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THE ROLE OF DIGITAL LITERACY OF PRE-SERVICE AND IN-SERVICE EFL INSTRUCTORS IN POST PANDEMIC COVID-19

Abstract. There is a need to pay more attention to the incorporation of digital technologies in teaching English as a Foreign Language (EFL) due to the increased importance of digital technology and digital literacy highlighted by the COVID-19 pandemic. The digital proficiency of teachers is crucial for effective teaching and learning in the 21st century, especially in the context of foreign language education [1]. In this context, this study investigates the role of digital literacy of pre-service and in-service EFL instructors post-pandemic. Participants are N:165 EFL pre-service and in-service instructors. The current study has a quantitative design, the data tool is the Digital Literacy Questionnaire for Language Teachers. The data is analyzed via the Mann-Whitney U test, Wilcoxon Signed Rank Test, descriptive analysis for one of the questionnaire items and content documentation for the last open-ended question for of the questionnaire. The findings of the study indicate that there are significant differences between Pre-service and In-service EFL Instructors for some of the items. Besides, as the findings suggest lack of skills and knowledge of teachers, lack of training, lack of budget, and lack of interest of teachers are among the factors affecting the use of digital technologies for foreign language teaching. The findings undeniably confirm the vital importance of digital literacy in teaching English as a Foreign Language (EFL) in the digital age, highlighting the need for teachers to actively acquire and employ it. Therefore, it is essential for EFL teachers to include digital literacy in their teaching methods by making use of a range of digital technologies, including Web 2 tools that provide several capabilities. The results also indicate the necessity of teacher training programs focused on enhancing the digital literacy skills of English as a Foreign Language (EFL) instructors.

Keywords: Digital Literacy; Pre-service and In-service EFL Instructors; COVID-19 Pandemic

1. INTRODUCTION

The COVID-19 pandemic had wide-ranging repercussions across several aspects of daily life, particularly in the sphere of education. As a result, the globe swiftly transitioned to online education, a trend that may last for an extended period of time. Thus, COVID-19 has underscored the significance of digital technologies and literacy in the realm of education. [2] emphasized that teachers with inadequate digital literacy skills encountered significant challenges in accessing internet material throughout the remote education stage of the pandemic. In their study, [3] asserted that teachers must possess digital literacy to effectively assist students in learning a foreign language. This is because digital literacy equips teachers with a diverse array of tools for language instruction. Hence, in order to stay up with technological advancements, language teachers must provide support and guidance to their students in order to enhance their proficiency in utilizing digital devices for language learning [4].

Educators must utilize information and communication technology (ICT) to manage information, communicate with others, and explore the world. These contemporary technologies are essential for enhancing both the quality of life and education. Hence, contemporary individuals must possess digital literacy skills, a necessity that is further emphasized by the widespread advancements and utilization of modern ICTs. Researching digital technologies in education is necessary due to their transformative impact on the educational paradigm. In order to keep up with the rapid advancements in the field, individuals

must possess the requisite skills and abilities to effectively navigate the evolution of current ICTs. To effectively use technology in the assessment of young students such as Virtual Reality (VR) and Augmented Reality (AR), it is necessary to integrate digital tools that are appropriate for their age, stage of development, and learning goals [5]. Digital literacy abilities, as referred to by [6], have emerged as a key competency in the 21st century, according to [7]. Language teachers in the digital era have access to a wide range of valuable tools, platforms, and programs that can be utilized in their education through computers and smartphones [8]. Technological advances have been widely recognized as effective tools for facilitating language teaching and learning [9].

2. THE THEORETICAL BACKGROUNDS

According to [10] digital literacy refers to proficiency in utilizing software and digital technology, encompassing cognitive, social, motoric, and emotional abilities, in order to fulfill users' needs and desires. Some individuals refer to it as knowledge literacy, which necessitates a cognitive benchmark for perceiving, comprehending, and producing information using digital tools. [11] provided a more exact definition of digital literacy as the capacity to gather information from digital media. According to [12], knowledge can be acquired from various sources. Digital literacy encompasses language, phrases, video, motion graphics, visual displays, audio, and multimedia. [13] assert that the use of CALL meets the criteria for digital literacy practice in educational development.

[14] recorded the diverse range of technology and its usage in digital literacy, including Twitter, online browsers, interactive storybooks, applications from the Play Store, group websites, board programs, and eBooks. The order of integration of various platforms such as Facebook groups, blogs, Skype, and WhatsApp into literacy activities is discussed in reference [15]. Digital literacy is an essential skill that encompasses the use of digital technologies, understanding digital media platforms, and building and interacting with digital content. It involves using electronic devices, understanding and using data from various sources, and performing tasks proficiently in a computerized setting. It involves understanding, reproducing, and manipulating information [16].

3. LITERATURE REVIEW

To date, there have been several studies on digital literacy. The study by [17] investigated the perspectives of in-service secondary and high school teachers on the significance of digital literacy in their EFL instruction. It aims to uncover the extent of EFL teachers' digital literacy and its impact on their teaching practices, as well as to comprehend the capabilities and obstacles associated with digital tools in EFL instruction. Findings suggested that high school instructors were more familiar with the concept of digital literacy than social studies teachers. Both SS (secondary school) and HS (high school) teachers displayed confidence in utilizing digital tools and possessing digital literacy skills. Furthermore, it was asserted that digital literacy benefits language instruction. Furthermore, all the participants unanimously acknowledged that the advancements in digital technologies greatly enhanced their language training. Overall, the findings of this study unequivocally validate the crucial significance of digital literacy in English as a Foreign Language (EFL) instruction in the digital era, emphasizing the necessity for teachers to actively learn and utilize it.

The objectives of the study by [18] also aimed to explore the use of digital literacy; assess instructors' attitudes towards implementing digital literacy; examine the problems encountered; and analyze the strategies employed to address these challenges. It is found that the teachers

demonstrated a favorable disposition toward utilizing digital literacy in their EFL instruction. They prioritized the curriculum, recognized their role as educators, employed successful teaching methods, incorporated various literacy practices, and enhanced proficiency in the four language skills. Nevertheless, obstacles such as insufficient technology, students' socioeconomic background, time constraints, and inadequate financial resources were recognized as barriers to the successful implementation of digital literacy. Students are commonly referred to as digital natives in the current era, as they are constantly exposed to and familiar with technology in their daily lives. To improve pupils' proficiency in digital literacy, it is imperative that the instructor possesses a high level of digital competence. Similarly, [19] study explored teachers' perspectives on digital literacy practices at both the classroom and school levels. Additionally, it aims to identify the digital literacy practices employed by EFL instructors and examine the obstacles they encounter when implementing these practices in the classroom.

There has been a growing body of research dedicated to the topic of digital literacy [20], [15]. [20] conducted a study to examine the comprehension of digital literacy among Turkish pre-service language teachers, as well as their practical use of digital literacy in their daily lives and future teaching endeavors. Some pre-service teachers indicated that they possessed knowledge and utilized digital tools, while others stated that they were able to employ these tools for communication purposes and in their teaching practices. Additionally, a portion of them exhibited excessive self-assurance in their abilities and knowledge about online security. The digital tools utilized by pre-service teachers predominantly consisted of social media platforms, learning management systems (LMSs), and quiz activities. These tools were employed in their activities in class and outside the school. They extensively utilized social media technologies for communication, enjoyment, academic purposes, and language acquisition. In addition, they included digital tools in their instruction as resources, either to augment the acquisition of knowledge and skills or to promote motivation, independence, innovation, collaborative work, and active participation.

[21] conducted a study on digital literacy practices in the Indonesian EFL classroom by comparing the teaching methods of teachers who are not proficient in digital technology and those who are proficient in digital technology. The findings revealed that both teachers were actively adjusting to digital literacy, as seen by their utilization of digital media in their teaching practices. Collectively, the research conducted by [21] and [20] offers a thorough depiction of the digital literacy practices of educators who are currently teaching or undergoing training. The researchers examined the digital literacy practices of instructors in their classrooms, including how they use digital media, the goals they have for using it, and the responses of the students. Therefore, the two research yielded a multitude of valuable insights into the field of digital literacy.

In addition to this, various research has examined digital literacy within the framework of teacher education. [22] and [23] examined the endeavors made to train student teachers in incorporating technology into literacy instruction. Their research indicates a disparity between the presence and utilization of digital technologies in educational settings. The existing research indicates that student teachers who are familiar with and actively use digital technologies are more likely to be sensitive to their use. This is supported by studies conducted by [24], and [25]. The primary focus in advancing digital technologies in teacher education is the need to educate student teachers on how to learn "about, through, and with technology" ([26] p. 383). This includes providing instruction on how to actively engage in digital literacy practices [25]. Similarly, a study by [27] investigated the perspectives of English pre-service teachers in the Spanish setting on their digital literacy. According to the findings, participants had a positive perception of their digital skills but believed that they had not dedicated enough effort to improving their digital literacy. In addition, the respondents admit to lacking understanding of

how to evaluate or enhance their digital literacy. According to [28], modern education relies on various skills such as critical thinking, communication, information literacy, technology proficiency, and life skills. Teachers must integrate these skills into their instructional practices. This study examines the self-reported viewpoints of pre-service English as a Foreign Language (EFL) teachers who are currently enrolled in a Bachelor's Degree program in English Studies: Language, Literature, and Cultures at UNED (Spain) regarding their digital proficiency. Considering the factors examined in most research conducted in the area of EFL teacher training, specifically digital literacy and technology [27]; [29]; [30], three hypotheses are formulated.

H1. Participants possess a favorable perception of their own digital skills.

H2. There are notable disparities in the self-perceived digital competence across participants based on gender.

H3. There are notable variations in the self-perceived digital proficiency among participants based on their years of academic experience.

Similarly, the seminal study by [31] investigated Indonesian student teachers' attitudes about the use of digital technologies in the EFL setting. Research on teachers' digital competency is abundant in the Spanish setting. [32] conducted a study to assess the self-perceived digital skills of pre-service teachers. Similarly, [33] found evidence that gender has an impact on the digital abilities of prospective instructors, particularly in the areas of information searching, processing, problem-solving, communication, and overall digital performance. These skills were consistently found to be more favorable for men. [29] demonstrate that teachers possessing greater pedagogical knowledge surpass their counterparts with lesser skill in the domain of digital security. [34] conducted a study on the digital competency of in-service English teachers in EFL settings. The study revealed that, despite getting targeted training in these abilities, the teachers still require additional assistance and technological resources. [1] conducted a study to assess the self-perceived digital literacy of pre-service EFL and bilingual education teachers who had both in-person and online training. The study highlights the importance of providing targeted initial teacher training in digital competence.

In summary, the aforementioned research has indicated that it is imperative for teachers to actively utilize digital technology in order to reap their advantages. One of the benefits is the incorporation of digital tools in a learning setting, which helps student instructors enhance their confidence in acquiring literacy skills. Therefore, teachers' proficiency in using digital tools is extremely important for teaching in the 21st century and for learning in general, especially when it comes to learning foreign languages. According to [35], it is evident that teachers and students must be adequately trained to adapt to virtual education, including the use of technology and acquiring digital teaching and learning abilities (p. 35).

Effective digital technology use involves technical capabilities and classroom practice changes. Teacher techniques and implementations using digital technology and teaching-learning facilities should be considered [36]. ICT is an effective technique for teaching digital literacy [37]. Teachers have more content and pedagogical autonomy. However, if they lack computer literacy, new media interaction will be difficult. Sharma says teachers are key learning facilitators in the digital age [38]. Networking, communicating, thinking, nurturing, and knowledge management are general teaching qualities that facilitate learning. Skills in networking enable collaborative learning. This skill is needed in the digital age to let students and teachers collaborate and share material. Communication skills assist students build technical abilities like creating online material or short films and connecting to a larger community of individuals exchanging ideas, projects, and chatting online. It can work with student communities to tackle daily teaching issues.

Taking the above-provided information into account, there has been a growing body of

research dedicated to the topic of digital literacy [20], [15] examining the comprehension of digital literacy among Turkish and other pre-service language teachers, as well as their practical use of digital literacy in their daily lives and future teaching endeavors.

Regarding this, the current study aims to investigate the role of digital literacy of pre-service and in-service EFL instructors in the post-pandemic era.

The current study has the following research questions.

1)   Is there a significant difference between the attitudes of pre-service and in-service EFL Teachers towards 'Digital Literacy'?
2)   What are the factors affecting digital technologies for language teaching?
3)   Have there been any changes in the level of EFL instructors' digital literacy before and after the Pandemic (COVID-19)?

4. METHODOLOGY

4.1. Participants and Context

Participants are (N:165) instructors from different contexts such as English Language Teaching programs, the School of Foreign Languages, the Ministry of Education, and Private and State Schools. The table below provides detailed information regarding the background of the participants.

4.2. Data Tools

The study adopted a quantitative research method. The data tool is the Digital Literacy Questionnaire-Language Teacher adapted from [39] to evaluate Preservice and In-service EFL Instructors' digital literacy in Turkey. Before administering the survey, permission from the copyright holder was granted for use in this evaluation. During the adaptation process, some of the items of the questionnaire were modified and Sections 2 and 5 were implemented.

4.2. Data Analysis

The data revealed non-normal distribution which is why non-parametric tests such as The Mann-Whitney U test and Wilcoxon S-R test were used for whole data analysis [40]. In addition to this, a descriptive analysis was conducted for one of the items of the questionnaire (item number 8). Besides, the responses for item 19 which is an open-ended question regarding the changes in the level of digital literacy before and after the Pandemic (COVID-19) were also reported in a detailed form.

5. THE RESULTS AND FINDINGS

5.1. Findings for Research Question 1:

Is there a significant difference between the attitudes of pre-service and in-service EFL Teachers towards 'Digital Literacy'?

The table below shows the mean ranks for two different groups of 'In-service and Pre-Service EFL instructors.

Table 1.

Descriptive Statistics of Mean Ranks

Ranks				
	GROUPS	N	Mean Rank	Sum of Ranks
@3Howwouldyourateyourtypingskills	In-service	77	88,91	6846,00
	Pre-service	76	64,93	4935,00
	Total	153		
@4Howwouldyourateyourwebsearchskills	In-service	78	82,05	6400,00
	Pre-service	76	72,83	5535,00
	Total	154		
@5Howwouldyourateyourcomputerliteracyt heabilitytouse	In-service	78	84,23	6570,00
	Pre-service	76	70,59	5365,00
	Total	154		
@6HowwouldyourateyourInternetliteracythe abilitytouse	In-service	78	81,71	6373,00
	Pre-service	74	71,01	5255,00
	Total	152		
@7Howwouldyourateyourdigitalliteracythea bilitytouse	In-service	78	76,60	5975,00
	Pre-service	76	78,42	5960,00
	Total	154		
@9Ienjoyusingdigitaldevices	In-service	78	79,46	6198,00
	Pre-service	76	75,49	5737,00
	Total	154		
@10Ifeelcomfortableusingdigitaldevices	In-service	78	78,31	6108,00
	Pre-service	76	76,67	5827,00
	Total	154		
@11Iamawareofvarioustypesofdigitaldevices	In-service	78	74,65	5822,50
	Pre-service	75	79,45	5958,50
	Total	153		
@12Iunderstandwhatdigitalliteracyis	In-service	78	84,61	6599,50
	Pre-service	76	70,20	5335,50
	Total	154		
@13Iamwillingtolearnmoreaboutdigitaltechn ologies	In-service	78	83,54	6516,00
	Pre-service	76	71,30	5419,00
	Total	154		
@14Ifeelthreatenedwhenotherstalkaboutdigit altechnologie	In-service	78	72,34	5642,50
	Pre-service	76	82,80	6292,50
	Total	154		
@15IfeelthatIambehindmyfellowteachersinu singdigital	In-service	78	72,44	5650,50
	Pre-service	76	82,69	6284,50
	Total	154		
@16Ithinkthatitisimportantformetoimprovem ydigitalfl	In-service	77	81,33	6262,50
	Pre-service	76	72,61	5518,50
	Total	153		
@17Ithinkthatmyteachingcanbeenhancedbyu singdigitalto	In-service	77	78,88	6073,50
	Pre-service	76	75,10	5707,50
	Total	153		

The Mann-Whitney and Kruskal-Wallis tests were run to explore if there are significant differences between teachers with different teaching experiences. The below table shows the results of the Whitney and Kruskal-Wallis tests.

Table 2.

The Mann-Whitney and Kruskal-Wallis Tests Results

	Mann Whitney	Wilcoxon W	Z	Sig. (2-tailed)
@3Howwouldyourateyourtypingskills	2009,00	4935,00	-3,57	,00
@4Howwouldyourateyourwebsearchskills	2609,00	5535,00	-1,38	,16
@5Howwouldyourateyourcomputerliteracytheabilitytouse	2439,00	5365,0	-1,99	,04
@6HowwouldyourateyourInternetliteracytheabilitytouse	2480,00	5255,00	-1,620	,105
@7Howwouldyourateyourdigitalliteracytheabilitytouse	2894,00	5975,00	-,270	,787
@9Ienjoyusingdigitaldevices	2811,00	5737,00	-,600	,549
@10Ifeelcomfortableusingdigitaldevices	2901,00	5827,00	-,244	,80
@11Iamawareofvarioustypesofdigitaldevices	2741,50	5822,50	-,71	,47
@12Iunderstandwhatdigitalliteracyis	2409,50	5335,50	-2,12	,03
@13Iamwillingtolearnmoreaboutdigitaltechnologies	2493,00	5419,00	-1,88	,06
@14Ifeelthreatenedwhenotherstalkaboutdigitaltechnologie	2561,50	5642,50	-1,52	,12
@15IfeelthatIambehindmyfellowteachersinusingdigital	2569,50	5650,50	-1,46	,14
@16Ithinkthatitisimportantformetoimprovemydigitalfl	2592,50	5518,50	-1,32	,18
@17Ithinkthatmyteachingcanbeenhancedbyusingdigitalto	2781,50	5707,50	-,58	,56

The Mann-Whitney and Kruskal-Wallis tests revealed a significant difference between teachers with in-service and pre-service teachers.

item 3 = 0,43 (p < 0,00)

'How would you rate your typing skills?

item 12 = 0,00 (p < 0,03)

'I understand what digital literacy is.

Mean Rank for item 3 = 88.91 for in-service and 64.93 for pre-service teachers.

Mean Rank for item 12 = 84.61 for in-service and 70.20 for pre-service teachers.

5.2. Findings for Research Question 2:

2) What are the factors affecting the use of digital technologies for language teaching?

In order to answer research question 2 (which is for the questionnaire's item number 8) descriptive statistics were run. Figure 1 below shows the factors affecting the use of digital Technologies.
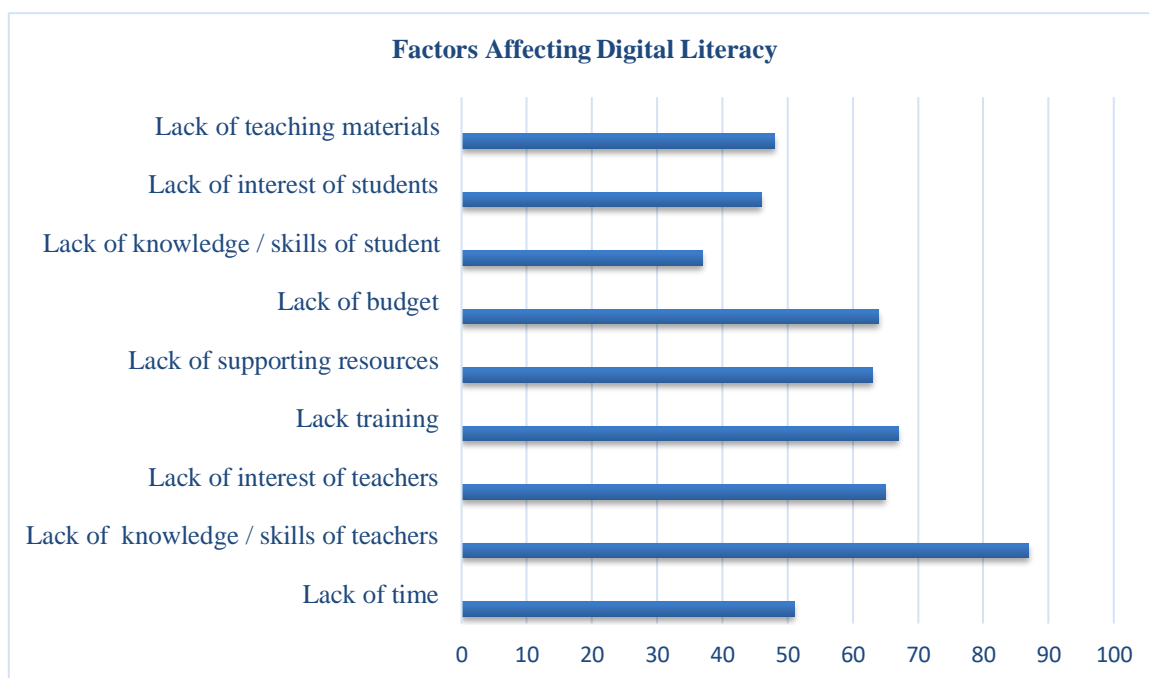
Fig. 1. Factors Affecting the Use of Digital Technologies for Language Teaching

As the figure above demonstrates among the most significant factors affecting the use of digital technologies are; Lack of Knowledge / Skills, Lack of Training, Lack of Interest of Teachers, and Lack of Budgets.

5.3. Findings for Research Question 3:

3) Please indicate if there have been some changes in the level of your digital literacy before and after the Pandemic (COVID-19).
As for research question 2 (which is the last item of the questionnaire), The excerpts below show the differences in the level of digital literacy before and after the pandemic.

> *P: I think that knowledge about digital literacy has increased after the pandemic due to mandatory conditions I thought I had been using many tech apps effectively before Covid 19, yet with the start of Covid 19, I definitely improved my use of video conferencing apps such as Zoom effectively. I must admit that it took some time for me to learn different uses of it such as sharing a screen, using breakout rooms or annotation.*

> *P: Definitely, the pandemic process of teaching enhanced my educational technology skills i think I improved a lot. My skills were not that much improved or maybe i wasn't aware of my digital skills. Thanks to online teaching it improved.*

> *P: Obviously yes. But I would say the spread of AI tools has also contributed immensely my skills have improved immensely better*

> *P: I enhanced my WEB2 skills and during online teaching, I spent so much time searching different resources That is why now I have insight and access to various native channels, websites, and resources.*
> *The Pandemic enhanced my digital literacy. Before the pandemic, I was using*

technology less.

PRESERVICE: Yes I have learnt a lot. I am good at digital skills and every day I am better.

P: It has increased obviously. My use of technological devices increased after the pandemic period.
I have always been somehow tech-savvy and in touch with technological advancements due to my interests. However, during and after the pandemic I have gained more experience in applying my knowledge about computers and software into my teaching. We used a lot of applications in that period
When you have to do sth, you show progress, so I feel that I am more digitally literate after the pandemic

People thought that before the pandemic, there was no need to access so many online courses and resources. After the pandemic, it was realized that this was necessary, and online course options and diversity increased greatly.

PRE SERVICE P: My digital literacy level has improved after COVID-19. My digital literacy increased a lot after Covid 19. I am much more familiar now Last 2 years teachers found the digital learning contents in their lectures very useful.

P: During the Covid-19 epidemic, which lasted approximately 2 years, teachers; found the digital learning contents they used in their lectures very useful and stated that the teaching activities carried out in this way eliminated the limits of time and space, learning became faster and more memorable, the teaching environment was enriched, and students' motivation for the course increased. They expressed that the epidemic period should be seen as an advantage in keeping up with the digital age and that they hope it will be permanent in the future.

P: First of all, I believe that we weren't (none of us) aware of our digital skills before the pandemic (COVID-19). Thanks to online education we had a chance to improve and integrate our digital literacy to teaching foreign languages.

P: It has changed a lot after the pandemic. Certainly, experiencing the pandemic fostered teachers as well as students to engage more with the internet, digital tools, and software applications. This led us to have more experience with digital tools and teaching materials and to increase our knowledge regarding digital literacy. Now better than in the past

PRE-SERVICE P: From the moment distance education entered my life (university 1st year flipped classroom), I had to deal more closely with digital technologies because I tried to integrate new digital technologies into my lessons in order to make my lessons more interesting and to explain the subjects to my students in every aspect. I tried to make online education more interesting and understandable for my young learners by using various digital tools. This situation changed after the pandemic. Although I used digital technology in the classroom, the curriculum I had to follow restricted the use of this technology.

P: Before the pandemic, my digital literacy level was intermediate but after the

pandemic it increased and high I think that after the pandemic, the level of digital literacy changed because the world changed. I need digital literacy for classroom management.

P: Due to online teaching, I believe my digital literacy skills have expanded and improved. I think it has also exposed areas where others and I can improve.

P: During the pandemic time, there was a compulsory transition to digital, but this is how we saw different aspects and good and bad points. Thus, we had the opportunity to integrate our digital experiences at the current time. It definitely has the effect of the pandemic on the widespread of digital.

P: I have always been interested in digital technologies and how I can apply it into my personal and professional life but still I have gained a lot of experience and knowledge specifically in how I can use digital tools for teaching online.

P: I think everyone had to learn how to use digital technologies since it was the only way to keep teaching and learning. We learned about various websites and applications in this era. So I think I improved my internet skills.

PRE-SERVICE: The Pandemic enhanced, my ability to use digital Technologies, the beginning of my awareness of digital literacy was COVID-19

P: The pandemic caused me to expose and thus discover more technological methods to use in the future.

PRE-SERVICE P: I know way more now than before the pandemic. I'm also more interested in using digital technologies. Before the pandemic, I wasn't aware of the use of digital technology in teaching. However, during the pandemic, we needed to use digital technologies so that our university classes could proceed. I have learned how to use Blackboard and PowerPoint more than I used to before the pandemic. After the pandemic, I have found out that there are many sources you can use as material for classes. During my time at the public school I attended as an observer during the Teaching Practice course, I used the internet to create worksheets for students, and I used PowerPoint during my classes.

P: Certainly, there may have been some changes in digital literacy levels before and after the pandemic. I am an artificial intelligence model, so I don't have individual experiences, but I can understand general trends and effects.

PRE SERVICE P: Before the pandemic, digital literacy typically encompassed a person's ability to use the internet, effectively utilize digital tools, and critically evaluate online content. With the impact of the pandemic, digital literacy became even more crucial as people became more reliant on remote work, online education, and digital communication.

P: After the pandemic, there may have been an increase in digital literacy. People may have gained more knowledge about digital tools because they used them more frequently during the pandemic. Additionally, with the increased need to participate in online activities and use online resources, people may have developed these skills

further.

P: However, due to the challenges brought about by the pandemic, some people may have faced difficulties in digital literacy. Especially, groups struggling with access to and use of technology may have experienced setbacks in digital literacy.

P: Overall, the pandemic may have had complex effects on digital literacy. While some people may have improved their skills, others may have encountered new challenges in this area. The need for digital literacy has become even more crucial after the pandemic. Almost every occupation has run some of the business on some online platform since face-to-face interaction was then prohibited. the ones that are not normally that interested in using technology were the ones that faced most of the trouble.

P: There are major changes compared to pre-COVID As the teachers had to switch to distance education they were obliged to improve their digital literacies. It's more prevalent to use digital materials now than in the pre-Covid period. It applies to me as well.

It can be inferred from the statements above that participants overall have experienced a great deal of major positive changes in the level of their digital literacy after the pandemic Covid 19 with the help of their implementation of online courses, digital and technological, web2 tools, as well as AI.

6. DISCUSSION

The result of this research supports the study by [17] on the perspectives of in service secondary school and high school teachers on the significance of digital literacy in their English as a Foreign Language (EFL) instruction since the findings suggested that high school instructors were familiar with the concept of digital literacy. These findings are closely related to the result of the current study which suggests that in-service EFL teachers stated that they understand what digital literacy is. Furthermore, a study by [17] is in line with the current study since both of the study findings indicated the importance of advancements in digital technologies greatly enhanced their language training (e.g.: P. After the pandemic, there may have been an increase in digital literacy. People may have gained more knowledge about digital tools because they used them more frequently during the pandemic. Additionally, with the increased need to participate in online activities and use online resources, people may have developed these skills further).

Similarly, the study by [18] is also in accord with the current study indicating that the teachers demonstrated a favorable disposition toward utilizing digital literacy in their EFL instruction by focusing on curriculum by utilizing various literacy practices. In addition to these, these results confirm that there are certain types of obstacles such as insufficient technology, students' socioeconomic background, time constraints, and inadequate financial resources were recognized as barriers to the successful implementation of digital literacy [19] These results again support the findings of current research stating that the most significant factors affecting the use of digital technologies are; Lack of Knowledge / Skills, Lack of Training, Lack of Interest in Teachers, and Lack of Budgets.

In addition to these, studies by [20] that examined the comprehension of digital literacy among Turkish pre-service language teachers, as well as their practical use of digital literacy also support the findings that pre-service teachers had the knowledge and utilized digital tools

in their teaching practices such as learning management systems (LMSs), and quiz activities which match the findings of the current research. *(e.g.: Pre-Service Instructors: have learned how to use Blackboard and PowerPoint more than I used to before the pandemic. After the pandemic, I have found out that there are many sources you can use as material for classes. During my time at the public school, I attended as an observer during the Teaching Practice course, I used the internet to create worksheets for students, and I used PowerPoint during my classes)*. Similarly, the findings of the current research seem to be consistent with [24], [25] showing that pre-service teachers actively use digital technologies.

These findings are in agreement with the study by [27] as well because participants had a positive perception of their digital skills but believed that they had not dedicated enough effort to improving their digital literacy. In addition, the respondents admit to lacking understanding of how to evaluate or enhance their digital literacy which is clearly stated in the findings part as Lack of Knowledge / Skills. Finally, [34], and [27] study also support the findings of the current research revealing that teachers still require additional assistance and technological resources.

In summary, findings undeniably confirm the vital importance of digital literacy in teaching English as a Foreign Language (EFL) in the digital age, highlighting the need for teachers to actively acquire and employ it. Therefore, it is essential for EFL teachers to include digital literacy in their teaching methods by making use of a range of digital technologies, including Web 2 tools that provide several capabilities. The EFL teachers recognized the importance of undergoing training and participating in seminars to help them properly utilize these technologies and adapt to the digital age.

7. CONCLUSION

7.1. Suggestions for Further Studies

The findings of the study indicate that it is imperative to possess the necessary skills and abilities to maximize the advantages of digital technology. Education is a domain that makes use of advancements in digital technology, specifically in the context of teaching and learning, to achieve educational objectives. This challenge necessitates the active involvement of teachers, who play a pivotal role in the preparation of future human capital since instructors are the one who can employ technology and digital literacy skills. The results also indicate the necessity of teacher training programs focused on enhancing the digital literacy skills of English as a Foreign Language (EFL) instructors in the Turkish Higher Education setting. These essential abilities need to be cultivated by both instructors and students in order to ensure that future education remains up-to-date with the latest, cost-effective technology that aids students in their learning to achieve success.

EFL teachers in the 21st century are expected to have received adequate training to assist in the development of language competency and digital literacy in future generations. Furthermore, given the significant influence of the ongoing pandemic on education, technology appears to be the sole viable means of ensuring the uninterrupted progression of teaching and learning [27].

7.2. Limitations

The study was limited by the absence of a substantial sample size, hence impeding the ability to sufficiently generalize the findings. The primary flaw of the study is in its choice of research design. The study may incorporate a qualitative research approach, employing a semi-structured interview and classroom observations, rather than solely relying on a quantitative

research methodology.

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РОЛЬ ЦИФРОВОЇ ГРАМОТНОСТІ У ПІДГОТОВЦІ ТА ПІДВИЩЕННІ КВАЛІФІКАЦІЇ ВИКЛАДАЧІВ АНГЛІЙСЬКОЇ МОВИ В УМОВАХ ПОСТПАНДЕМІЇ COVID-19

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Анотація. У зв'язку з підвищенням важливості цифрових технологій та цифрової грамотності, що було виявлено під час пандемії COVID-19, виникає необхідність більше уваги приділяти впровадженню цифрових технологій у викладання англійської мови як іноземної (EFL). Для ефективного викладання та навчання у XXI столітті цифрова компетентність викладачів має вирішальне значення, особливо при викладанні іноземних мов. У статті представлено дослідження ролі цифрової грамотності при підготовці та перепідготовці викладачів англійської мови у постпандемічний період. У дослідженні взяли участь 165 викладачів англійської мови, які проходять підготовку та підвищують кваліфікацію. Дослідження має кількісний дизайн, інструментом збору даних був використаний Опитувальник цифрової грамотності для викладачів іноземних мов. Дані проаналізовано за допомогою U-критерію Манна-Уітні, критерію рангів Вілкоксона, описового аналізу одного з пунктів анкети та документації щодо змісту останнього відкритого запитання анкети. Результати дослідження вказують на те, що існують значні відмінності за деякими пунктами між викладачами англійської мови, які проходять підготовку та перепідготовку. Крім того, як свідчать результати, брак навичок та знань викладачів, недостатня підготовка, брак бюджету та незацікавленість викладачів впливають на використання цифрових технологій у викладанні іноземної мови. Отримані дані беззаперечно підтверджують життєву важливість цифрової грамотності у викладанні англійської мови як іноземної (EFL) в епоху цифрових технологій, вказують на необхідність активного оволодіння викладачами цифровими технологіями та їх застосування. Тому викладачам англійської мови важливо долучати цифрову грамотність до своїх методів викладання, використовуючи низку цифрових технологій, зокрема інструменти Web 2, що надає більш можливостей під час викладання. Результати також вказують на необхідність розробки програм підготовки вчителів, спрямованих на підвищення цифрової грамотності викладачів англійської мови як іноземної (EFL).

Ключові слова: цифрова грамотність; підготовка та підвищення кваліфікації викладачів англійської мови (EFL); пандемія COVID-19

APPENDIX:

DIGITAL LITERACY QUESTIONNAIRE – Language Teachers

1. Please state accordingly
   o Pre-Service EFL Instructor
   o In-Service EFL Instructor
2. Where do you currently work?
   o Higher Education
   o Public
   o Private
3. How would you rate your typing skills?
4. How would you rate your web search skills?
5. How would you rate your computer literacy?
6. How would you rate your Internet literacy (the ability to use the Internet)?
7. How would you rate your digital literacy (the ability to use digital technologies)?
8. What do you think are the factors affecting the use of digital technologies for language teaching?
   o Lack of time
   o Lack of knowledge/skills of teachers
   o Lack of interest of teachers
   o Lack of training
   o Lack of supporting resources
   o Lack of budget
   o Lack of knowledge/skills of students
   o Lack of interest of students
   o Lack of teaching materials
9. I enjoy using digital devices.
10. I feel comfortable using digital devices.
11. I am aware of various types of digital devices.
12. I understand what digital literacy is.
13. I am willing to learn more about digital technologies.
14. I feel threatened when others talk about digital technologies.
15. I feel that I am behind my fellow teachers in using digital technologies.
16. I think that it is important for me to improve my digital fluency.
17. I think that my teaching can be enhanced by using digital tools and resources.
18. I think that training in technology-enhanced language learning should be included in language teacher education programs.
19. Please indicate if there have been some changes in the level of your digital literacy before and after the Pandemic (Covid 19).