THE INCORPORATION OF INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN THE PRE-SERVICE LEARNING ACTIVITIES IN A TEACHER'S LESSON PLAN

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ABSTRACT

The advancement of Information and Communication Technology (ICT) has had a significant impact on the field of education, primarily in the areas of teaching English as a foreign language. However, the incorporation of ICT tools in pre-service teachers' lesson plans for learning activities is still limited. As a result, the purpose of the research is to determine the types of ICT tools used in learning activities in pre-service teachers lesson plans. To answer the research questions, content analysis is used. The ten lesson plans are organized. The result showed that there are five types of learning activities. YouTube, PowerPoint, PowToon, Proprofs, Seesaw, Instagram, Movie Audio, Vizia, Audiobook, Winamp, and Google Form are among 11 types of ICT tools found in pre-service teacher's lesson plans. Furthermore, all of the different types of learning activities are identified and listed as follows: 10 listening, 3 speaking, 3 reading, 9 writing, and 6 viewing. This finding suggests that pre-service teachers' lesson plans that incorporate information and communication technology act as content transmitters, presentational devices, and tools for directly engaging pre-service teachers and students on a platform.

Keywords: ICT-based learning activities, ICT tools, Lesson Plan, Pre-Service Teacher.

A. INTRODUCTION

In the last decade, there have been many papers focussing on Information and Communication Technologies (ICT) in curriculum, teaching and learning activity, and assessment. It is generally accepted that research reviews have shown that technology-enhanced learning can improve students' understanding and engagement with the subject matter (Janssen & Lazonder, 2016). Preparing pre-service teachers for the right use of such technology in the classroom is thus an important goal for teacher education. Several researchers designed technology integration courses that encouraged pre-service teachers to create technology infused in lesson plans in order to teach them about the use of technology (Abbitt, 2011). In line with that idea, Noortje Janssen, Knoef, &

Lazonder (2019) found that pre-service teachers provide integrated support had more integrated pedagogical and content-related judgments and higher-quality lesson plan than those who got isolated support. Both of groups lacked technological rationale and their technology integration was poor. Fadhilah Hamid & Drivoka Sulistyaningrum (2019) found that the ICT competences are mostly integrated in the component of Teaching Method or Classroom Activities and Learning Media in the syllabuses. In addition, Drivoka Sulistyaningrum & Herawati (2018) claimed that ICT-based learning is widely integrated in the English Language Education Study Programme (ELESP), resulting in numerous benefits for both the teacher and the students. However, the implementation of ICT tools in learning activities of a pre-service teachers' lesson plan is still limited. Research has tended to focus on investigating ICT tools in the syllabus rather than in a lesson plan for pre-service teachers' learning activities. As a result, the purpose of this paper is to determine the types of ICT tools used in learning activities in pre-service teachers' lesson plans.

Mclean, Richards, & Wardman (2007) pointed out that pre-service teachers can use a lot of innovative new learning tools and to empower their students like never before, due to the advancement of ICT. ICT pre-service teachers are operationalized in part through the learning activities that they select, combine, sequence, and redesign during instructional planning (Harris et al, 2010). Along with that idea, Meredyth, Russell, Blackwood, Thomas, & Wise (1999) revealed that creativity, information, communication, and educational programs and games are the four domains of ICT activity. ICT was most prevalently used for information purposes (70 % of teachers), creative purposes (50 % of teachers), educational programs (50% of teachers), and games (43 % of teachers).

A considerable amount of research has been conducted by many researchers regarding the incorporation of ICT tools in curriculum and syllabuses. However, none of those studies investigated the pre-service learning activities in a teacher's lesson plan. This gap has led the researchers to investigate this study. As a result, the ideas presented above have been able to provide a strong reason for investigating the incorporation of ICT tools in the pre-service learning activities in a teacher's lesson plan.

B. LITERATURE REVIEW

1. The Concept of ICT Tools in Learning Activities.

Reviewing UNESCO (2011), the successful incorporation of ICT into the classroom will depend on the ability of teachers to structure the learning environment with innovative things, to combine new technology with a new pedagogy, to create socially active classrooms, empowering co-operative interaction, collaborative learning and group work. UNESCO promotes the incorporation of ICT into education by establishing an ICT Competency Framework intended for teachers. UNESCO's objective is to create ICT literate teachers from the level of Knowledge Acquisition, Knowledge Deepening to Knowledge Creation (UNESCO, 2018). As a result, ICT must be integrated into learning activities and the teaching process. In short, in the Technology Literacy approach, pedagogical practice involves the use of various ICT tools and digital content as part of the whole class, group and individual students' activities. Teacher practice

involves knowing where and when (as well as when not) to use technology for classroom activities and presentations.

In the meantime, Altam (2020) investigated the impact and benefit of ICT tools and social media on listening. He found that students spend more time using social media to learn the English language, and listening is the most improved skill when using social media to learn the English language. The findings also showed that using social media encourages students to learn and practice new vocabulary and reduces their spelling errors. Finally, YouTube is the most popular social media tool for English language learners. To conclude, the research explored how social media such as Zoom, YouTube, Facebook, Twitter, WhatsApp, blogs, etc, influence EFL learners. Furthermore, Ghouali & Benmoussat (2019) investigated the effect of social media on EFL students' Writing production. They revealed that students have been addicted to social media, particularly Facebook, for a long time.. This habit led to a deficiency in their writing abilities. Mubarak (2016) also conducted a study to inspect the role of social media in learning English as a second language among Saudi Arabian students and he discovered that the vast majority of the participants utilize social media to develop their communication abilities. In brief, this review of studies explored the use of ICT tools and social media in language skills (listening, speaking, writing, and reading) in learning activities.

As proposed by Harris et al. (2010), the types of ICT-based learning activities are integrated for the study of languages around the world. These types of learning activities are systematic, pedagogically meaningful scaffold that guides teachers' instructional thinking, decision-making, and technology integration. Furthermore, in the American Council on the Teaching of Foreign Languages (ACTFL) Standards for Foreign Language Learning, which state the target language communication can be understood as a process that includes three basic modes, namely (a) interpersonal mode which delivers two-way written or verbal communication with an active negotiation meaning, (b) interpretive mode which points on the proper interpretation of meaning, and (c) presentational mode which communicates in only one-way and thus gives no potentials for negotiation of meaning among the audience and the presenter. Because of those three basic modes, students have to work on different skills as they foster their competence in communication. Harris et al. (2010) concepts have structuralized these activities of learning into five types that cover the following abilities: (a) listening, (b) speaking, (c) reading, (d) writing, and (e) viewing. In summary, this study suggests the theory of Harris et al., (2010) and UNESCO (2011, 2018) to investigate the types and the incorporation of ICT tools in the learning activities in the lesson plans which are designed by pre-service teachers.

2. Pre-Service Teachers at English Language Education Study Programme at Universitas Negeri Jakarta

According to Yaoyuneyong, Thornton, & Lieu (2013), pre-service teachers' confident in quality and familiarity with the latest technology have presented to be an indicator which can affect the design of learning and teaching materials. In short, the pre-service teachers for digital native students play an important role, both in integrating ICT into their classrooms and in guiding students in the future to value and optimally utilize the available resources through technology. Therefore, these ICT tools can be investigated in a lesson plan.

The implementation of ICT in language learning and teaching, the English Language Education Study Program of Universitas Negeri Jakarta modified its curriculum by incorporating Information and Communication Technologies (ICT) in English Language Teaching (ELT) as one of their disciplines. Pre-service teachers in the semester of 113 are obliged to follow the curriculum when they partake in the internship programs. The focus of this study is the pre-service teachers as they are namely described as tech-savvy diffused by the technology and English. They are also required to have technological literacy and English and to be able to the latest social interaction form.

C. RESEARCH METHODOLOGY

This study used content analysis to answer the research questions. This study used a classroom observation check list and a protocol interview adopted from Harris et al. (2011) framework to collect the data. An interview with pre-service teachers was also conducted to get additional data in order to meet the objective of this research. The objective was to find out the types and the incorporation of ICT tools in the learning activities in the pre-service teachers' lesson plans.

Table 2. ICT Tools at learning activity in the Lesson plan (Harris et al, 2010).

Code	**ICT Tools**	**Learning Activity types mentioned in the Lesson Plan**				
		Speaking	Writing	Reading	Listening	Viewing
LP01						
		N=0	N=0	N=0	N=0	N=0

The source of data used in this study is made of 10 lesson plans designed by pre-service teachers who joined the Information and Communication Technology in English Language Teaching (ICT in ELT) Class in semester 113 in the English Language Education Study Program, Faculty of Language and Arts, Universitas Negeri Jakarta as well as interview transcriptions. The data comprises the learning activities in the lesson plans that use ICT tools. And the 10 lesson plans are codified in reference to the five types of learning activities proposed by Harris et al. (2010) criteria.

As suggested by Cohen, Manion, & Morrison (2020), the data analysis procedures are carried out in the following orders:

1. Data tabulation of frequencies to identify ICT tools incorporated in the pre-service learning activities were performed. In order to clearly draw the significance of those ICT tools, the researcher also explained the types of activities in the lesson plans designed by the pre-service teachers as it is also described by Harris et al. (2010).
2. The table consists of four parts. First, the code is entered in order to simplify the numbering and for the Lesson Plan. Second, the ICT tools that are found in the learning activities are stated. Third, there is a breakdown of the learning activities (speaking, writing, reading, listening and viewing) checklist and the fourth part is a brief description that states the lesson plan.

3. Calculate the total number of all ICT tools in the lesson plan for each activity type as shown in the following table 1.
4. Table 1. The coding of ICT-based learning activities identification stated in pre-service teachers' lesson plan Code in table 1: 'LP' stands for Lesson Plan. '01' is the number of the data source, thus it can be analyzed easily.
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6. The interview sessions carried out the following steps:

1st step: Arrange appointment from interviewer with the interviewee.
2nd step: Begin the researcher's introductory and present the purposes to the interviewee.
3rd step: Encourage the interviewees to request any questions or further explanation before the recording session of the interview.
4th step: Create a quality description regarding the findings found on table 3,4,5, and 6 and the interview documentary of the ICT tools incorporated in the types of learning activities in the lesson plans designed by the pre-service teachers.

D. FINDINGS AND DISCUSSION

This part discusses in general about the overall findings orderly according to each section in learning activities in the classroom observation check list and then the result of the interview to support the main data.

1. Observational Check List Result
   a. General Result

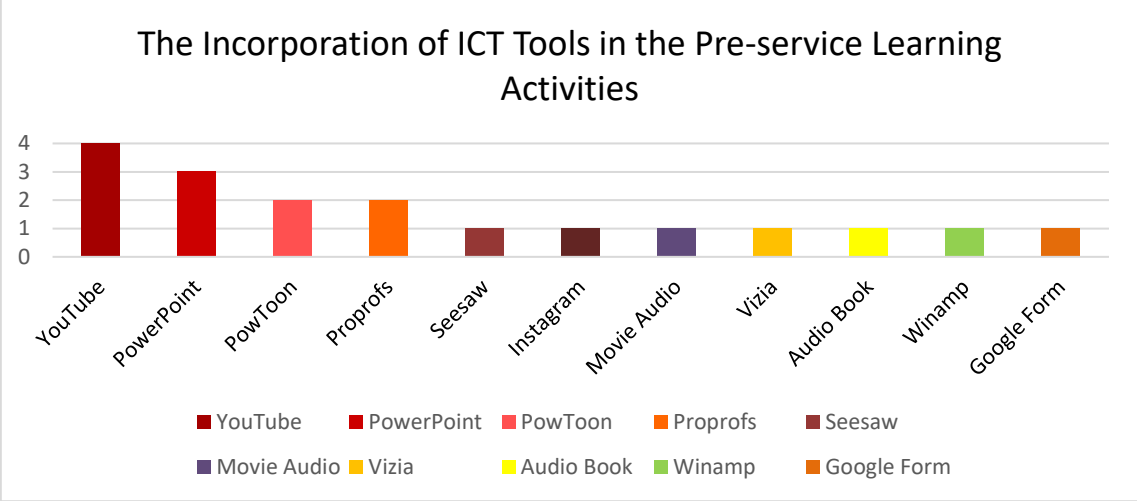

Fig. 1. ICT tools used in pre-service learning activities

Figure 1 shows that there are eleven types of ICT tools. They were utilized mostly in the pre-service learning activities of 10 lesson plans, such as 'YouTube', 'PowerPoint', 'PowToon', 'Proprofs', 'Seesaw', 'Instagram', 'Movie Audio', 'Vizia', 'Audio book', 'Winamp', and 'Google Form'. The numbers of each tool incorporated are also drawn in the figure 1. This findings verified with Altam (2020); Ghouli & Benmoussat (2019); UNESCO (2011); Harris et al. (2010).

Table 2 ICT-based learning activities identification

Code	ICT Tools	Pre-service Learning Activities Types Mentioned in Lesson Plan				
		Speaking	Writing	Reading	Listening	Viewing
LP01	Media Player & YouTube		√		√	
LP02	YouTube	√	√	√	√	√
LP03	YouTube	√	√		√	
LP04	Proprofs		√		√	
LP05	PowerPoint & Instagram		√		√	√
LP06	Movie Audio & PowerPoint		√		√	√
LP07	PowerPoint, YouTube, Vizia		√	√	√	√
LP08	PowToon, Audiobook, Winamp, Proprofs and Google form		√	√	√	√
LP09	PowerPoint, Audio of Daily Routine		√		√	√
LP10	PowToon and Seesaw	√			√	
		N= 3	N= 9	N= 3	N= 10	N= 6

Table 3. The pre-service teachers' lesson plans for speaking, reading, writing, listening and viewing activity

From Table 3, it can be seen that the pre-service teachers' lesson plans for listening activity is the most incorporated with ICT-based learning activity, followed by other activities such as writing, viewing, speaking and reading.

b. Listening Activities

In listening activities, there are two types of ICT tools incorporated such as YouTube and Vizia. Brief description of listening activities and type of activities are described in the following table:

Table 4. ICT tools used in listening activity

ICT tools	Brief description of listening activities	Type of activities
YouTube	The students are asked to listen to the song in the video and to mentions the expression of greetings types.	Listen and speak the expression of greetings types.
Vizia	Students listen to a presentation in 'Vizia' about garbage, creative recycle industry, campaign of zero waste, and garbage division industry.	Listen and points out the issues such as garbage, creative recycle industry, zero waste campaign, and garbage division industry.

As being transmitters of content, presentational devices, and also tools for directly engaging the pre-service teachers and students incorporated ‘YouTube’ and ‘Vizia’. Table 3 reveals that ‘YouTube’ and ‘Vizia’ are the content transmitters that guide teachers and students engage in instructional thinking, decision-making, and technology integration. Comprehension and message interpretation are involved in the listening activities, including authentic observation and interaction among native speakers and dialects, accents, registers, and body language differences without leaving the classroom’s boundaries. This is actually in line with the explanation of Altam (2020), UNESCO (2011), Harris et al. (2010). Thus, the findings of this study confirm to the framework of Harris et al. (2010).

c. Speaking Activity

In speaking activity, YouTube and PowToon were incorporated as the ICT tools. A brief description of speaking activities and type of activities are described as follows:

Table 5. ICT tools used in speaking activity

ICT tools	Brief description of speaking activities	Type of activities
YouTube	The teacher plays video from YouTube while students observe and imitate the expressions of congratulations .	Perform the dialogue/monologue record about Greetings from ‘YouTube’
PowToon	Students read and observe the video from ‘PowToon’. They then repeat the appropriate intonation and stress of congratulating expressions in the dialogue.	Pronounce the stress and intonation found in congratulating expressions dialogue.

Table 4 explains speaking activities incorporating the ICT tools and also the type of activities. As an illustration, You Tube and PowToon as the presentational devices, as a content transmitter, and as communication tools that guide teachers and students engage in instructional thinking, decision-making, and technology integration. Speaking is the activity of producing variants of vocal sounds to converse one’s ideas and feelings through spoken language. The ability to communicate effectively and transmit meaning in an enthusiastic, insightful, and convincing way are includes speaking ability. Having a discussion, participating in an oral question-and-answer exercise, and conducting role-plays are all examples of speaking learning activities in language acquisition. On the whole, the findings are in line and replace with to the framework of Harris et al. (2010) and Mubarak (2016).

d. Writing Activity

Proprofs, Google Form and Instagram were incorporated as the ICT tools in writing activity. A brief description of writing activities and type of activities are described as follows:

Table 6. ICT tools used in speaking activity

ICT tools	Brief description of writing activities	Type of activities
Proprofs & Google Form	The teacher provides 'Proprofs' as a template for writing in certain modes of communication: interpersonal, interpretive, and presentational.	Distinguish word boundaries, recognize a core of words, and interpret words which is based on audio recording.
Instagram	From 'Instagram' the teacher facilitates reading activities to create a journal of short self- reflection.	Students are asked to create a journal of short self-reflection.

Table 5 describes writing activities incorporating with the ICT tools and also the type of activities. As an illustration, Proprofs & Google Form and Instagram as a content transmitter and as communication tools that guide teachers and students engage in instructional thinking, decision-making, and technology integration. Writing in L2 focuses on both the process and the product. When working with writing skills, students can engage in all three modes of communication, namely interpersonal, interpretive, and presentational. In addition, the writing abilities involve the same four competencies mentioned above (grammatical, sociolinguistic, discursive, and strategic) that enable learners to convey meanings with accuracy across cultures. In conclusion, the result is in line and confirms to the framework of Harris et al. (2010); UNESCO, 2011; Ghouali & Benmoussat, 2019).

e. Reading Activity

Audio visual book, Proprofs, PowToon and google form were incorporated as the ICT tools in reading activity. A brief description of reading activities and type of activities are described as follows:

Table 6. ICT tools used in reading activity

ICT tools	Brief description of reading activities	Type of activities
Audio Visual Book & Proprofs	A teacher provides students the 'Audio Visual Book' collaborated with 'Proprofs' as a tool for students to do the reading learning activities by three four-question types such as answering multiple-choice questions, true-false questions, matching information, and writing an essay.	Students read aloud from 'Audio Visual Book' and they fill out the worksheet existing the www.proprofs.com website
PowToon, Google Form	Students read a narrative text derived from 'PowToon' and answer questions through 'Google Form'.	Students comprehend narrative text by answering the questions (worksheet from 'Google Form')

Table 6 shows that the kind of ICT tools incorporated with the writing activities, and types of activities. As an illustration, Audio Visual Book collaborated with Proprofs, PowToon, and Google Form as a presentational device, a content transmitter and as communication tool that guides teachers and students to engage in instructional

thinking, decision-making, and technology integration. The cognitive processes involved in reading in a foreign language are similar to those described for the listening skills. Students bring into play grammatical, discursive, sociolinguistic, and strategic competences when attempting to comprehend and interpret a written message. The activities listed in Table 6 can be done either aloud or silent. In brief, the findings are in line and confirmed with the framework of (UNESCO, 2011&Harris et al., 2010).

f. Viewing Activity

YouTube was incorporated as the ICT tools in viewing activity. A brief description of viewing activities and type of activities are described as follows:

Table 7. ICT tools used in viewing activity

ICT tools	Brief description of viewing activities	Types of activities
YouTube	Students pay attention, listen, and observe what is given in a 'YouTube' video.	Watching a video of performance.

Table 7 describes viewing activities incorporated with the ICT tools and also the type of activities. As an illustration, a You Tube as a presentational device, a content transmitter and as a communication tool that guides teachers and student to engage in instructional thinking, decision-making, and technology integration. Through viewing activities, students observe authentic interactions among native speakers, learn about differences between dialects, accents, registers, and body language. Just like with the reading and listening activities, students learning an L2 bring into play the same four competencies to comprehend and interpret a message. In short, the viewing activity types shown in table 7 vary in the degree of challenge offered to students in terms of comprehension and interpretation of meanings. In short, the findings are in line and confirmed with Altam (2020); UNESCO (2011); Harris et al. (2010).

2. Interview Result

This part discusses the interview section to support the main data. All of the interviewees are pre-service teachers who created the lesson plans and participated in the ICT in English Language Teaching (ICT in ELT) Class, and enrolled the semester of 113 in the English Language Education Study Program at the Faculty of Language and Arts, Universitas Negeri Jakarta. Table 8 contains a description of interviews with pre-service teachers about the usage of lesson plans. The interviewees are labelled or coded with the letters A, B, C, and D.

Table 8. Interview summary

Themes	Formulated meaning clusters
The incorporation of ICT tools	For information exchange, 'blogs' and 'Wikipedia' are utilized. Padlet is employed for online conversation, task submission, and providing feedback on our tasks.
Educational	Raise students' awareness of technology.

Impact	It can assist pupils to improve their writing and technological skills. Using ICT tools makes the subject easier to understand and takes less time. Social networking bridges physical gaps between people. Collaborative learning using technology allows students to work on projects.
Potential advantage	It reduces costs and allows teachers and students to communicate more quickly. Increases interpersonal interaction. Increases educational opportunities through exchanging information.
Limitation	Some tools are not available for free. We can't opt out if we don't have access to mobile data or Wi-Fi. Students can become perplexed when it comes to implementing new technologies. Students are less likely to adopt new technologies when finding software bugs. Extra work in developing an interactive website could increase user participation and enthusiasm.

According to the interview document, the following important points were noted.

a. The incorporation of ICT tools

Types of ICT tools have been use for various purposes. Some people use social networking sites to maintain a social connection and to share things with others. It is confirmed with the Altam (2020) and Harris et al. (2010). Furthermore, UNESCO (2011) framework found that the integration of ICT into the classroom will depend on the ability of teachers to structure the learning environment in innovative things, to create socially active classrooms, build cooperative interaction, collaborative learning and group work. The following presents the results of the interview. One of the respondents stated,

"…I used [social media] a lot some for chatting or discussing something in WhatsApp groups and Instagram for sharing my daily life…." (Interview A). The findings are in line and confirmed with Altam (2020).

Instagram and WhatsApp are commonly used in their daily lives. Among those interviewed, a number of users preferably pick one or two specific tools. Another one said,

"…I usually used applications like WhatsApp to chat with my group, and then Instagram to post videos or photos, and then LINE also like WhatsApp…" (Interview B) The findings are in line and proved with Altam (2020)

One responder stated that she primarily used “YouTube” and “PowerPoint” for learning purposes. These tools assist her in accessing resources, locating sources, and submitting the work. She uttered,

“…I use Google Drive in the assessment class and then I also use Padlet in the ICT class and so far they helped us a lot to access the materials and the sources …” (Interview C) The findings are in line and confirmed with UNESCO (2011) in Knowledge Creation approach.

The usability and also the functionality of “YouTube” and “PowToon” are seems comfortable with some students. The other respondent preferably said,

“…I usually use Google Drive, for submission. And then Padlet and Google Mail…” (Interview D) It is in line and proved with Altam (2020) and UNESCO (2011).

b. ICT tools incorporated in pre-service learning activities

Because pre-service instructors are incorporating ICT tools into their teaching and learning activities, ICT tools have the potential to support education. The following findings is confirmed that in Technology Literacy approach, pedagogical practice include the use of various ICT tools and digital content as part of the whole class, group and individual students activities (UNESCO, 2011). According to one interviewee,

“…I use YouTube to download the videos because in my teaching activity I always use video. It can get students’ attention more. And Padlet I am using it for students to submit their tasks. It’s really helpful…” (Interview D). It is in line and confirmed with Altam (2020); UNESCO (2011); Harris et al. (2010).

Practically, learning with technology effortlessly captures students' attention and inspires them to engage in projects. This is supported by the other respondent's statement,

“…I came up with a task about the British Council and I think the British Council has made the learning activities more interesting. Because the student can choose from a lot of videos available, topics, and because the web also provides the answers and also the transcript of the videos, it’s also easier for the students…” (Interview B) It is in line and confirmed with UNESCO (2011) and Harris et al. (2010).

c. Limitations using ICT

The researcher also received some obligation about few drawbacks of using ICT tools in the interview, but only dwell in one problem, mentioned by the respondent,

“…The only problem is the limited access to the internet in our public places…” (Interview A)

The limitation of the internet seems to be a big concern when it comes to the implementation of ICT tools. This issue was also mentioned by the other respondent,

"…I think the big problem is mobile data. We cannot use the internet if things like mobile data or Wi-Fi don't exist…" (Interview B)

Thus, more effort in the development of ICT tools is needed for the convenience of both pre-service teachers and students.

E. CONCLUSION

This study concludes that the incorporation of Information and Communication Technology in the Pre-service Learning activities in a teacher's lesson plan activities addresses five topics that address different abilities, namely (a) listening, (b) speaking, (c) reading, (d) writing, and (e) viewing, as described below. YouTube, PowToon, Proprofs, Seesaw, Movie Audio, Vizia, Audiobook, and Winamp are prevalently used to facilitate listening and viewing activities. These are used to transfer materials, including such videos, audio, and photographs. PowToon, Proprofs, Seesaw, Instagram, Vizia, and Google forms were found in the lesson plans as ICT tools used in writing activities, and those tools open up a wider range of ICT tools in the lesson plan, allowing both pre-service teachers and their students to actively use them. They can assist pre-service teachers in developing quizzes or other assessments, and students can use them as worksheets that are directly connected to the pre-service teachers and students. Students are expected to be able to speak in character in L2 in a simulated situation as part of the speaking activities. The pre-service teachers incorporated ICT tools such as Seesaw, YouTube, and PowerPoint into their lesson plans to accomplish this. YouTube, PowerPoint, PowToon, Proprofs, and Google Forms, Vizia, PowToon, and See Saw are the ICT tools used in the reading activity. This finding suggests that pre-service teachers incorporate information and communication technology in their lesson plans as content transmitters, presentational devices, and, more pertinently, as tools for directly engaging pre-service teachers and students on a platform.

F. REFERENCES

Abbitt, J. T. (2011). Measuring technological pedagogical content knowledge in preservice teacher education: A review of current methods and instruments. *Journal of Research on Technology in Education*, *43*(4), 281–300.

Altam, S. (2020). Influence of social media on EFL Yemeni learners in Indian Universities during Covid-19 Pandemic. *Linguistics and Culture Review 4*(1), 35-47.

Cohen, L., Manion, L., & Morrison, K. (2020). *Experiments, quasi-experiments, single-case research and meta-analysis*. *Research Methods in Education*. https://doi.org/10.4324/9780203029053-23

Drivoka Sulistyaningrum, S., & Herawati, A. (n.d.). *The 2 nd International Conference on Informatics for Development 2018 ICT-Based Learning in English Language Education Study Programme*.

Fadhilah Hamid, S., & Drivoka Sulistyaningrum, S. (2019). Designing Ict Competences-Integrated Syllabuses Of Speaking Courses (Design And Development Study Of English Language Education Program Syllabuses) (Use Microsoft Word template style: Paper Title). *IJLECR-International Journal of Language Education And Culture Review*, *5*(1), 1-13.

Ghouali, K., & Benmoussat, S. (2019). Investigating the Effect of Social Media on EFL Students' Written Production: Case of Third-Year EFL Students at Tlemcen University, Algeria. In *Arab World English Journal (AWEJ) May 2019 Chlef University International Conference Proceedings*.

Harris, J., Hofer, M., Blanchard, M., Grandgenett, N., Schmidt, D., Van Olphen, M., & Young, C. (2010). "Grounded" technology integration: Instructional planning using curriculum-based activity type taxonomies. *Journal of Technology and Teacher Education*, *18*(4), 573-605.

Janssen, N., & Lazonder, A. W. (2016). Supporting pre-service teachers in designing technology-infused lesson plans. *Journal of Computer Assisted Learning*, *32*(5), 456–467.

Janssen, Noortje, Knoef, M., & Lazonder, A. W. (2019). Technological and pedagogical support for pre-service teachers' lesson planning. *Technology, Pedagogy and Education*, *28*(1), 115–128. https://doi.org/10.1080/1475939X.2019.1569554

Mclean, R., Richards, B. H., & Wardman, J. I. (2007). it a n d h e a l th — v i ew p o i n t it a n d h e a l th — v i ew p o i n t, *187*(3), 0–3.

Meredyth, D., Russell, N., Blackwood, L., Thomas, J., & Wise, P. (1999). Real time: Computers, change and schooling. *Department of Education, Training and Youth Affairs, Commonwealth of Australia*.

Mubarak, A. A. Al. (2016). Learning English as a Second Language through Social Media: Saudi Arabian Tertiary Context. *International Journal of Linguistics*, *8*(6), 112-127.

UNESCO. (2011). *Unesco Ict Competency Framework For Teachers*.

UNESCO. (2018). *UNESCO ICT Competency Framework for Teachers Version 3*. *United Nations Educational, Scientific and Cultural Organization*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000265721

Yaoyuneyong, G., Thornton, A., & Lieu, J. (2013). Innovation and Web 2 . 0 in Business Education : Student Usage , Experiences with , and Interest in Adopting Web 2 . 0 Tools. *International Journal of Technology in Teaching and Learning*, *9*(1), 37–63.