TEACHING-21ST CENTURY LEARNING-MEDIA INNOVATION FOR EFL TEACHING AND LEARNING: PRE-SERVICE TEACHERS PERSPECTIVE

Asmi Rusmanayanti[1] and Nasrullah[*2]
[1]Eötvös Loránd University
[2]The University of Lambung Mangkurat

Abstract
Nowadays, EFL teachers are benefited by the abundance of technological resources that enable them to provide learners with sufficient comprehensible input. Yet, not all of them are literate to the available supported devices neither in the form of webs nor other internet applications. Therefore, this study aims at describing a view toward a trend of ICT use as learning resources both in a form of web and internet based applications used by pre-service teachers..This research employed mix-method research by using an open-ended questionnaire and interview with 24 pre-service teachers as participants who study in English department, Lambung Mangkurat University. The finding of this study revealed that even there are several pre-service teachers who encountered problems when using the available applications, nevertheless, most of them have a positive perspective on ICT use in teaching and learning activities. Moreover, it is found that mostly MALL (Mobile Assisted Language Learning) applications have familiar to be used during the learning time especially out of the class rather than CALL applications.

Keywords: ICT, Teaching-Media, TEFL

INTRODUCTION

English is often used in this disruptive era for worldwide communication either online or the English skills and English components. The specific skills such as reading, writing, speaking, and listening can be focused one by one or integrated. It is also possible for the language components that need to be upgraded by both teachers and students.

In Indonesia, English is the foreign language taught at school from elementary up to university level. The objectives of teaching English in Indonesia are designed to make the students master four skills in English such as Reading, Speaking, Writing and Listening, and internalize other English elements i.e. Pronunciation, Grammar and Vocabulary. Those skills and the components should be improved and learned simultaneously to make the students able to use their English appropriately and as native speakers.   Therefore, any method or media that can improve teaching and learning English for EFL need to be updated and easier to be applied in daily life. Media are tools that are brought and provided to facilitate

*correspondence Address
E-mail: nasrullah01@ulm.ac.id

the teaching-learning process and to make students easy to understand the materials given by the teacher.

These days, teaching and learning have begun to integrate technologies in its' process. Information and communications technology (ICT) or digital technology can be referring to online or internet usage. It can be for communicating, creating and sharing information, multimedia texts, and the like. Digital media includes many kinds of things that can be surf by internet such as websites, electronic books or E-Books, many kinds of software e.g. e-mail or anti-virus programs, audio material from MP3, MP4 or podcast, video, video games, mobile media applications or 'apps', and social media.

The broad range of smart gadget use, handy device and wireless things has changed the horizon of learning way include one of which in learning language (Kukulska-Hulme, 2012). Many mobile applications are developed to sustain variety of facet in second language learning within its all components such vocabulary, grammar, reading, listening writing and speaking. Eventhough these usually embedded with interactions, sound and image which are sparks learners' interest, the language pedagogy should never be overlooked.

Talking about integrating ICT in the classroom activities is unavoidable anymore particularly in the EFL field. The use of pens, pencils, write on the board, paper and books might be the best tools for the teachers' job, but it is clear that digital skills are important for the education and employment of the graduate students in the 21 century.

There are many kinds of ICT media that could help teachers to teach their students as well as improve teaching and learning behavior. The use of ICT for learning is also known as E- learning. In Indonesia, E-learning is developed in a program called E-education.

Nowadays, ICT used in in the classroom setting is in both modes, mobile and computerized. Thus, students nowadays have more media to assist in autonomous learning outside school hours. This thinking will hinder their goal to help the students to learn effectively and can adapt to technological advancement since students nowadays have their own ICT devices to help them learn. Furthermore, the research conducted by Maulana. R., Opdenakker, M-.C., & Bosker, R. (2013b) who stated that students' motivation in learning tends to be higher if there are teachers' involvement, this result is not only found in their study but also in accordance with Western context as well.

There are two terms that mainly connected with ICT media in learning. They are CALL and MALL. As for the usage of computers in teaching and learning process is called Computer Assisted Language Learning (CALL), and for mobile-technologies in teaching and

learning process is called as Mobile Assisted Language Learning (MALL). CALL has been one of the prominent and well-known field of education for the learning technologies application (Thomas, Reinders, & Warschauer, 2012). As for MALL, Kukulska-Hulme (2012) said that MALL harnesses mobile technologies in language learning, in which situations of device portability provides particular benefits that provide interaction across distinguished contexts in more personalized and contextualized.

Related to MALL, some researches have been increased recently (Ramya, G.,&Madhumathi, P., 2017). However, these researches mostly conducted in the western context. Almost no in-depth studies have been carried out to investigate this topic in the Asian context. Therefore, this study is intended to investigate students' perception s of the implementation of ICT media in the teaching and learning process and their perceptions toward the use of ICT media in teacher development activities, especially the perceptions from Indonesian EFL teachers.

As a foreign language, sometimes English becoming difficult to learn. As this problem appears, teachers have to be able to solve. One of the ways to solve the difficulty, especially in teaching reading comprehension is by using and developing this kind of teaching-learning media.

Generally, media is an instrument to deliver the message to the receiver. Higgins, Xiao, and Katsipataki (2012) stated that the evidence on media suggests that it is the "how rather than the what" that is the key element to learning. Basically, teaching-learning media can be classified into traditional media (such as pictures, photos, textbooks, etc.), and technology media (such as Information and Communication Technology media include a computer, gadgets, internet, etc.), compact disc, LCD projector, etc.

There will be thousands of websites, apps, and tools that can help teachers and learners of English. Sometimes, it can be difficult to find and choose which of these online spaces most for both the teachers and the students are. Therefore, some skills and strategies need to be acquired by the teacher and the students. The skills or strategies such as the easier way in locating digital content, and find it again when it is needed, will save plenty of time.

Making sure digital content is relevant will help the teacher plan appropriate tasks when he or she needs to prepare the lessons. Knowing to find useful digital content for teaching or learning may help make the lessons more authentic. For example, the teacher may ask the students to look at, listen to or watch online texts, language is used to communicate ideas or tell stories, not just to teach grammar.

As ICT integration is in the classroom, students students' engagement in interactive tasks will cover an amount of information and knowledge during their learning. Meanwhile, the attitudes of the teachers would give impact to students in fusing ICT in their teaching practice(A. A. Barakabitze, E. J. Kitindi, C. Sanga, G. Kibirige, and N. Makwinya, 2015).

There are some points that the teachers need to teach their students before they know the way of finding the right sources by using ICT. The first thing to think about when searching for information online is the search terms or keywords that need to be put into a search engine. The students need to be clear about the exact information that they need to search for.

For example,imagine if a teacher wants to find some drama or song activities to motivate his or her students to use more spoken English. You use a search engine and input your keywords. The word combinations need to be decided first which will give the most relevant results: drama, English, language, teaching, resources. Put the most important words first; here it is English language teaching resources you want (not any language, and not learning). After putting the keywords between ' ' i.e. 'English language teaching drama resources' , the websites will appear with words in exactly this order. It is a good idea to look at the first results page quickly and select up to five websites. Look at the first page of these websites for a minute or more, then decide if they look useful and bookmark them. Bookmarking is the way to save web-pages,therefore,it will be easier to find them again.When it is already three to five bookmarks, the teacher or the students need to evaluate how well the content meets your teaching needs.

There are some questions that can be used for evaluating digital content the students:
   a. The content is suitable for the age/language level/skills of the learners.
   b. The content's language/learning outcomes meet learning needs .
   c. The progress, achievement tracking or feedback (with explanations).
   d. The meaningful or the distraction of multimedia.
   e. The possibility to have differentiation (activities for different levels).
   f. Kinds of activities engaging (e.g. learning by game-playing) or repetitive.
   g. Time allocation for the activities.

However, the research in English language teaching progress because of the effect of mobile apps still rare to be conducted. Studies which are done in deeply in connection with Mobile Applications for learning English are still few to be carried out particularly driven by proper learning theories and principles as well as the assessment toward the on going studies. Therefore, this study is aimed to investigate how we contribute to existing learning

theories coined with current practice as an aid in evaluating and analyzing technological devices whether in the forms of webs or apps for learning English.

RESEARCH METHOD

This research applied the mixed-method approach. Mix methods is a methodology for conducting research that involves collecting, analyzing, and integrating quantitative and qualitative research in a single study or a longitudinal program of inquiry. Furthermore, Creswell and Clark (2014) defined that the purpose of this form of research is that both qualitative and quantitative research, in combination, provide a better understanding of a research problem or issue than either the research approach alone.

A quantitative method was employed by using questionnaires related to the teacher's and students' perception s toward the use of ICT media in the teaching and learning process. While the qualitative method was used with a deeper interview with the students, and some documentation to help explain the outcomes from quantitative data (Creswell, 2014). It is believed that using different types of procedures for collecting data and obtaining that information through different sources (learners, teachers, etc.) can augment the validity and reliability of the data and their interpretation.

Research Problem

The purpose of the research is to explore the use of ICT media, whether computer or mobile devices in improving teaching and learning behavior in teaching and learning English skills. In order to achieve the goal of the research, the following questions will be addressed:

1.How is the use of ICT media help students to improve their learning behavior?

2.How are the students' perceptions related to the use of ICT media in learning English?

The first and the second question, the data will be gathered through classroom observation by two different raters to avoid bias and by using a questionnaire. Until the seventh question, the data will be gathered by using questionnaires, the questions used will be open and closed questions, there will also interview with some teachers and students.

Participants

The questionnaires were distributed to whole Advance Speaking (ABKB2402) class students in the English department of Lambung Mangkurat University, there are 24 pre-service teachers in this class. As stated before, they were chosen since they are on the last level for Speaking skills courses. Therefore, they are expected to be able to speak English fluently and also have good English knowledge and ability in English skills and components.

Instruments

Instruments that are used in this research are a set of open-ended questionnaires and interview guidelines. This set of questionnaires is related to participants' perceptions of the use of mobile applications in mastering English skills. The instruments itself were distributed four weeks after they were acquainted with some mobile applications. Questionnaires offer an objective means of collecting information about people's knowledge, beliefs, attitudes and behaviour.. The researcher chose the open-ended questionnaire over the closed one since the open-ended questionnaire gives more insight into participants' perceptions related to the topic.

The next method of data collection is an interview. Creswell (2014) defined an interview as the process where researchers ask one or more participants in a study mostly general, open- ended questions and record their answers. To this end, the researcher wants to get firsthand information directly from some knowledgeable informants. Flick (2006, p. 160) added that the purpose of the interview is to reveal existing knowledge in a way that can be expressed in the form of answers and so become accessible to interpretation.

There are three types of interviews: structured, unstructured, and semi-structured interviews (Creswell, 2014). The researcher used an interview. According to Gay, Mills, and Airasian (2012:387), in a structured interview, the researcher has a specified set of questions that elicits the same information from the respondents. Furthermore, Creswell (2014) suggested that one-on-one interviews are ideal for interviewing participants who are not hesitant to speak, are articulate, and who can share ideas comfortably. The researcher used a one-on-one interview because it allows flexibility for the researcher to encourage the participants to express their perceptions freely.

Procedure

As stated in the previous part, the questionnaire was distributed four weeks after the participants were acquainted with some mobile applications during regular class hours. Before the participants began answering the questionnaire, they were informed beforehand that there was no personal information collected and the participants were anonymous. Since the data was collected by using a set of open-ended questionnaires, the researcher analyzed the data qualitatively.

RESULTS AND DISCUSSION

Results

This research was conducted to investigate students' perception s toward ICT and the applications that mostly used by the students either in the class or outside the class. As stated before, the data analyzed as collected from the open-ended questionnaire related to the topic.The questionnaire was distributed four weeks after the participants were acquainted with some applications to make sure that they have understood those applications well, e.g.its' uses or its functions. The questionnaire was divided into two parts, part one was for their information in general, and the second part was exclusively for their perceptions on MALL or CALL applications.

The questionnaire is selected as one of the instruments used to collect quantitative data. According to Fidaoui et al. (2010), questionnaires are any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers.

Table 1. Result of Students ' Perception of Using ICT

Gender	Male	10 students
	Female	14 students
English Competency Level (Based on the student's perception)	Low Level	3 students
	Average Level	15 students
	High Level	6 students
Familiarity with ICT during the classes this semester	Yes	24 students
	No	0 students
Types of technologies do you prefer to use in EFL learning	Mobile Phone	19 students
	Computer	4 students
	Others:Mobile& Computer	1 student
Types of technologies you think appropriate for using in EFL learning (especially in our country)	Mobile Phone	19 students
	Computer	4 students
	Others: Mobile & Computer	1 student
The benefits to student's uses of technology in EFL learning	Agree	24 students
	Disagree	0 students
	Neutral	0 students
The barriers to student's uses of technology in EFL learning	Technical	8 students
	Non- Technical	16 students

Table 2. Kinds of Applications by Using ICT from the Students' Preferences

Kinds of application or website that are suggested to improve your English especially specific skills or components:	Listening Skills	TED talks, Youtube, Duolingo, TED Audio, English Listening, and Speaking, TOEFL AIO app,
	Speaking Skills	TED talks, Orai, Ted videos,Youtube,Pronunroi, American Pronunciation Pro, Duolingo Perfectlyspoken.com,
	Reading Skills	Jakarta Post, Starfall. Com, BBC News, FourFourTwo.com, TED Audio, americanliterature.com,
	Writing Skills	Wattpad, Hemingway, Blogspot, Google Document,Grammarly, Duolingo, Grammar Test,
	Vocabulary	U dictionary, Lingodeer, Duolingo, Pronunroid, Vocabulary.com, Grammar Test, Hello English,
	Grammar	grammarly, English Grammar, Google Translate, Duolingo, Grammar Test, U-dictionary, Hello English,

The total of the applications that have been suggested by the students after they try it by themselves is more than 20 applications, which is based on their own preference. The results collected reflect the students' general perceptions and insights toward the use of mobile applications in mastering English skills, especially application named Orai, TED, Duolingo, etc.

Based on Creswell (2014), he defines an interview as the process where researchers ask one or more participants in a study mostly general, open-ended questions and record their answers. To this end, the researcher wants to get firsthand information directly from some knowledgeable informants. Flick (2006, p. 160) added that the purpose of an interview is to reveal existing knowledge in a way that can be expressed in the form of answers and become accessible to interpretation.

The interview point of view at this research is trying to have a deeper understanding of certain points of the use of ICT during the semester. Some interesting points will discuss thoroughly based on the open-ended questionnaire and interview guidelines. Here are some

lists of applications that the students used or searched during the semester of English Speaking Class.

Table 3. List of Applications that are used by the EFL students at ULM

TED talks	TED Audio	TED
Youtube	Duolingo	TOEFL AIO app
Ted videos	Hello English	English Listening & Speaking,
Knudge.me	Memrise	Pronunroid,
Orai,	Converse	American Pronunciation (Pro)
Cambly,	Jakarta Post	Wattpad,
BBC News,	Tandem,	Google Translate
Google Document	Web novel	Lingodeer
Hemingway	Wordpress	Penny Dell Crosswords
Blogspot	U dictionary	Oxford Dictionary for English
Grammarly	vocabularytest	English Grammar
Grammar Test	LearnEnglish Grammar	Udemy
Grammar Tense	FourFourTwo.com	americanliterature.com,
starfall.com,	Sciencedirect.com	Perfectlyspoken.com,
Vocabulary.com	Examenglish.com,	

From the interview, every student shares their challenges of using ICT in learning English as well. These challenges occurred either inside or outside the class. Here are some common challenges that mentioned by them:

1. Availability of hardware and software, lack of computer knowledge, lack of computer experience, inadequate computer technology support, the time factor, and lack of professional development in computer technology integration.

2. Sometimes the internet connection is offline because it is also related to the supply of electricity since in Banjarmasin often blackout or no electricity and internet network. It requires a stable network to support the learning process.

3. Students may get distracted as they using their phones for chatting or playing games instead of searching for sources.

Discussion

On the first part, it was revealed that the participants mainly use their mobile phone on Chatting and Social Media applications, such as Line, Instagram, Whatsapp, Facebook, etc.; Web Browser,such as UC Browser, Chrome, etc.; and other mobile applications, such as Games, Music, etc.Only a small number of participants which use MALL in their mobile phone and those applications were mostly the same for all participants whichever used MALL. Those applications were such as a dictionary, and Edmodo since they need to use it for their college tasks.

As for the second part, the researcher found out much interesting information. As stated before, related to MALL, beside dictionary and Edmodo, most of the participants never used any other MALL applications. Most of them said that it was also the first time they ever heard about Orai or TED and the like. From the questionnaire, it was revealed that they thought that the Orai and TED made them interested to try other MALL apps since they felt benefited from using MALL apps. They said that Orai and other MALL applications are easy to use and make them easy to understand the material they needed and also make them easier to master English skills, especially speaking since the participants thought that it is the hardest skill to master. Thus, MALL application in general and particularly Orai or TED are a big help for them.

There were many perceptions toward the strength of MALL application generally. Related to MALL/CALL applications, the benefit they got are:

1. There is no time restraint such as when in the classroom,
2. There are many variants of MALL applications that can be used,
3. Flexible, not only related to time but also place, since they can use it almost everywhere.

Even though there are many positive perceptions of ICT and MALL especially, there is one thing that the participants thought as a weakness of most MALL applications. It is the dependence of the applications on internet connection provided by the internet provider and Wi-Fi used by the user since most of MALL applications required to be connected with the internet. The limitation interferes with the success of the students in learning using EFL is depending on the internet connection. It can be understandable since they cannot access the app or the website except the app has a feature that can access offline.

Another challenge is the internet access sometimes not free in Banjarmasin or even in Indonesia, especially if it is out of the campus. There are some times that they need to pay for data or space quota which is not free. Hence, some of them prefer to open or use the application only when it is at the campus. The next barrier is the lack of knowledge about the use of technologies. As stated by Yudhiantara, R. A.,& Nasir, I. A.(2017), technology may change too rapidly for students to keep up and causes difficulty in controlling learning content. Since not all the students familiar with ICT especially to certain applications, sometimes they tend to avoid to use it because they thought it will make their cellphone or laptop have more load and make other applications cannot be accessed at the same time. But, when the students already familiar with the work system of the application, they were

happy and eager to mind more applications that can be used to enhance their English capability.

However, it could be concluded that the participants have a positive perspective toward ICT in general and MALL in a particular way. It can be seen from their respond where they invest more time to find more applications even though it was not an obligatory point.

CONCLUSION AND SUGGESTION

Conclusion

From the study, the researcher discovered several results related to the topic. First, even though there are several students who encountered problems when using the application, most of them have a positive perspective on ICT use in teaching and learning activities. Mostly MALL (Mobile Assisted Language Learning) applications are used during the learning time especially out of the class, even though some of the students still use their laptops because it has a bigger screen and easy to be put on the table. There are several students who have started to use other MALL applications after they tried Orai, TED, VOA and the like because they thought MALL applications made them easier to understand material related to their study. Thus, from the results above, the researcher concluded that EFL students have a positive perspective towards MALL applications. Some applications have been suggested especially if the teachers or students want to be focused on certain English skills or other English language components.

Different media can help you make language learning and teaching more engaging for your learners. When language is introduced in context, it helps develop a deeper understanding. For example, in a short video where learners can see the situations in which people are communicating, they can observe body language, gestures, facial expressions, interpersonal relationships and the degree of formality. You know your learners and their interests and language needs, which means you can personalize content to make it more relevant when you produce learning materials. Learners may be more motivated to develop language learning and digital skills when they have a choice in the way they communicate.

Suggestion

Teacher can add variety to English language contents for the students by using digital multimedia that has been created or adapted so that the activity can be conducted inside or outside the class. The students or learners will engage with language, sound and image-rich texts when they navigate the internet in their everyday lives outside class if they

are online. This can be quite a different experience from engaging with English language teaching materials in course-books. All of the activities below can also be done with or without digital tools, either using paper and pens, texts, or board, as long as the teacher can adapt it based on the situation and availability.

a. Quizzes

SA multimedia online test with instant feedback. Learners navigate on their mobiles and you can download the class results. The other way is the teacher could re-type or copy the content and then distributed the printed version to students.

b. Polls

TA survey (e.g. of opinions) that learners answer anonymously online with their mobiles. The teacher could make offline polls by asking students to write their answers anonymously with sticky notes.

c. Infographics

Information that is presented graphically, e.g. in a combination of images and words.

d. Word clouds

An image made of words taken from texts. The bigger the size of the words, the more times they are in the text.

e. Podcasts

An audio recording that is shared online, e.g. like a radio show you make yourself. The teacher downloads the audio first as prevention when the connection is not good or just wanted to do the activity offline.

However, the teacher must not only pay attention to the technology but pay more attention to pedagogy as well as materials that the teacher wanted to be delivered because it is the most important.

REFERENCES

A.A. Barakabitze, E. J. Kitindi, C. Sanga, G. Kibirige, and N. Makwinya, "Exploring students skills and attitudes on effective use of ICTs: case study of selected Tanzanian public secondary schools," Universal Journal of Educational Research, vol. 3, no. 6, pp. 407–425, 2015.

Creswell, J. W. (2014). *Mixed Methods Research: Design and Procedures*. University of Pretoria

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and Conducting Mixed Methods Research*. London: Sage Publications Ltd.

Flick, U. (2006). *An introduction to qualitative research*. London: Sage.

Fidaoui, D., Bahousa, R., & Bacha, N.N. (2010). CALL in Lebanese elementary ESL writing classrooms. Computer Assisted Language Learning, 23(2), 151168. doi:10.10806 09588221003666248

Higgins, S., Xiao, Z., & Katsipataki, M. (2012). The impact of digital technology on learning: A summary for the education endowment foundation. Durham, England: Durham University,

Kukulska-Hulme, A. & Shield, L. (2008). *An Overview of Mobile Assisted Language Learning: From Content Delivery to Supported Collaboration and Interaction*. ReCALL, 20(3), 271-289. Retrieved on March 09, 2018.

Kukulska-Hulme, A. (2009). *Will mobile learning change language learning?* ReCALL, 21(2), 157165. Retrieved on March 09, 2018.

Kukulska-Hulme, A. (2012). *Mobile Learning and The Future of Learning*. International HETL Review, 2, 13-18. Retrieved on March 09, 2018.

Kukulska-Hulme, A. (2012). Mobile Assisted language learning. In C. Chapelle (Ed.), The encyclopedia of applied linguistics (pp. 3701–3709). New York, NY: Wiley Online Library

Maulana. R., Opdenakker, M-.C., & Bosker, R. (2013b). *Teacher– student interpersonal relationships do change and affect academic motivation:* A multilevel growth curve modelling. British Journal of Educational Psychology

Silver-Pacuilla, H., Ruedel, K., & Mistrett, S. (2004). *A review of technology-based approaches for reading instruction: Tools for researchers and vendors.* In The National Center for Technology innovation: Reading Matrix. Retrieved on January 2019 from http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.118.8463

Thomas, M., Reinders, H., & Warschauer, M. (2012). Contemporary computer-assisted language learning: The role of digital media and incremental change. In M. Thomas, H. Reinders, & M. Warschauer (Eds.), Contemporary computer-assisted language learning (pp. 1–12). London: Bloomsbury Publishing.London: Continuum International Publishing Group. Taylor and Francis online

Ramya, G.,&Madhumathi, P. (2017). Review on Use of Mobile Apps for   Language
        Learning. International Journal of Applied Engineering   Research , 12(21), 11242-
        11251.   Retrieved on March 09, 2018.

Yudhiantara, R. A.,& Nasir, I. A.   (2017). *Toward Mobile-Assisted Language Learning
        (MALL): Reaping Mobile Phone Benefits in Classroom Activities.* Language & Langua
        Teaching Journal Vol. 10, No. 1, 2017,pp.12-28