that technology bring various benefits particularly for the development of students in learning, as follows:

- a. Able to solve the lacks or the weaknesses of group or individual learning
- b. Able to provide inaccessible examples within classroom activity to be more concrete
- c. Possibility to do a repetition on an unachieved learning objectives without feeling any guilty
- d. Support individual, pairs, and group-work discussion
- e. Accustomed with the use of technology, not only in everyday life but also in educational context
- f. Effective learning media
- g. Build a "joyful" learning atmosphere³⁹.

To conclude, in choosing technology in teaching and learning activity, the teachers in this study are English pre-service teachers who should consider the numerous considerations so that it can be integrated maximally. Other than that, in order to achieve the learning objectives as well as students' needs, they should also choose the suitable, accessible, and affordable technology in their lesson.

3. Students' Digital Literacy Skill in this Present-day

In this present day, several studies have been conducted to expose the 21st century skill that students' need right now, and the answer expressing

³⁸Hardiman Hardiman, "Pengembangan Pembelajaran Berbantuan Komputer (Pbk) Mata Kuliah Ilmu Pendidikan Di Jurusan Pendidikan Agama Islam (Pai) Fakultas Tarbiyah Iain Porwokerto," Jurnal Pendidikan Agama Islam 11, No. 2 (February 9, 2017): 289–300, Https://Doi.Org/10.14421/Jpai.2014.112-09.

³⁹Tuti Andriani, "Sistem Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi," 2015, 24.

idea in digital media and be proficient in operating communicational tools⁴⁰. It means, this skill is not merely being able to use a variety of technology but also being able to wisely place, organize, understand, evaluate, and analyze information using digital technology. It is all because digital literacy skill is an ability to find, evaluate, and write clear information through various digital platforms⁴¹.

Other than that, this digital literacy enables one to understand and apply the information through the various digital sources. ⁴² In that way, it was basically conveyed that the ability to operate technology and collect information through digital media effectively and efficiently in various contexts can be defined as digital literacy skill. By having a sufficient comprehensibility of digital literacy, it enables ones to understand, operate, create, and share a various numbers of technological-based information and communication tools in both real-life situation and social networks ⁴³. Though the name mentioned is digital literacy, it does not take over the traditional form of literacy; instead, it builds on the foundation of the existing tradition and expands it through the concept of visual, computer, and information literacy which constructed based on the social-scientific research in literacy concept ⁴⁴. It means though the concept may be slightly different, but the vital essence of digital literacy is just exactly the same.

Those possibility may happen due to the critical components involved within the skills called digital literacy, namely digital devices understanding and use, critical and digital problem-solving ability, and

⁴⁰Frydenberg, "Achieving Digital Literacy Through Game Development: An Authentic Learning Experience."

⁴¹Fahrurrozi, Hasanah, And Dewi, "Integrated Learning Design Based On Google Classroom To Improve Student Digital Literacy."

⁴²Pool, C.R. "A New Digital Literacy: A Conversation With Paul Gilster". Educational Leadership, 1997, 55(3), 6-11. Retrieved August 22, 2021 From Https://Www.Learntechlib.Org/P/83481/.

⁴³Chetty Et Al., "Bridging The Digital Divide."

⁴⁴Arul Chib, Caitlin Bentley, And Reidinar-Julianewardoyo, "Distributed Digital Contexts And Learning: Personal Empowerment And Social Transformation In Marginalized Populations," Comunicar 27, No. 58 (January 1, 2019): 51–61, Https://Doi.Org/10.3916/C58-2019-05.

activeness and cooperative skill⁴⁵. To be precise, this digital literacy skill consists of six vital elements, as follows

- Ability of ICT (functional competencies) is regarding of the application of ICT-based equipments, applications, software as well as services in order to undertake tasks productively, simply, and quality-prioritized.
- b. Information-data-media literacies (critical utilization) is about the proportions to critically discover, appraise, organize, use and share digital files and information into kinds of digital media
- c. Digital invention, problem-solving and regeneration (Creative output) is dealing with the proportions in designing, establishing, implementing latest digital artifacts and objects, to solve problems as well as to respond issues, and to appoint and expand latest uses together with digital technology.
- d. Digital relation, cooperation and involvement (Participation) is the propotions in conveying effectively in digital media and spaces, in taking part within digital teams as well as working groups, and in involving in, facilitate and develop networks of digital.
- e. Digital science and construction (Development) becomes the proportion in order to partake in and profit from digital study opportunities as well as to bolster and extent others in digitally-affluent conditions.
- f. Identity of digital and welfare (Self-actualizing) is the proportion in developing and constructing the identity of conclusive digital, in organizing fame of digital, and in mantaining intimate health, security, connections and the balance of business-life within digital settings⁴⁶.

However, the existence of those vital components of digital literacy can be significantly affected by one vital factor named individual competence in operating, producing, analyzing, and communicating the contents of the media that make the digital literacy skill possessed by that

⁴⁵Kazakoff Myers, "Technology-Based Literacies For Young Children: Digital Literacy Through Learning To Code."

⁴⁶ Jisc. (2017a) Building Digital Capability: The Six Elements Defined, Joint Information Systems Committee, Bristol. Http://Repository.Jisc.Ac.Uk/6611/1/Jfl0066f Digigap Mod Ind Frame.Pdf

person either increases or decreases⁴⁷. It points out how important and suitable the chosen digital technology is in order to facilitate students' digital literacy skills in this present day.

Therefore, the teachers are highly demanded to provide a whole throughout understanding about digital resources and communication tools from the growth of digital culture⁴⁸. To put it simply, what the current teachers need to do is to facilitate students' digital literacy skill through the appropriate use of technology in the classroom activity that is accessible for all members of the classroom activity.

4. Digital Technology-integration in ELT Lesson Planning to Facilitate Students' Digital Literacy Skill

Adaptivity and flexibility within teaching beliefs toward some considerable aspects (e.g. needs, environment, development, believes) is a significant determinant in designing a lesson to facilitate and teach particular necessary skills⁴⁹. Thus, it is highly required to look into the consideration on how the teachers try to accommodate the specific and vital skills needed by the students in order to achieve the learning objectives in the most engaging and effective way, particularly in the integration of the technology to facilitate students' digital literacy skill.

By identifying the goals, analyzing the learners, investigating instructional activities, and selecting technology-based resources/media, it enables researchers to identify further on what consideration that the teachers take in designing a lesson plan to facilitate students' digital literacy skill.

a. Identifying the goals

⁴⁷E. Anisimova, "Digital Literacy Of Future Preschool Teachers," Journal Of Social Studies Education Research 11 (2020): 230–53.

⁴⁸Kong, "Developing Information Literacy And Critical Thinking Skills Through Domain Knowledge Learning In Digital Classrooms: An Experience Of Practicing Flipped Classroom Strategy."

⁴⁹Johannes König Et Al., "General Pedagogical Knowledge, Pedagogical Adaptivity In Written Lesson Plans, And Instructional Practice Among Preservice Teachers," Journal Of Curriculum Studies 52, No. 6 (November 1, 2020): 800–822, Https://Doi.Org/10.1080/00220272.2020.1752804.

It consists of how the teachers determine the basic competence, namely religious, social, cognitive, and skills competence that the students should achieve after the learning process ends. In this phase, the teachers may question whether there is a part of the learning process where the integration of technology can take place powerfully.

b. Analyzing the learners

In analyzing the learners, the teachers may report the past experience of the learners, particularly their difficulties in learning the topic of the lesson. This step will give information regarding the strengths and weaknesses of the learners in the upcoming teaching and learning activity.

c. Investigating the instructional activities

Since it is a technology-integrated classroom activity which mainly prioritizes the concept of students-centric, the instructional activities should also focus on the students to be more active in the teaching and learning activity. In this stage, the teachers need to consider how the activities will be carried out, particularly on how the emergence of problems occur, how it is overcome, and how the alternative will be.

d. Selecting technology-based resources

Not only choosing the best technology to be integrated, but teachers also need to ensure whether the technology is practicable and increases the values of the materials delivery. It should be guaranteed that the technology is accessible and affordable for the students and ease them to collect the materials given⁵⁰.

In the other prior study, the are five principles that can be used as a criterion in analyzing teachers learning design which integrate technology

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⁵⁰Ching Sing Chai Et Al., "Examining Preservice Teachers' Perceived Knowledge Of Tpack And Cyberwellness Through Structural Equation Modeling," Australasian Journal Of Educational Technology 28, No. 6 (August 15, 2012), Https://Doi.Org/10.14742/Ajet.807.

by reflecting on the school context, classroom experience, teachers beliefs, learners' background, technology-used, assessment and reflection⁵¹.

- a. Identifying the topics that are delivered more effectively if using technology.
- b. Identifying the content that is more comprehensible and difficult if using traditional tools.
- c. Identifying the teaching strategies that are impossible to be implemented using traditional means.
- d. Selecting the appropriate technology that supports the teaching strategy and content delivery.
- e. Infusing technology-integrated activities in the classroom activity. 52

Those five principals pointed out that when designing a technology-integration lesson plan, teachers start it by identifying the topics and materials of the lesson which allow technology to take a part. Then it is followed by choosing the specific context of the topics and the appropriate teaching strategies. Last, after considering all of that, the teachers will choose the best and suitable technology that is able to facilitate and support all of those considerations in the most effective way.

B. Review of Previous Study

There are several numbers of existing research which share the same field with the current study. In particular, the previous studies described below have mainly focused on either one or two aspects that the current study will be conducted, namely the teachers reaction of the closure of offline learning, the lesson plan designed by English pre-service teachers, the use of technology-integration within an online learning, and the use of digital technology to facilitate students digital literacy skill.

⁵¹Charoulaangeli, "Preservice Teachers As Ict Designers: An Instructional Design Model Based On An Expanded View Of Pedagogical Content Knowledge. J Comput-Assist Learn," Journal Of Computer Assisted Learning 21 (August 1, 2005): 292–302, Https://Doi.Org/10.1111/J.1365-2729.2005.00135.X.

⁵² Ibid

First, the study of Yaoran Li, Veronica Garza, Anne Keicher, and Vitaliy Popov entitled "Predicting High School Teacher Use of Technology: Pedagogical Beliefs, Technological Beliefs and Attitudes, and Teacher Training" examines about teachers' technological self-efficacy on pedagogical teaching⁵³. However, though the study has investigated the teachers' technological self-efficacy which represents their beliefs, perception, and preference, it has not deeply analyzed how they express and formulate it in the form of a written framework. Moreover, the subject in this study is high school teachers considered as professional and licensed teacher that has sufficient understanding and well-prepared pedagogy, while the current study will take pre-service teachers as the subject of the study since in a position of either students or teachers who have a very fresh pedagogical competencies.

Second, talking about pedagogical-interest of pre-service teachers as the subject of the study, the study of Ismail & Jarrahand Ibrahim Gokdas, have investigated the impact of teaching practice on pre-service teachers' perceptions toward their pedagogical preferences, teaching competence and motivation⁵⁴. Their study focused on exploring the perception of a pre-service teacher after having a teaching practice, particularly about what they got after doing such practices. However, though they have common subject-status and similar situations, that is pre-service teachers during teaching practices, the gap can be clearly noticed since this study focuses on their lesson plan as well as the rationale behind it during their teaching practices in Microteaching class. The researchers would like to investigate how they express and formulate their pedagogical beliefs in the form of a written framework focusing on the use of digital technology to facilitate students' digital literacy skill.

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⁵³Li Et Al., "Predicting High School Teacher Use Of Technology: Pedagogical Beliefs, Technological Beliefs And Attitudes, And Teacher Training."

⁵⁴Assoc. Prof., College Of Education, United Arab Emirates University, United Arab Emirates, Isadiq@Uaeu.Ac.Ae Et Al., "Exploring Pre-Service Teachers' Perceptions Of Their Pedagogical Preferences, Teaching Competence And Motivation."

Third, Maria Assunção Floresa and Marília Gago barely examined the teachers' pedagogical responses as a result of the schools and universities closure related to its difficulties, challenges and opportunities⁵⁵. This study proves that the ways teachers and students interact in the teaching and learning process has changed particularly the frequency of time and contact hours physically, and the teachers themselves are demanded to adjust their approaches and experiment with a variety of strategies in order to fulfill the demand of students in the current situation. From the study conducted by Maria Assunção Floresa and Marília Gago, however, it can be noticed that it only focused on the general pedagogical responses in which there was no specific teaching and learning activity that the researchers focused on and how they try to comply the demand by employing the 21st technologies.

Fourth, the study of Lim under the title "An Analysis of Synchronous and Asynchronous Communication Tools in e-Learning" has specifically studied on how the communication tools of both in synchronous and asynchronous learning take an important role during an online learning ⁵⁶. However, though the current study is intended to use synchronous and asynchronous communication tools as one of the criteria in exploring the integration of technology within learning activity, the prior study has not critically analyzed how those types of communication tools be integrated to facilitate specific students' 21st century skill. To be precise, the previous researchers investigated the usability and the limitation of those explored communication tools, without specifically relating it in the context of students' digital literacy skill and English pre-service teachers' lesson plan.

Fifth, the study entitled "Technology-Based Lesson Plans: Preparation and Description" by Kubilinskiene and Dagiene explored the way information technology can effectively help for the betterment of teachers' lesson plan development by considering the situation that occurred at that moment.⁵⁷ This

⁵⁵Assunção Flores And Gago, "Teacher Education In Times Of Covid-19 Pandemic In Portugal."

⁵⁶Lim, "An Analysis Of Synchronous And Asynchronous Communication Tools In E-Learning."

⁵⁷Kubilinskiene And Dagiene, "Technology-Based Lesson Plans."

study focused on creating a new template of technology-based lesson plan which firstly described each component of the existing lesson plan and looked for the parts which can be infused with the analyzed technology. It points out how different this study is from the current study, where the current researcher will only use the lesson plan, particularly in the stages, as the media to discover the use of digital technology to facilitate students' digital literacy skill.

Sixth, the study of Perdana, Yani, Jumadi, and Rosana entitled "Assessing Students' Digital Literacy Skill in Senior High School Yogyakarta" focused on examining students digital literacy level by conducting a mix-methodological research in one of the senior high schools in Yogyakarta. It meant the digital literacy discussed became the main focus on the topic of that study. While in this research, digital literacy will mainly become the sub-variables which function as the criteria to analyze and gain the main data that is as the consideration behind the English pre-service teachers use particular technology in their lesson plan to facilitate students' digital literacy skill.

Seventh, Dewi, Fahrurrozi, Hasanah, & Dj have investigated the significant factors involved in the digital literacy competence under the title "Analysis Study of Factors Affecting Students 'Digital Literacy Competency". Compared to this prior study, the current researcher would like to use digital literacy as the standard variables to specify researchers in analyzing the ELT lesson plan focusing on the use of technology to facilitate students' digital literacy skill. However, since the prior study found three important aspects and factors that impact on digital literacy competence level namely technical skills, critical understanding, and communicative abilities, the current research will likely use those findings as one of the criteria in collecting the needed data.

⁵⁹Fahrurrozi, Hasanah, And Dewi, "Integrated Learning Design Based On Google Classroom To Improve Student Digital Literacy."

Eight, the study entitled "Technology integration for students' information and digital literacy education in academic libraries" by Rafi, JianMing, and Ahmad exposed and understood students' digital literacy competence and technological skill in using database sources and searching online information. It shows that though this study also used digital literacy and technological skill as the focus; however, it was clearly not involving teachers' consideration as well as their lesson plan in teaching and learning activity. Moreover, the data digital literacy and technological skill in the current study will not be separately collected; instead, the researcher will collect it simultaneously from students teachers accordingly the topic of the study is English Pre-service Teachers' Preference in Technology-Integrated Lesson Plan to Facilitate Students' Digital Literacy Skills.

Ninth, the study conducted by Santiago Tejedor, Laura Cervi, Ana Perez-Escoda, and Fernanda Tusa Jumbo entitled "Digital Literacy and Higher Education during COVID-19 Lockdown: Spain, Italy, and Ecuador" focused on comparing three countries' higher education institution, precisely about the way they face educational changes and the development of their students' digital literacy. However, this study aimed to investigate on teacher's digital skills, sources for learning that may be adapted, communication between universities and students, and teaching methodologies, while the current study focused on the type of digital technology that English pre-service teachers use in order to facilitate their students' digital literacy skills and not their own digital literacy skills. Moreover, the current study focuses one the planning that the English pre-service teachers had been designed by integrating particular digital technology as well as the rationale behind it.

Tenth, the study related to digital literacy skills in the current situation has been conducted by Sigit Purnama, Maulidya Ulfah, Imam Machali, Agus

⁶⁰Rafi, Jianming, And Ahmad, "Technology Integration For Students' Information And Digital Literacy Education In Academic Libraries."

⁶¹ Santiago Tejedor Et Al., "Digital Literacy And Higher Education During Covid-19 Lockdown: Spain, Italy, And Ecuador," *Publications* 8, No. 4 (November 6, 2020): 48, Https://Doi.Org/10.3390/Publications8040048.

Wibowo, Bagus Shandy Narmaditya. ⁶² They investigated how digital literacy as well as other aspects named parental mediation and self-control affected online risk during the Covid-19 pandemic in Indonesia. It was clearly distinguishable that the variable of digital literacy in this prior research functioned as one of the aspects that was searched on its functions and impacts brought. While the current study focused on looking for what digital technology that was chosen by English pre-service teachers to facilitate their students' digital literacy skill. In other words, the digital literacy in this study functioned as a state on the subject of this study, particularly how they chose and considered particular digital technology.

Last, this current research may likely similar to the study of Minna Lakkala, Jiri Lallimo, and Kai Hakkarainen which examined teachers pedagogical design for technological-supported collective inquiry. However, they only focused on the design created by the teachers without investigating the reasons behind such a framework being designed. The researcher sees this as a vital point that can be uncovered, since every lesson plan created is legitimately influenced by the designers' subjective view and beliefs in assessing particular issues. Moreover, the other variables involved in the prior study was the activity during students' collective inquiry, while the current study focuses on a must-have skill that the 21st century students needed, namely, digital literacy skill.

Based on some numbers of previous studies above, the researchers can conclude that the way pre-service teachers formulate their ELT lesson plans by integrating technology to facilitate students' digital literacy skill in their teaching and learning process, was only a few examined and investigated, particularly by taking into account the current educational status in Indonesian context in these days and ages. Hence, the researchers take this as

⁶² Sigit Purnama Et Al., "Does Digital Literacy Influence Students' Online Risk? Evidence From Covid-19," *Heliyon* 7, No. 6 (June 2021): E07406, Https://Doi.Org/10.1016/J.Heliyon.2021.E07406.

⁶³ Lakkala, Lallimo, And Hakkarainen, "Teachers' Pedagogical Designs For Technology-Supported Collective Inquiry."

the significant gaps that can confirm and guarantee the novelty of this study as well as its validity and its relevance to the current issues.



CHAPTER III

RESEARCH METHOD

This chapter focuses on elaborating the way the researcher conducted the study in investigating teachers use of digital technology in ELT lesson planning to facilitate students' digital literacy skills that involved (1) Research design, (2) Research setting (3) Data and source of data, (4) Research instruments, (5) Data collection techniques, (6) Data analysis techniques, and (7) Checking validity of research.

A. Research Design

This study used a qualitative research method in order to analyze teachers' preference in technology integrated lesson plan to facilitate students' digital literacy skill. Qualitative research was an investigation process to uncover in-depth understanding representing the contextual condition of the concept, opinions, or even experience⁶⁴. It meant this type of research design goes by analyzing words in spite of numbers, and reporting detailed information of someone or phenomenon from interview, behavior, and documents which would not be analyzed using statistical methods. This study was qualitative research because it explored the written framework and perspective of English pre-service teachers in designing a technologyintegration lesson plan to facilitate students' digital literacy skill where all the data were in a form of words both written and utterance without considering any numbers. To know their perspective, beforehand, it would be more relevant and valid if the researcher knew the lesson framework they had designed at the very beginning. Therefore, before exploring their perception, the researcher had conducted a document analysis toward their lesson plan in facilitating students' digital literacy skill by using the technology-supported integration in their lesson plan.

⁶⁴John W. Creswell, Educational Research: Planning, Conducting, And Evaluating Quantitative And Qualitative Research, 4th Ed (Boston: Pearson, 2012).

B. Research setting

The research setting in this study was divided into two aspects namely place and time; where and when the study intended to be conducted.

1. Place

This study took place in the English Language Education Department of UIN Sunan Ampel Surabaya. However, because the situation was not supporting, this study was conducted online in participants' own home both during the distribution of questionnaires and the interviews.

2. Time

The study was conducted in early November 2021 where the English pre-service teachers were still undergoing teaching practice or PLP 2. Around that time, the researcher believed that English pre-service teachers were still having sufficient relevancy related to their beliefs in designing a lesson plan focusing on their technology integration to facilitate students' digital literacy skill during their first teaching practice in Microteaching class.

C. Data and source of data

1. Data

The data of this study were the information written in the lesson plan of English pre-service teachers focusing on the technology used to facilitate students' digital literacy skill and the perception of English preservice teachers in facilitating students' digital literacy skill using technology-integration. To answer the first research question about the preference of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill, and the second research question about the reasons of English preservice teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill, the researcher used document analysis toward their lesson plans focusing on the description of the stages, particularly the existence of technology-integration to facilitate

students digital literacy skill, distributed a set of questionnaires to all 30 subjects of the study whose lesson plans were analyzed and conducted an interview session in order to collect the more data related to the topic being discussed.

2. Source of Data

The source of the data was 30 students of the English Language Education Departmentin UIN Sunan Ampel Surabaya who had passed Microteaching class in academic year 2020-2021. It was decided because when this study was conducted, they were highly in a position of not students' anymore but not English teachers yet, or simply say they were English pre-service teachers who learnt how to be a licensed teacher under certain supervision. As prepared teachers, English pre-service teachers are still undergoing a set of training to shape their teaching pedagogical beliefs and competence which gives them a big chance to gain a correct and appropriate understanding due to the intensive supervision they received. Other than that, since they were born when the technology has been vastly promoted, it increases their chance to understand and integrate a variety of digital technology optimally which simultaneously and unconsciously increases their digital literacy skill through the process of collecting information in digital media. In particular, the source of the data were from those English pre-service teachers whose lesson plans were intended for senior high school in online-based learning as well as their perception behind it when designing technology-supported activities to facilitate students' digital literacy skill in their online-classroom activities.

D. Research instruments

Since this study was qualitative research, the researcher decided to use these instrument, namely document analysis, questionnaire, and interview guideline to answer the first and second research questions

1. The document analysis

Document analysis is one of the research instruments that is used by analyzing books, papers, or any documents related to the topic of the study⁶⁵. The document that was analyzed in this study was 30 lesson plans of English EFL teachers that had been created when they were in Microteaching class in 6th semester focusing on online-based learning which integrates technology to facilitate students' digital literacy skill. The researcher used this instrument to answer the first research question about the ways the English pre-service teachers of UIN Sunan Ampel Surabaya use technology in ELT lesson planning to facilitate students' digital literacy. Therefore, the lesson plan that had been analyzed should have been identified based on particular criteria which mainly contained some criteria of the use of technology-integration and students' digital literacy skill (see appendix I).

The criteria itself was created by reflecting on one of prior study which in accordance with the current topic of the study⁶⁶. In the document criteria, there were four categories which simultaneously function as stages to identify the document: identifying the goals, analyzing the learners, investigating the instructional activities, and selecting technology-based resources. These four criteria were used to uncover the existence of technology within the lesson plan of English pre-service teachers to facilitate students' digital literacy skill considering the context of how the lesson plans were used.

2. Questionnaire

The researcher used a questionnaire to answer the first and second research questions about the use and consideration of English pre-service teachers of UIN Sunan Ampel Surabaya in using technology to facilitate students' digital literacy skill in their ELT lesson planning. This kind of instrument is able to be used to serve approximate constructs such as knowledge and attitudes toward the related-study⁶⁷. The content of this

⁶⁵ Donald Ary Et Al., *Introduction To Research In Education*, 8th Ed (Belmont, Ca: Wadsworth, 2010).

⁶⁶ Chai et al., "Examining Preservice Teachers' Perceived Knowledge of TPACK and Cyberwellness through Structural Equation Modeling."

⁶⁷ Ibid

questionnaire was designed by Adapting and synthesizing several studies about teachers' beliefs, competence, and preference in facilitating students' digital literacy skill. To be precise, the questions items number 1-8 were intended to answer the first research question focusing on the use of it, while the items number 9-14 aimed to answer the second research question focusing on the considerations. Those contained about their perspective in answering a set of questions about digital-technical devices understanding and skill, critical understanding and problem-solving ability, and activeness, communicative and cooperative skill of their students.

The questionnaires developed in this study were oriented to the Likert Scale questionnaires where each point represented a particular variable and aspect in a form of statement written digitally in Google Form. Likert Scale itself is a scale used by rating some ideas using a range of numbers that have different meanings, namely: 1=strongly agree, 2=somewhat agree, 3=neutral,4=somewhat disagree, and 5=strongly disagree. In addition, the researchers emphasized the respondents to only fill out the questionnaire based on their beliefs, perceptions and preference, without any coercion or influence from other unnecessary things to avoid any invalidity and irrelevancy. The questionnaire is presented in the appendix I.

3. Interview Guideline

Another instrument used in this study was an interview guideline which focus was just similar to the use of questionnaires. After answering the questionnaire, the focused group of the study would be given a number open-ended questions which aimed to gain in-depth understanding and subjective answers since having no exact answers, either true-false, yesno, or agree-disagree⁶⁹. In particular, the researcher decided to use an

 ⁶⁸Jenifer Larson-Hall And Jenifer Larson-Hall, A Guide To Doing Statistics In Second Language Research Using Spss, 0 Ed. (Routledge, 2009), Https://Doi.Org/10.4324/9780203875964.
 ⁶⁹ Ihid

open-ended interview guideline. The use of open-ended interviews aimed to enrich the information collected about the pre-service teachers' rationale in designing such lesson plans to facilitate students' digital literacy skill by integrating technology within the learning process. This open-ended interview was able to provide much broader information under the current study⁷⁰. This type of interview required the subjects of this study to answer the questions with their own thoughts and words, without any limitation on particular ideas.

Generally, the questions list in this interview guideline were based on the teaching beliefs, perceptions, and considerations related to the topic of the study that the researcher has constructed by synthesizing several studies about facilitating students' digital literacy skill through the use of technology. To be specific items question number 2, 4, 5, 6, 9, and 10 were aimed to answer the first research question about the use, while item number 1, 3, 7, and 8 aimed to answer the second research question about the consideration. Then, this was drawn some variables and aspects which finally brought up a dozen of open-ended response that considered importance. In addition, to ensure if the researchers did not slip over particular information, tape recorder within a smartphone was used throughout the interview process. The interview guideline is presented on the Appendix I.

E. Data collection techniques

In collecting the data, the researcher used several existing data collection techniques namely analyzing data, distributing questionnaires, and conducting interview sections.

1. Analyzing Document

As the name suggested, this data collection technique focused on analyzing the relevant document in order to get the needed information within the content of the document. This technique was applied by analyzing 30 lesson plans of English EFL teachers that were created when

⁷⁰Creswell, Educational Research.

they were attending Micro Teaching class in the academic year 2020-2021. The focus in analyzing this document was about the types of digital technology in ELT lesson planning by English pre-service teachers to facilitate students' digital literacy skill as well as on what way they use such technology in their classroom activity as described in the stages of their lesson plan. Therefore, the aim in using this data collection technique was to answer the first research question about the preference of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill.

Firstly, the researchers collected all lesson plans designed by English pre-service teachers of UIN Sunan Ampel Surabaya during their teaching practice in their Microteaching class without any exception. Secondly, the researchers chose 30 lesson plans that integrate technology to facilitate their students' digital literacy skill. Thirdly, the researcher analyzed it thoroughly based on the established criteria reflecting on particular study (see appendix 1). Lastly, the researcher drew a narration for all of the lesson plan based on the established criteria by describing the use of technology to facilitate students' digital literacy written in their lesson plan.

2. Distributing Questionnaire

After creating a set of questionnaire consisting considered variables involved by synthesizing several studies involved about facilitating students digital literacy skill through the integration of digital technology and put them into online questionnaire using Google Form, the researcher distributed it to the subject of this study, that was English pre-service teachers whose lesson plans were involving the use of technology-integration to facilitate students' digital literacy skill. The distribution of this questionnaire was done for about two weeks starting from 19th of October until 6th of November 2021 after the researchers got the name and the number of the 30 English pre-service teachers of UIN Sunan Ampel Surabaya. To put it simply, the distribution of this questionnaire aimed to

provide data to answer the first and second research questions about the teaching beliefs, perspectives and preference of English pre-service teachers of UIN Sunan Ampel Surabaya in designing lesson plans, particularly in facilitating students' digital literacy skill using technology-integration.

3. Conducting an Interview

To gain deeper understanding behind the answers given from English pre-service teachers on their questionnaire, the researcher conducted an interview section with several chosen students. Those who were given a set of open-ended questions were those who had interesting ways in designing a lesson during their teaching practice which represented others. Just like the other instruments, the construction of this interview guideline was the result of synthesizing several studies involving facilitating students' digital literacy skill through the integration of digital technology.

Firstly, the researchers determined the interviewee based on the results of their documents and questionnaire. The researcher eventually was able to decide 5 chosen interviewees based on those who were able to represent the whole or the majority results of document analysis, and those who were integrating digital technology which was considered minor. Secondly, the researchers decided the time that the interviewee was available online via WhatsApp voice note. Here, the researcher and the interviewees agreed and succeeded in conducting it on around 6th of November to 10th of November after they had filled out the questionnaires. Thirdly, during the interview section, the researcher prepared and used notes-book to write the information gained and tape-recorder to record the full speech spoken by the interviewee. Fourthly, the researchers rearranged the manual-written information to be readable and transcribed the recorded speech into a written text to be understandable. Lastly, the researchers compare the results of the manual-written information and the recordedspeech transcribed to discover whether the information was valid and relevant.

F. Data analysis techniques

Data analysis is the process of reviewing, sorting, and grouping, data aims to construct hypothesis and lift it into conclusion in the finding of the research⁷¹. In this study, the researcher analyzed the data that had been gathered using the research instrument and technique prepared by reflecting on the criteria created by the researcher. In particular, the data about the use of technology in ELT lesson plan to facilitate students digital literacy skill collected using document analysis and the data about English pre-service teachers' perception about the use of technology in their lesson plan to facilitate students digital literacy skill collected using questionnaire and interview guideline were analyzed separately in different techniques, as follows:

1. Analyzing the data from document

After collecting the data using the steps written in the data collection techniques, the researcher followed these sequences to systematically analyze the gathered data:

- a. Read and understand 30 qualified lesson plans created by English pre-service teachers.
- b. Analyze the document using the created criteria (see appendix I).
- c. Interpret it in a form of sentences to get comprehensible discussion about the use of technology to facilitate students' digital literacy skill.
- d. Make conclusions based on the analyzed data and use it to answer the first research question about the ways of English pre-service teachers of UIN SunanAmpel Surabaya use digital technology to facilitate students' digital literacy skill in their lesson plan.

2. Analyzing the data from questionnaire

After constructing the questionnaire, the researcher analyzed it by using the steps suggested by Creswell, as follows:

a. Prepare and organize the data from the Google form.

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⁷¹ Ibid

- b. Arrange all participants' answers from each question to each factor in order to get well-classified information.
- c. Interpret the results of each aspect to draw general-specific statements representing the whole questions in the questionnaire.
- d. Summarize participant answers for each aspect.
- e. Combine the findings from both questionnaire and interview becomes one complete, valid, and relevant information to answer the second research question about the consideration that English preservice teachers take when using technology to facilitate students' digital literacy skill in their lesson plan.

3. Analyzing the data from interview

After constructing the interview guideline, the researcher analyzed the results by using the steps suggested by Creswell, as follows:

- a. Prepare and organize the data from the tape recorder and notes
- b. Transcribe the recording to get written-information from the whole interview section.
- c. Translate the written information, which was still in Bahasa Indonesia, into English.
- d. Interpret the results of the transcription to draw general statements representing the whole questions in the interview.
- e. Summarize participant answers for each aspect.
- f. Combine the findings from both questionnaire and interview become one complete, valid, and relevant information to answer the second research question about the consideration that English pre-service teachers take when using technology to facilitate students' digital literacy skill in their lesson plan⁷².

G. Checking Validity Settings

To check the validity of this research, the researcher used a triangulation technique which combines the findings from the research instruments. Triangulation itself is a strategy to refine the validity or evaluate the research

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⁷² Ibid

findings⁷³. In other words, it attempted to reduce any misinterpretation and to strengthen the conclusions by providing an evidence from (1) different sources and individuals where in this study they were from written information in the lesson plan and spoken information from English preservice teachers, (2) type of data and data collection technique, where the researcher analyzed the lesson plan, distributed questionnaires, and conducted an interview to collect all written and spoken information, and (3) member checking, where the researcher reconfirmed the collected data from the source of the data, that was English pre-service teachers of UIN Sunan Ampel Surabaya who had finished their Microteaching course in academic year 2020-2021. Through the examination of the source of the collected information and the supported evidence, the researcher may eventually create and develop the report with valid and reliable data⁷⁴.

⁷³ S. Mathison, "Why Triangulate?". Educational Researcher, Vol. 17 No.2, 1988, 13.

⁷⁴ Creswell, Educational Research.

CHAPTER IV

FINDING AND DISCUSSION

This chapter reports about previous findings of the data collection process and the discussion of it by reflecting it on the existing related theory. To be precise, there are two things that are discussed in this chapter, namely the preference of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill, and the reasons of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill

A. Findings

The data of this research were collected on 25th October – 10th November 2021. There were 30 participants involved in this research, where all of them were English pre-service teachers of UIN Sunan Ampel Surabaya who had already passed a Microteaching course in academic year 2020-2021. Firstly, their lesson plan which integrated digital technology to facilitate students' digital literacy skills were collected and analyzed. Secondly, after their lesson plan being analyzed, they were given a questionnaire consisting of 14 questions in a form of hyperlink of google form. Thirdly, by reflecting on their lesson plan questionnaires, the researcher chose 5 participants to be interviewed to gain an in-depth understanding related to the topic being discussed. The answers from document analysis, questionnaire and interview were used to answer the first and second research questions related to the reason for the use of digital technology by English pre-service teachers of UIN Sunan Ampel Surabaya to facilitate students' digital literacy skills. The findings of the research were presented as follows:

1. The preference of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill

To investigate the use of digital technology by English pre-service teachers of UIN Sunan Ampel Surabaya to facilitate students' digital literacy skill in their lesson planning, the researcher used document analysis. The criteria that had been constructed to analyze the document, in this context was the lesson plan of English pre-service teachers of UIN Sunan Ampel Surabaya during micro teaching class in academic year 2020-2021, consisted of the digital technology used, and the objective of the lesson and the instructional activity.

Regarding the type of digital technology, the majority of participants chose a type of digital technology which could be used as a media to give a task, either for individual projects or collaborative works, which functionally were the types of interactive web application, social-media, and LMS though only a few. See the table 4.1

Table 4.1. The chosen digital technology

Type of digital technology	Name of the digital technology	The participant who use it
Web application	Quizizz	14
	Google document	8
	Google form	4
	Mentimeter	3
	Ahaslides	1
	Coggle	1
	Vocaroo.com	1
	Word wall quiz	1
	Answergarden	1
Social media	Telegram	1
	WhatsApp	1
LMS	Google Classroom	1

To classify the type of digital technology preferred by English preservice teachers, the researcher had already set a criterion of the chosen digital technology. Those classifications are web-application, social media, LMS, and online games where each type has a different number of users, considerations to choose, ways it was used, and ways it was able to facilitate students' digital literacy skills.

a. Web applications

Based on the collected data, English pre-service teachers who chose web applications were pretty many and varied. There were quizizz chosen by 14 participants, google document by 8 participants, Google form by 4 participants, mentimeter chosen by 3 participants, ahaslides, coggle, vocaroo.com, word wall quiz, answergarden where each chosen by one participant. It showed that the majority of them chose a web-application type of digital technology which is able to provide interactivity, great visualization, and usable and applicable features which have specific functions. Based on the data, almost a half of the participants integrated Quizizz in their lesson plan. However, having taken a look at their lesson plans, the use of this digital technology in their instructional activities were pretty varied which also considered the objectives of the lesson. One of the participants used Quizizz in the beginning of the lesson to check whether students have a common understanding about what they were facing at the moment which related to the material of the study. Other students used this digital technology in the middle and last section of a meeting to check whether students have already understood about the materials or not.

While relating it with the facilitation of students' digital literacy skills, it could be seen from how the instructional activity was designed. It was used because of how flexible it was in enabling the teachers to use it in a variety of tasks, such as working on simple questions, answering some questions after watching a video, or even in a guessing game which requires students to complete the sentences with the correct vocabulary. These activities were designed following the objective of the lessons which either focused on the cognitive of the students or skills of the students, or even both. Those activities

which had been designed had already involved at least one of the construction elements of digital literacy skills. It was indeed the least, but considering how the main aim of the lesson is delivering materials, the involvement and effort to facilitate students' digital literacy skills cannot be considered lightly. In that type of activity, the students' digital literacy skills which were trained were the ICT proficiency of the students. To be precise, in how the students carry out the tasks effectively and productively in a digital setting. The other major application used was Google document. This type of digital technology might be similar to Microsoft word. However, it has features that cannot be found in Ms. Word, such as the features that enables the users to work collaboratively, work efficiently without the need to type manually, and even the users did not need to be afraid of not getting saved automatically. As it was available in doing such things, the students will indeed get greater results which are not only about collecting the materials but also being able to develop their digital understanding resulting in their digital literacy skills.

The other type of digital technology such as Google form, mentimeter, ahaslides, vocaroo.com, word wall quiz, and answergarden basically have a similar function to Quizizz which able to provide a place for students to convey their thought either in a close-ended or open-ended question. However, there were still differences among them regarding the accessibility and the surface of the display. Some of them have good interactivity which trigger students' motivation in learning higher, while some of them have lesser limitations. Yet, they were still chosen because it was done in order to introduce and broaden students' understanding about digital technology that can be integrated during teaching and learning activity. As a result, it enabled students to simultaneously increase their digital literacy skills during their learning process.

Lastly, there was one participant who decided to use Coggle in an interactive way during a lesson. The facilitation of digital literacy through this digital technology so far was the complete one involving all the elements of digital literacy skills. It can be seen from the instructional activity that was designed, where the teacher here asked the students to create a mindmapp after they have already understood about the materials thoroughly and after being introduced with this Coggle. To put it simply, the development of students' digital literacy skills using this type of digital technology was pretty varied since there were many choices of digital technology that could be considered. Yet, it was still highly influenced by how the English preservice teachers designed the instructional activity integrating the chosen digital technology without neglecting the goals of the lesson.

b. Social Media

Regarding the other type of digital technology, there were some participants who used social media as the digital technology-integrated in their lesson plan, namely Telegram and WhatsApp. These two digital technologies were indeed common and students have already understood about it. However, the teachers used the features that students rarely use or even did not know yet. For example, the use of telequiz feature from telegram which was integrated within an instructional activity which required students to answer some questions related to the materials. This was indeed similar to the application such as Quizizz or Google form, but from the telegram application. Hence, though it was probably familiar to the students, yet the teachers tried to use the thing that the student did not know yet.

The use of these two common social media might not be visibly able to facilitate students' digital literacy for a glance. However, as the instructional activity involved the construction of digital literacy such as critical, creative and collaborative work digitally, it was able to

make students realize that the social media that they used for fun and entertainment also have a function to carry out a lesson. Eventually, these digital technologies enable the English pre-service teachers to facilitate their students' digital literacy skills during the teaching and learning process.

c. Learning Management System

There were also English pre-service teachers who used LMS not only to manage classroom documents, but as the integrated digital technology used during the lesson. Google Classroom, for example, was used by the teachers and students when they wanted to have a discussion about a particular topic which required students to upload their work and give comments on it. It was used to familiarize students on how the learning management system works during the lesson. As an example how it was integrated, one participant used it when the teacher asked the students to classify the generic structure of a descriptive text that had been created by sharing and discussing it in the Google classroom.

By requiring them to manage their own work by uploading the task and giving comments on it, this will trigger their digital understanding about both the materials and the media which results in the increase of their digital literacy skills. It showed that LMS, which was mostly used as a place to only manage the classroom document, portal to submit work, and give assignments, also functions as a medium to have proper communication. If they have been familiarized with it thoroughly, then the students have already had enough understanding about this kind of digital technology. In other words, the teachers have already succeeded in facilitating students' digital literacy skills.

From the collected data and the table, it also shows the number of participants who choose their digital technology exceeds the number of participants in this study. It does not mean that the data gathered is not in

line with the report, instead it means there were some English pre-service teachers who chose more than one digital technology to be integrated in their lesson. For instance, one of the participants who used WhatsApp and Google Form from different types of digital technology in their lesson, asked students to access the link of the google form and answer the questions given within a particular duration. When all of them finished, they would have a group discussion in their WhatsApp Group to get better comprehensibility of the topic discussed. Other than that, there was another student who also used two different types of digital technology, they were google classroom and Quizizz. The Google Classroom was used when the teacher asked the students to classify the generic structure of a descriptive text that had been created by sharing and discussing it in the Google classroom. Quizizz was used by the teacher in the final part of the lesson, particularly when the teacher asked the students to review the material of the day by answering several questions in Quizizz. The use of these two common digital technologies aimed for students to be much more familiar with it, aware that it can be used in teaching and learning activity, and strengthened their understanding about the use of it which resulted in increasing their digital literacy skill. Unfortunately, none of the participants chose to integrate Weblogs as the digital technology to facilitate students' digital literacy because of its limitations and complexity in operating it.

In brief, most of the participants used quizizz, mentimeter, and google document in their lesson plan. Still, some of them preferred some unfamiliar digital technology, though likely had similar functions, such as telequiz, ahaslides, coggle, vocaroo.com, word wall quiz, and answergarden. Though some of them chose a common digital technology, yet they have tried their best to introduce new things and features that were available in the integrated digital technology, such as the feature of Voice typing in Gdoc or Telequiz in Telegram. In other words, the majority of English pre-service teachers of UIN Sunan Ampel Surabaya planned to

integrate digital technology that was interactive to access, had great visualization, and usable and applicable features which were mostly found in web applications and social media. Though some of them decided to use a particular LMS, they ensured that the way they used it was within interactive instructional activity. In addition, after analyzing on What type of digital technology and how it was planned to be integrated by English pre-service teachers of UIN Sunan Ampel Surabaya, it was surely that they have already understood and applied it based on the critical considerations such as learning objectives and indicators, characteristics of the materials, the interact-ability and availability of the media, time availability, the expected condition occurred when the media being used, and the classroom organization (either individual, small group, or big group).

By reflecting on how the English pre-service teachers attempted to integrate it, these digital technology enabled the students to get to know, explore, and even create the intended project successfully which involve the important skills constructing digital literacy skills, though not all, such as developing their ICT proficiency, collecting information-data-media literacies, producing creative result, digitally communicating and collaborating with others, digitally learning and developing opportunity, and even self-actualizing. In other words, as the digital technology developed, it should be accompanied on how they were able to utilize it, through the skills of digital literacy that had been given attention by English pre-service teachers of UIN Sunan Ampel as the subject of this study. Therefore, through the improvement of digital literacy skills, students were not only able to use digital technology to search for information instantly, but were able to run and operate them to gain a comprehensive understanding.

2. The reasons for English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill.

Regarding the considerations of English pre-service teachers in choosing digital technology to facilitate students' digital technology as written in their lesson plan, the researcher provided several questions written in questionnaire and interview guidelines. This attempted to give a comprehensive elaboration on the reasons behind why they decided to choose particular digital technology to facilitate their students' digital literacy skills.

a. The easiness and familiarity

The first consideration that English pre-service teachers took was about the easiness and familiarity in choosing digital technology where all of the participants chose agree and pros with it, "I choose digital technology that is familiar and easy to access anytime and anywhere", just like what was stated by several participants as follows:

"Easy to use and has a minimalist and uncomplicated appearance are the priority" and "...because in my opinion it is digital technology that is easy to operate for teachers and students, besides that the teachers can also determine for themself what kind of design activities will be carried out using the technology without giving much burden and demand."

It showed that almost all of the participants agreed to integrate digital technologies that were already well-known and easy to access whenever and wherever they were. To determine which digital technology was probably easy to use, interviewee 1 stated that English pre-service teachers needed to take into account how the state of the students that were going to be taught, from their competence level, technological capability, even their characteristics in their learning. If the teachers chose digital technology that was familiar and easy for us but not for students, it might hinder them and make them face a great difficulty when accessing it. On the other hand, if the chosen digital technology was too familiar and too easy for them, then they were not going to learn anything from the integration of it, and it would not be able to increase their digital literacy skills.

In addition, if the chosen digital technology was not accessible for the teachers as well, they might find some difficulties in determining the activity that would be carried out. Hence, this what it meant by familiar and easy to access of a digital technology just like the statement conveyed by almost all of the interviewees of this study.

b. The interactivity and attractiveness

The second consideration taken highly was about the interactivity and attractiveness. Most of them agreed that being interactive and interesting became one of the priorities in choosing digital technology in a lesson. As what stated by the interviewee 2, as follows:

"Apart from me and my students being able to access it easily and can be accessed anytime and anywhere and doesn't consume a lot of quota, I also consider its appearance. For example, when I use Canva, there I can choose an attractive appearance and can make students not bored to access the material"

This indicated that ability to accommodate the stimulus presentation (visual and/or audio) as well as interact-ability and availability of the chosen media indeed becomes one of important considerations by most of the subjects of this study. As a result, by having an interactive and communicative classroom activity through the integration of digital technology, it enabled teachers to conduct a "joyful" learning atmosphere which resulted in the students gaining information about the materials and the process of operating the chosen digital technology. By doing so, the construction of digital literacy has been achieved, particularly in terms of digital creation, innovation, participation, and digital learning and development. Still, as long as it was well-functioned and well-displayed, these considerations came to number two but still highly important.

c. The feature availability and usability

The other important consideration is regarding the feature variety as the consideration in choosing digital technology where a third of them agreed about this consideration. It pointed out, though the majority of English pre-service teachers considered the variety of features within digital technology, some of them did not really think so, while the main feature was accessibility. Though having various features of a digital technology increased the possibility of students to improve their digital literacy skills, as long as the chosen digital technology was not too common for them, it was still doable. The interviewee 4 even stated that the digital technology should be minimalist and not complicated in terms of features so that it will not confuse the users. In addition, the other interviewee also gave statement in a form of examples, as follows

"...I ask students to write sentences, but there is a format, like what font, what color font, then what kind of paragraph, what kind of title writing, so I encourage them to use the existing features and even introduce other new tools like voice typing and add comment to make them work collaboratively with their group..."

It showed that as long as there was something new for students to access and learn, it was still doable to integrate the chosen digital technology without giving any burdens to them. Hence, choosing the best digital technology indeed needed some crucial considerations which were possible to be used effectively and not bother students when accessing it.

d. The possibility to carry out the instructional activity

Other than that, all of the participants agreed that before deciding what type of digital technology to use, it was surely important to look at how the activity was being carried out. Particularly related to the accessibility of the users either for them to access it individually or perhaps in groups. After knowing students' role within the planned activity, then the teachers were able to choose the possible activity that was suitable for it. In other words, It meant that the one who would access the digital technology was a matter if they wanted to decide which digital technology would be integrated.

"The activity that I design used godoc, I ask students to write sentences, but there is a format, like what font, what color font, then what kind of paragraph, what kind of title writing, so I encourage them to use the existing features and even introduce other new tools like voice typing and add comment to make them work collaboratively with their group..." stated by interviewee 3.

Another consideration is about the facilitation of the improvement of students' technological understanding. This was basically about the belief on how their chosen digital technology is able to facilitate students' digital literacy skills during the lesson. Majority of participants were sufficiently confident to be able to integrate digital technology that was able to improve students' digital literacy skills significantly in this current situation. But several of them, when they chose such digital technology, did not really consider it consciously whether it was able to facilitate students' digital literacy skills or not. Yet, though they were conscious or unconscious about the possibility of digital technology to facilitate students' digital literacy skills, they still have tried their best accordingly by doing what should a teacher naturally do when teaching, particularly when introducing something new for students. It was in accordance to what interviewee 2 do in her case of teaching and learning process as follows:

"...the digital technology that I used was vocaroo.com, vocaroo.com is a kind of online voice note, where you can record their voices and then send the link to the teacher. Then the teacher can use it to assess their speaking skills. So by doing so, students will learn something new, namely about vocaroo.com which they didn't know before. At the beginning I gave an introduction, how to access it, how to operate this vocaroo.com and then how they can share the link to the teacher. So that, digital technology is able to improve students' digital skills"

e. The availability to maximize the materials and goals deliveries

Lastly, about the other consideration in choosing digital technology, namely the materials and purposes of the lesson as the thing that is basically a must considered had been agreed critically by almost all of the English pre-service teachers. It showed that almost all of them considered what materials that they were going to deliver and what goals that they were going to achieve before integrating particular digital technology for their students which would

simultaneously facilitate their digital literacy skills. This was because the main goal of a lesson is indeed delivering material, so that it would be wasted if it was not involved at all. One of the interviewees even believed that the instructional activity may come forward when deciding the digital technology, so that the activity and the chosen digital technology became relevant when being integrated.

"...for example when the materials of today is about descriptive text and I will use godoc, of course the content I will ask to student is related to it. I will ask my students to write simple present tense sentences using gdocs, I also ask them to write their names there, write the title of what will be done there, so I think that I can achieve learning objectives while assessing their skills. and during the process they can explore something new and try out new features which improve their digital literacy skills" said the interviewee 3.

another elaboration conveyed by the other interviewee which said

"I usually use digital technology that suits me and the lesson. For example, Canva, I use this Canva to design material for students and students can also access it, because there are many interesting templates for students to see. Then I also use WAG, to have discussions with students. Then for daily attendance, I use gmeet to meet students live-virtually. Then I also use quizizz to find out students' understanding of the material that has been studied. I sometimes also use Google Forms to answer quizzes and questions. For speaking I use vocaroo.com, because there students can record their voices and send them via a link, and it can't be expired"

In addition, based on the result of interview, all interviewees agreed and had similar perspective that the integration of those digital technology might bring about numerous benefits for the students since the teachers had already planned it to be able to facilitate the construction of students' digital literacy skills during the process, namely ICT proficiency, collecting information-data-media literacies, producing creative result, digitally communicating and collaborating with others, digitally learning and developing opportunity, and even self-actualizing. However, due to the limitation of digital technology, the construction of digital literacy skills might not be all thoroughly and directly facilitated in that one meeting of the lesson. Yet, the

subjects of this study have put their effort in choosing particular digital technology with the strong reasons behind it to facilitate their students' digital literacy skills.

Other than that, based on the explanation stated by them through questionnaire and interview section, it was rational and in line with why they decided to choose digital technology which basically were web application, online games, and social media, and even LMS though only a few. These all due to availability of those types of digital technology that cannot be found easily in other types of digital technology, such as weblogs. Moreover, aside from how those chosen digital technology provide lots of benefits, such as the attractiveness, documentation, and real-time collaborative and meaningful discussion, they have their own limitations which require a right solution. Several participants in the interview session state that the solutions given by the teachers were pretty helpful for the upcoming challenges. For instance, after knowing how the chosen digital technology was unavailable, interviewee four provided a creative solution which also required students' creativity in solving it. Hence, the students were implicitly able to increase their digital literacy skill by looking for the solution of problems that they face during the process.

To conclude, regarding the considerations of English pre-service teachers in choosing digital technology to facilitate students' digital technology as written in their lesson plan, the answers collected from the respondents showed that almost all of the considerations mentioned were matter. Starting from the easiness, familiarity, interactivity, feature, and accessibility of the digital technology, as well as the materials and the objectives of the lesson in order to be able to facilitate students' digital literacy skills during the lesson, though not all of the considerations gained a full justification and agreement from the English pre-service teachers as the participants of this study.

B. Discussions

This discussion session talks about the previous findings by reflecting it on the existing related theory. There are two things that were discussed in this session. First, the use of digital technology in ELT lesson planning by English pre-service teachers of UIN Sunan Ampel Surabaya to facilitate students' digital literacy skill as reflected in their lesson plan. Second, the reasons for the use of digital technology in ELT lesson planning by English pre-service teachers of UIN Sunan Ampel Surabaya to facilitate students' digital literacy skills.

1. The preference of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill

As the main focus of this study, the participants chose several distinguished digital technologies in their lesson plan in order to facilitate students' digital literacy skills. It happened due to the rise of the internet which was possibly able to facilitate students' comprehensibility in analyzing digital information effectively and responsibly. However, the researchers found it was not sufficiently varied. English pre-service teachers of UIN Sunan Ampel Surabaya used the type of digital technology that is generally classified into a web-based application, online games, social media, and common LMS at the very least. In detail, most of the participants used quizizz (14), and google document (8), google form (4), and mentimeter (3) in their lesson plan. Still, some of them preferred some unfamiliar digital technology such as telequiz, ahaslides, coggle, vocaroo.com, word wall quiz, and answergarden. See diagram below.

⁷⁵ Fahrurrozi, Hasanah, And Dewi, "Integrated Learning Design Based On Google Classroom To Improve Student Digital Literacy."

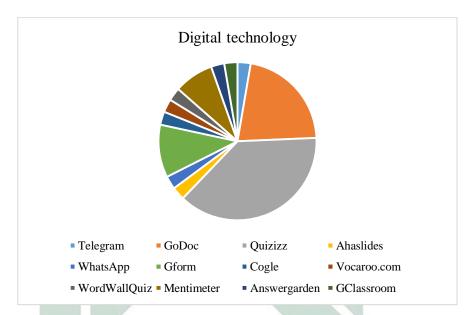


Diagram 4.1. The digital technologies chosen by English pre-service teachers

Majority of participants chose a type of digital technology which could be used as a media to give a task, either for individual projects or collaborative works, have a great interactive-ability, well-operated features, and many other applicable benefits from it. This may help teachers to develop effective social skills and increase motivation and engagement leading to an effective classroom activity. Hence, it can be understood that an increase in the number of people wishing to apply digital technology in educational activities have been proven to increase the level of digital literacy unconsciously. Therefore, the planning of the use of these digital technologies was conducted thoroughly in order to be able to support the learning process effectively as well as to facilitate their digital literacy skills through the introduction and use of the chosen digital technology. This also aimed to fulfill the demand of the 21st century teachers and students regarding what they were facing at the moment.

In other words, the tendency of participants from English pre-service teachers of UIN Sunan Ampel Surabaya in integrating digital technology

⁷⁶ Lim, "An Analysis Of Synchronous And Asynchronous Communication Tools In E-Learning."

⁷⁷ Anisimova, "Digital Literacy Of Future Preschool Teachers."

⁷⁸ Tejedor Et Al., "Digital Literacy And Higher Education During Covid-19 Lockdown."

to facilitate students' digital literacy skills were in line with what digital technology was able to facilitate the learning process of the students sophisticatedly. With the varieties of applications that can support learning process, there are also many ways, strategies or patterns of implementing learning on each platform. In addition, there were several English pre-service teachers' who also decided to integrate more than one digital technology during one meeting of the lesson, and those mostly the familiar and unfamiliar ones. These all chosen digital technologies were planned to be integrated in order to familiarize students on how helpful digital technology is in the learning process and increase their digital technology understanding. By doing so, they were able to consciously or unconsciously improve their students' digital literacy skills.

While regarding the possibility of the students' digital literacy skills being facilitated by the use of digital technology, it can be seen through the set of instructional activity where the English pre-service teachers had planned it involving the construction of digital literacy skills, though unconsciously. Those that can be seen were how students' ICT proficiency being trained by being introduced to carry out the tasks using digital chosen digital technology which integrate ICT-based applications or software, how students were asked to critically and creatively use it by finding, evaluating, managing, using and sharing the information within the chosen digital technology, and how the chosen digital technology gave a place for students to work the task given interactively, communicatively, and even collaboratively.⁸¹ In other words, the subject of this study, that is English pre-service teachers, had already involved the importance of the construction of digital literacy to be facilitated by the use of digital technology within particular learning stages written in their lesson plans.

⁷⁹ Rizka Safriyani Et Al., "Online Learning Strategies During Covid-19 in an Early Childhood

⁸⁰ Jisc. (2017a) Building Digital Capability: The Six Elements Defined, Joint Information Systems Committee, Bristol. Http://Repository.Jisc.Ac.Uk/6611/1/Jfl0066f_Digigap_Mod_Ind_Frame.Pdf
⁸¹ Ihid

In brief, the use of digital technology in ELT lesson planning by English pre-service teachers of UIN Sunan Ampel Surabaya to facilitate students' digital literacy skills was sufficiently varied. It showed that they had broad understanding related to the importance of digital technology that was well-developed in this era. They surely integrated the digital technology that was in line with the basic competence/learning objectives, able to maximize the interaction between teacher and students, and among students, able to integrate several interactive media, as well as to how it would be able to provide a help for teachers and students in achieving the goals of the lesson through a relevant and well-designed instructional activity. 82 In other words, based on what was written in their lesson plans, students had skillfully planned and developed an integrated digital technology to facilitate students' digital literacy skills for senior high school students according to the applicable curriculum. This is in line with one of the prior studies which said that as pre-service teachers, they should have been braver to face future challenges and the new upcoming demand of the students, while in this context it is about digitalization of skills, competences, and opportunities of learning through the advancement of digital literacy skills. 83 Moreover, during the Covid-19 pandemic, digital literacy is very important to be trained in every school where learning activities are carried out using educational technology and the internet.⁸⁴

2. The reasons of English pre-service teachers of UIN Sunan Ampel Surabaya in technology-integrated lesson plan to facilitate students' digital literacy skill

When English pre-service teachers of UIN Sunan Ampel Surabaya decided to choose particular digital technology as described previously, they certainly had some considerations to report. These considerations were also based on how they believe in the integration of it as well as the

⁸² Rebecca Ferguson. (2019). Pedagogical Innovations For Technology-Enabled Learning. Canada: The Commonwealth Of Learning

⁸³ Tejedor Et Al., "Digital Literacy And Higher Education During Covid-19 Lockdown."

⁸⁴ Purnama Et Al., "Does Digital Literacy Influence Students' Online Risk?"

competences that they have in applying it. It was obvious that if the aim is to help improving students' materials understanding and simultaneously improving students' digital literacy skills process digital information independently, effectively and responsibly, it requires innovative learning designs that adapt to digital-technological understanding.⁸⁵ The first consideration that they took was the familiarity on how it might be accessed easily, whenever and wherever it was. To be precise, they considered the complexity of the digital technology, and teachers and students' probability of accessing it based on their competence level. It was done in order for the students not to get too much difficulty in accessing it and eventually bother them greatly. 86 This easiness and accessible digital technology is also related to the affordability of the chosen digital technology. A cheap or even free digital technology makes it financially feasible not only for the teachers but also the students to make them be able to access it.⁸⁷ The second consideration was about the display surface of the digital technology chosen, specifically on how interactive and attractive it was. The attractiveness of the digital technology was able to gain students interest and even trigger their motivation in learning. It even had a power to be able to create a joyful learning atmosphere from only the display.88

Other than that, regarding its function and its features provided, the one which provided a variety of features within one digital technology was highly considered rather than the only one with only few features or tools used. This was because it had a higher chance of higher probability of success in facilitating students' digital literacy skills since it enabled students to explore there deeply. This also included on how the digital technology would be integrated whether enabled students to work

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⁸⁵ Fahrurrozi, Hasanah, And Dewi, "Integrated Learning Design Based On Google Classroom To Improve Student Digital Literacy."

⁸⁶ Azhararsyad. "Media Pembelajaran". Pt Raja Grafindopersada, 2011, Vol 140, Page 10.

⁸⁷ Lim, "An Analysis Of Synchronous And Asynchronous Communication Tools In E-Learning."

⁸⁸ Andriani, "Sistem Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi."

individually or in group. Students will be able to learn much more comprehensibility once teachers have mastered the abilities of the presented digital technology and understand how to use them. ⁸⁹

Yet, the point is the ability to accommodate the stimulus presentation and students' needs which are in accordance with the availability of the features of the chosen digital technology. Any innovation that is going to integrate is guided by teaching beliefs and competences of the teachers, based on understanding of how students access and learn, and how they are motivated to learn. 90 Thus even able to provide evidence of students work which mostly be accessed 24/7 enabling them to reflect, evaluate, and document feasibly. 91 So it was able to solve any lack of classroom activity in the current situation, support any type of intended learning process, and had a potential to achieve learning objectives in a more objective way along facilitating students' digital literacy skills.

This shows how important it is for teachers, including English preservice teachers, to have a good competence and consideration in terms of digital skills as a key point in digital literacy skills development of the students. Therefore, from the several considerations mentioned, it was indeed understood why the English pre-service teachers decided to choose the type of digital technology which mostly came from web applications, online games, social media, and LMS. This is in accordance with the fact that the amount of information spreading to those kinds of digital technology is increasing. In particular, since students freely use a non-literal educational type of digital technology, like social media without knowing the results, the consideration to integrate it should be taken seriously. Sample of the seriously of the serious

⁸⁹ Anisimova, "Digital Literacy Of Future Preschool Teachers."

⁹⁰ Ihid

⁹¹ Andriani, "Sistem Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi."

⁹² Tejedor Et Al., "Digital Literacy And Higher Education During Covid-19 Lockdown."

⁹³ Purnama Et Al., "Does Digital Literacy Influence Students' Online Risk?"

Next, the use of digital technology in the classroom activity was indeed determined not only about the technology itself, but also on what objectives of the lesson would be achieved. For instance, if by the end of the lesson students were required to be able to create a mind-map containing important information about narrative text, then the English pre-service teachers used the suitable digital technology like Coggle whose functions could not be found in other digital technology like Quizizz, Mentimeter, etc. Yet, the goals of the lesson did not limit teachers to use more than one digital technology. For example, under the objective, "by the end of the lesson, students were able to classify the generic structure of descriptive text", one participant integrated two type digital technology in one meeting of the lesson. Firstly, Google classroom was used not only as an LMS (Learning Management System) to give materials, but as a media for students to have an interactive discussion, so that they might understand its function well. Whereas, Quizizz was intended to be integrated to review the delivered material and what had been discussed previously through answering some number of questions in Quizizz. By doing so, the learning objectives of the students as well as students' understanding toward the advanced digital technology might be achieved and facilitated richer and more varied. 94 It showed that it is important to know the right combination of these tools if the teachers want to improve the instructional activity, promote effective learning, and enrich students' understanding toward digital technology. 95 They were motivated by a vision of what is to be achieved in the future, in terms of effects, behavior or cognition.⁹⁶ In other words, learning objectives and its indicators, including the materials, become one of the specific-important determination when choosing the type of digital technology that is going to integrate.

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⁹⁴ Azhararsyad. "Media Pembelajaran". Pt Raja Grafindopersada, 2011, Vol 140, Page 10.

⁹⁵ Lim, "An Analysis Of Synchronous And Asynchronous Communication Tools In E-Learning."

⁹⁶ Rebecca Ferguson. (2019). Pedagogical Innovations For Technology-Enabled Learning. Canada: The Commonwealth Of Learning

Furthermore, those various numbers of digital technology to facilitate students' digital literacy skills by English pre-service teachers were designed in various instructional activities, following the objectives of the lesson, which involves the construction of digital literacy skills. Those involve the possibility of students in accessing and carrying out the task effectively, critically and effectively collecting and organizing information digitally, and communicating and collaborating with others in a digitallyrich setting.⁹⁷ Since all participants' main aim was not deliberately focusing on digital literacy skills but other considerations such as the materials of the lesson, it was justifiable that all six elements of digital literacy might not be directly facilitated in one meeting. However, according to their written lesson plan and their elaboration, they have set a lesson that was able to not only deliver the materials but also support and facilitate students' digital literacy skills. It gave further evidence that preservice teachers were able to contextually integrate technology in the classroom as they had prior understanding about digital technology. 98

These considerations should be taken into account thoroughly in order to meet and respond to the demands of students in this 21st century. Hence, by reporting on some crucial considerations, English pre-service teachers were able to not only achieve the learning objectives, but were able to facilitate students' digital literacy during a teaching and learning process. As a result, they were able to operate, produce, analyze, and communicate the contents of the media that make the digital literacy skill possessed by those students increase. ¹⁰⁰ It was due to the use of it included the development of planning, integration, assessment of processes and

Through Structural Equation Modeling."

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⁹⁷ Jisc. (2017a) Building Digital Capability: The Six Elements Defined, Joint Information Systems Committee, Bristol. Http://Repository.Jisc.Ac.Uk/6611/1/Jfl0066f_Digigap_Mod_Ind_Frame.Pdf
⁹⁸ Chai Et Al., "Examining Preservice Teachers' Perceived Knowledge Of Tpack And Cyberwellness

⁹⁹ Sinton Soalablai, "Teachers' Use Of Technology In Lesson Planning And Presentation In Palau," N.D., 102.

¹⁰⁰ Anisimova, "Digital Literacy Of Future Preschool Teachers."

resulted in integrated learning of the students.¹⁰¹ Students were free in exploring the entire content of information related to this course and the tasks were done either in groups or independently.

Moreover, if reflected on the six elements of digital literacy skills, each English pre-service teacher had already involved those for at least a half of them, though done consciously or unconsciously. Thus, those goals required innovative lesson plans that adapt to digital-technological developments so students might possibly process digital information independently, effectively and responsibly. Taken together, regarding their choice in choosing the digital technology, teachers' considerations indeed played an important role in influencing how they design a lesson which integrated digital technology to facilitate students' digital literacy skills. 103

¹⁰¹ Fahrurrozi, Hasanah, And Dewi, "Integrated Learning Design Based On Google Classroom To Improve Student Digital Literacy."

¹⁰² Ibid

¹⁰³ Chai et al., "Examining Preservice Teachers' Perceived Knowledge of TPACK and Cyberwellness through Structural Equation Modeling."

CHAPTER V

CONCLUSION AND SUGGESTION

This chapter conveys about the conclusion from the finding and discussion, as well as the suggestion that the researcher can give for the parties involved, regarding the use of digital technology in ELT lesson planning by English preservice teachers of UIN Sunan Ampel Surabaya to facilitate students' digital literacy skills.

A. Conclusion

There are two points that can be concluded from the findings of this study, namely:

1. Teachers' use of digital technology in ELT lesson planning by English preservice teachers of UIN Sunan Ampel Surabaya to facilitate students' digital literacy skills as reflected in their lesson plan was generally well-prepared and well-organized. They choose various types of digital technology which basically come from the kind of web application, online games, social media, and even LMS that have great features to facilitate students' digital literacy skills. While for the specific type of it, there were some of them that were dominant or commonly used by other English pre-service teachers, and some of them were likely unfamiliar. However, this did not mean they have different competence regarding the consideration in choosing digital technology in classroom activity. It is just that they need to adjust what digital technology they are going to use with the materials, activity, learning objectives, and even the students they are going to teach. Here, based on the findings, all of the English pre-service teachers of UIN Sunan Ampel Surabaya have already designed a lesson which integrated digital technology to facilitate students' digital literacy skills within a relevant instructional activity and in accordance with the goals of the teaching and learning activity. the facilitation of digital literacy skills of the students itself, can be seen by how well-organized the instructional activity which involve the elements of digital literacy skills construction, namely carrying out the task digitally, organizing data critically and creatively, participating

- on a digital communication and collaboration, and even support and develop others in digitally rich settings.
- 2. There are some definite reasons for the use of digital technology in ELT lesson planning by English pre-service teachers to facilitate students' digital literacy skills. Beforehand, English pre-service teachers have already known how important they use digital technology within the classroom process, particularly in this situation. They also surely understood how digital literacy of their students should be facilitated both for their learning and their social life. While in choosing the digital technology that they were going to use, English pre-service teachers have several considerations, such as the accessible, the interactivity, the function and feature, and the possibility to facilitate students' digital literacy skills significantly. Not only that, before determining what digital technology to facilitate students' digital literacy skill would be chosen, English pre-service teachers have already set on what goals of the teaching and learning process will be achieved, what instructional activity will be conducted, and what types of the students they will teach. Eventually, they are not going to put too much focus on facilitating students' digital literacy skills and neglecting the main purpose of teaching and learning process, but achieving both of them simultaneously. However, as the main aim of a teaching and learning process is to deliver materials, it was justifiable that the facilitation of digital literacy might not be directly facilitated thoroughly in one meeting.

B. Suggestion

Based on the conclusion and limitations of this study, the researcher has several suggestions for the English pre-service teachers and future researchers. As follows:

1. For English pre-service teachers, it is going to be good if they try to explore more about the existing digital technology instead of only using the most common one which the students are already familiar with. There are some numbers of digital technology that have similar functions, so that they may try the variety of it by looking at some considerations that have been

discussed. In addition, though the vast majority of English pre-service teachers have been confident with their competence in using digital technology, it is not wrong to always train their skills deeply by learning and exploring further. It is due, as the time goes by, there will be new things that develop and benefit them and their students. Other than that, though later on the approach of learning was not online-based anymore, the integration of digital technology hopefully was not going to be reduced since digital literacy skills is one of the critical skills for the students in this 21st century.

2. For future researchers, there are some suggestions that the current researcher can give. First, it is going to be interesting to conduct a study to compare between the English pre-service teachers who integrate digital technology and those who do not. Second, by reflecting on these findings, the further study may also investigate the effectiveness or the challenges of the chosen digital technology to facilitate students' digital literacy skills after being integrated. Third, they may also investigate the similar cases of this study to the different participants, such as the licensed teachers who have broader and higher practical experience in educational fields. Hence, the current researcher does not limit the future researcher to explore further by looking for the gaps that the current study has not covered yet, either as one of the references, or as bases to examine and validate the results of this study. Other than that, the future researchers might also compare and contrast whether there is an effect on the chosen digital technologies which are integrated into English learning activities toward the teachers or/and students' English competences.

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