

Computer Assisted Language Learning Based Activities for Pre Service English Teachers` Digital Literacy Enhancement

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Abstract. The computer, having various pedagogical characteristics and giving some benefits, has been utilized in teaching languages around the world. It affects the way we view teaching and learning, probably more than most educators admit. CALL-based activities provide the students with various activities dealing with digital learning. It directly facilitates the teaching process in the digital era to support the pre-service English teachers` digital literacy competencies. This research aimed at exploring the pre-service English teachers` views on the use of the computer-assisted language learning based activities in enhancing their digital literacy. This explanatory study was conducted in the English education study program, Universitas Baturaja and the participant was 22 pre-service English teachers. The questionnaire, interview, and observation were used to gather the data. The findings clearly presented that CALL based activities allow them to be digitally literate (73%), make them know some functions of computer applications (91%), make them familiar with some EFL software (82%) , and CALL based activities guide them how to create the digital media in EFL teaching (77%) . It can be concluded that CALL-based activities make the pre-service English teachers be more digitally literate and promote digital literacy enhancement dealing with digital language teaching and learning.

Keywords: CALL, Digital Literacy, Digital Teaching

1 Introduction

Technology facilitates the people in many things including the teaching and learning process in the digital era. [1] The majority of the learners used the web and internet. It is important to control the students` activity and make learning meaningful through technology facilities. Computer Assisted Language Learning (CALL) is a program that can be provided in digital era language teaching especially for an education program to facilitate the pre services English teachers in creating the material and media dealing with digital teaching. [2] found out that pre-service English teachers had a positive attitude toward CALL and the use of computer CALL made the learners more enthusiastic about foreign language. [3] stated that CALL can be an adequate medium for improving the quality of teaching and learning the language. This is due to the following leverage points: (1) the computer may be suitable for

provoking fruitful classroom activities which help in the acquisition of the four language skills, (2) CALL can help students learn inside as well as outside the classroom, (3) it may also provide individualized, continuous and authentic teaching activities, (4) it reduces learners' apathy and lack of involvement in the learning process. So, CALL supports the latest pedagogical theory which is the learner-centered approach, (5) it may also be a tool for the integration of the four skills, and (6) the computer can provide learners with immediate feedback. Furthermore, [4] argued that computer technology became an integral part of the learning activity and he recommended that the universities should take the technology as a significant part of teaching and learning program.

The general research finding showed that CALL delivered some benefits in the teaching and learning process: Helping the students in increasing their grammar learning [5] and improving the students' reading performance [6], increasing the learners' motivation and [7], increasing the students' language and cultural awareness [8], improving academic performance [9], and developing learners' visual and intellectual structures [10] [11]. The results revealed that the use of a technology tool (computer) is very appropriate and important to handle the digital teaching environment. Besides, [12] conducted a case study on the use of gamification in education as one of the technology applications and the result revealed that the participants argued that it delivered some benefits such as increasing motivation, avoiding cheating, and keeping time.

[13] found that most of the English teachers provide online resources, technology such as LCD projector, sound system and use social media in teaching English. The questionnaire result of the basic digital literacy competencies showed that teachers were in average ability in providing Microsoft Office such as MS-Word, Excel, PowerPoint, in operating the LCD projector, sound system, etc. The next, the result of average media literacy competencies showed that teachers were in average ability in using online references, online browse, online learning, blogging, HTML, having them high ability in using social media such as facebook, WhatsUp, Twitter, email, and having the low ability in using web page design. And the last for the advanced digital literacy competencies, teachers were in low ability to know well about computer parts and their functions, to create digital storytelling and others such as *iMovies*, *moviemaker*, *powtoon*, animated video etc as the teaching media, to lead the others in using a new application dealing with teaching media, and to create application dealing with English teaching. To sum up, the result showed that the dominant of EFL teachers' digital literacy competencies were at an average level. [14] an important element in the digital world is the ability to learn from others, understanding clues from close observation and altering someone's language use to different contexts. In addition, [15] proposed the development of student digital competence: to practice basic experiments using DT options and to specify information about nature by observing, discovering and searching from a variety of information sources.

[16] mentioned eight components of digital literacy for teachers are: 1) Functional skills; enable to develop capabilities and confidence in operating and using technology as part of teaching and learning process, 2) Creativity; digital technologies deliver the opportunities to be creative in the teaching and learning process and facilitate the creation of pictures or illustrations, websites films, animations, podcasts, blogs, wikis, online content and social networking sites, musing and song, interactive maps, and learning diaries, 3); Collaboration – digital technologies support a shared and social spaces, but this does not mean that it is automatically easy to collaborate using digital technologies. Teachers can facilitate effective group work by supporting students to develop strategies for making collaboration easier, 4) Communication; critical and discerning user of digital communication tools with knowledge,

skills, and understanding (choosing the most appropriate communication tool and how to use it effectively), 5) The ability to find and select information; teachers can give students information about how to construct their web search so that students are more likely to find relevant information, 6) Critical thinking and evaluation; being reflective, interpreting meaning, and determining significance in order to make decisions and create informed sense of the worlds around us 7) Cultural and social understanding; equips students with language and context for their digital literacy, 8) E-Safety; to be critically aware and able to ask questions of the situation when they are online . Furthermore,[17] technology changing allows the teachers to appreciate the new technology opportunities that will be provided and to explore technology options for implementations in language learning classroom. [18] clarified that the common teaching and learning methods such as lecturing method, discussion, question-answer, practicum, and presentation that are used in the language classroom. These teaching and learning method can be integrated with technology usage in the English classroom. Moreover, [19] the teachers were not consistent in providing the technology tools because they were not familiar with the technology tools and lack of appropriate training. The last, [20] the basic rule to be digitally literate is reaching the skill to operate digital technology. It is necessary for pre-service teachers at the English education study program, Baturaja University being digitally literate to face digital teaching. These conditions allowed the researcher to do research on pre-service teachers` digital literacy enhancement. The difference from the other research, CALL based activities in this research had been designed to cover the eight digital literacy components. The purpose of this research was to explore the use of the computer assisted language learning based activities in enhancing digital literacy based on the pre-service English teachers` views.

2 Method

This research was in the form of explanatory. It was conducted in the English education study program, Universitas Baturaja and one lecturer and 22 pre-service English teachers were involved as participants. One of the criteria of the lecturer is having at least an intermediate digital literacy level and having at least 10 years of teaching experience. In gathering the data, the researchers used questionnaire, interview, and observation. The questionnaire and interview form had been validated by five expert judgments. The pre-service English teachers answered the questionnaire and at another time, they were interviewed. To support the data, the researcher observed the classroom teaching and learning during CALL based activities four times. The taken data were analyzed to get the results.

3 Finding

Questionnaire Result of the Pre Service English Teachers` Views on the Use of CALL based Activities in Digital Literacy Enhancement

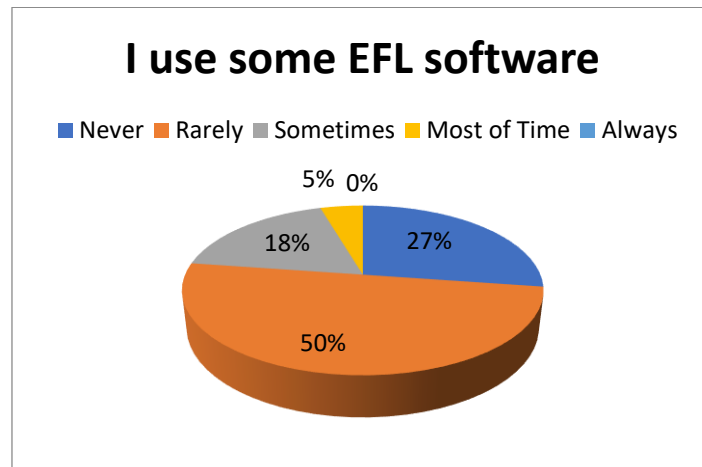


Chart 1. The Pre Service English Teachers` Views on the Use of EFL Software

The chart 1 indicated that 27% of pre-service English teachers never use the EFL software, 50% of them rarely use EFL software, 18% of them sometimes use EFL software, 5% of them most of time use EFL software, and none of them always use EFL software.

Table 1. CALL based Activities in Digital Teaching

Statement(s)	Yes	No
CALL based activities allow me to be digitally literate	16 73%	6 27%
CALL based activities make me know some functions of computer applications	20 91%	2 9%
CALL based activities make me familiar with some EFL software	18 82%	4 18%
CALL based activities guide me on how to create digital media in EFL teaching	17 77%	5 23%

The table 1 revealed that from the 22 pre-service English teachers, 73% of them argue that CALL based activities allow them to be digitally literate, 91% of them argue that CALL based activities make them know some functions of computer applications, 82% of them argue that CALL based activities make them familiar with some EFL software, and 77% of them argue that CALL based activities guide them how to create the digital media in EFL teaching.

Interview Result

CALL based Activities in Digital Literacy Enhancement

During the CALL based activities, the pre-service English teachers were involved to understand and play the digital media in teaching English. They were familiar with YouTube, Facebook, Twitter and provided the downloaded video when they did peer teaching practice. They directly took from the internet without analyzing and synthesizing.

As Pre-service English Teacher 4 explained;

“ I know some parts of my computer such as movie maker, adobe flash, audio, record process after joining CALL based activities ”

As Pre-service English Teacher 9 explained;

“ I can create some digital media to be used in teaching English later on ”

As Pre-service English Teacher 18 explained;

“ I have some applications/software on my computer but I can operate it. For example the movie maker, I didn't know what it is, and what for it is. In this class, I can use and know its functions. I like this class activity ”

As Pre-service English Teacher 2 explained;

“ At first, I didn't know some functions of the computer application and after joining this class I know the term of digital literacy and digital media ”

As Pre-service English Teacher 2 explained;

“ CALL based activities provide the guideline on how to use some EFL software that can help us to improve our computer competence dealing with English teaching ”

Observation Result

Table 2. Observation Result

Observation 1		
Pre-service English Teachers` Activities	Pre-services English Teachers` Responses of CALL Based Activity	Lecturer and Pre-service English Teachers ` Interactions
Listening and following the lecturer`s instructions Using their earphones	Listening to the academic conversation Directly answers the questions	Lecturer guided the students to do the activities
Observation 2		
Pre-service English Teachers` Activities	Pre-services English Teachers` Responses of CALL Based Activity	Lecturer and Pre-service English Teachers ` Interactions
		Lecturer guided the students to

Listening and following the lecturer's instructions	Understanding the digital storytelling in teaching English Downloading the example of digital storytelling in YouTube Discussing the example of digital storytelling as a media in teaching English	CALL based activities Digital Storytelling
Observation 3		
Pre-service English Teachers` Activities	Pre-services English Teachers` Responses of CALL Based Activity	Lecturer and Pre-service English Teachers` Interactions
Listening and following the lecturer's instructions Creating digital storytelling	Discussing kinds of digital storytelling as a media in teaching English Making their digital storytelling and it will be used as media to the peer teaching	Lecturer provided information on how to create the digital storytelling Lecturer played the digital storytelling and the students listened The students answered the questions from the lecturer
Observation 4		
Pre-service English Teachers` Activities	Pre-services English Teachers` Responses of CALL Based Activity	Lecturer and Pre-service English Teachers` Interactions
Listening and following the lecturer's instructions Creating the <i>Powtoon</i>	Discussing kinds of <i>Powtoon</i> as a media in teaching English Making their <i>Powtoon</i>	Lecturer provided information on how to create <i>Powtoon</i> Students presented and discussed the <i>Powtoon</i> in front of the class

The observation results indicated that CALL based activities made the pre-service English teachers familiar with some computer applications dealing with English language teaching. In observation 1, the pre-service English teachers directly connected to the website and they prepared for the things related to the computer-based learning. They did activities and followed the instructions from the lecturer and in the observation 2 and 3, the pre-service English teachers found an interesting and meaningful topic, recorded, edited, and uploaded the videos to be used for digital storytelling which the process of creating their digital storytelling directly affect to their digital literacy enhancement. [21] found that digital storytelling facilitated the students' learning toward getting 21-century competences.

The findings revealed that the use of CALL based activities support the pre-service English teachers` digital literacy enhancement, for example, the ability to find and select information, critical thinking, and evaluation (as one of the components of digital literacy) in line with the study from [22] there were six most important digital competencies for students, one of them was understanding and demonstrating safe, respectful, and responsible online communication such as email, social network, and commerce. In CALL based activities, the pre-service English teachers were allowed to create their digital media such as digital storytelling and powtoon.

4 Conclusion

CALL-based activities made the pre-service English more digitally literate in language teaching and learning and the activities promote digital literacy enhancement. Besides, they also had to apply the components of digital literacy such as functional skills, creativity, collaboration, communication, the ability to find and select information, critical thinking and evaluation, cultural and social understanding, and E-safety from the technology. The use of CALL in teaching and learning enjoys, motivates, and supports facilitates both the teachers and students to be critical and creative in making digital media. It recommends to the pre-service English are more participate actively in the changing of digital teaching era and be aware of their digital literacy competencies.

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