

Teachers' In-Service Trainings To Enhance Digital Pedagogy Skills In The Algerian University: Between Reality And Expectations

Khaoula Hakkoum

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Abstract:

To customize universities to the 21st C educational needs and requirements, both teachers and learners have been demanded to expand their knowledge of digital technologies. Digital literacy is one among the most emphasized skills in the 21st C notably with the massive changes the Covid-19 Pandemic has brought to teaching/learning concepts. Nowadays, teachers have shifted to online or flipped classrooms by means of necessity more than choice. Therefore, teachers have found it inevitable to raise the digital pedagogy literacy, which necessitates intensive in-service training on both using digital technologies and online teaching. The new reality imposed by the afore-mentioned changes urged teachers not only to use digital technologies but also to use them properly; however, a number of studies monitor that teachers lack digital pedagogy skills in the first place. The findings of these studies highly accentuate the need for in-service teacher's trainings. For the purpose of this study, a questionnaire is administered to 20 teachers from different Algerian universities to examine teachers' digital literacies skills level, check the effectiveness teachers in-service training and the teachers' attitudes towards this problematic issue.

Keywords: Digital literacies, EFL Teachers, In-service Training, ICTs, Digital Pedagogy Skills.

1. Introduction

The changes which the process of teaching/learning English as a foreign language has witnessed in the last decades have made it mandatory for teachers to develop effective digital literacy skills. Despite the fact that teachers and educators are now aware that the use of technology is a fait accompli now, Kessler (2006) reports that the lack in digital training to teachers of English is remarkable. Hubbard (2008) adds that English teachers education programs do not permit sufficient space for digital training.

Put differently, the effect of the digital turn on our culture, teaching practices and EFL classroom requirements is nonnegotiable. In the Algerian context, the unplanned and unexpected shift to online and blended learning during the pandemic stressed the need to augment teacher's digital literacy and pedagogy skills. The English language teachers, with lack of experience and training, met several obstacles to perform their tasks (teaching, assessing, and supervising) students online. Therefore, digital literacy as one of the core 21st C skills in language teaching and learning does not encompass only the use of Information and Communication Technologies (ICT) but also the use of these technologies to create and share information through the different media. In this regard, Son et al establish that digital literacy

is mainly “the ability to use computers at an adequate level for creation, communication and collaboration in a literate society” (2011, p. 27)

This study is based on the findings of the literature review and previous studies on digital literacy in language teaching. For its purposes, a questionnaire was administered to 20 English language teachers from different Algerian universities. The main concern of the study is to investigate the extent to which EFL teachers in Algerian universities are digitally prepared and literate vis-à-vis the rapid and urgent need for implanting ICTs and digital pedagogy skills in the classroom. With regard to the challenges and difficulties faced by these teachers, the importance of in-service trainings to develop teachers' digital literacy skills is an equally important concern in this study. On this basis, the study attempts to answer two main questions:

- 1- To what extent are teachers of English in Algerian universities able to use digital skills in the EFL classroom effectively?
- 2- How important is the in-service training to raise teachers' awareness and command of digitalizing the EFL class?

2. Digital Literacy and EFL Teaching/Learning

2.1. Digital Literacy

Traditionally, literacy has been defined as the ability to read and write. Nowadays, literacy includes other skills because the mere ability of reading and writing has become insufficient to get along with the requirement of the new digital age. These factors have led to the creation of the new conceptualization of literacy into digital literacy. The latter was first coined by Gilster (1997) as he explains that digital literacy is not about “keystrokes” but about “mastering ideas”. Gilster's view of digital literacy revolves around surpassing the knowledge and use of computer-based and digital sources to thinking critically when processing the data and information available on those sources.

In fact, establishing a fixed definition of digital literacy is not quite possible due to the immense changes “having computer skills and the ability to use computers and other technology to improve learning, productivity, and performance.” (in Cote & Milliner, 2018, p.72), one finds that only knowledge and ability to use computer skills were highlighted.

With the advancements of ICTs, computer skills alone have become a short supply for the digital literacy and more skills have emerged as exigent. Dudeney, Hockly and Pegrum mention that being able to make use of technologies at one's disposal and understanding the social practices that surround the use of new media are among the skills which comprise digital literacy (2014). Contemporary digital literacy can be seen comprehensively from Spire and Bartlett's view (2012) as having the ability to access and use digital technologies, to create knowledge through digital sources, and finally sharing the produced digital outcomes in a literate society.

2.2. Digital Literacy and EFL learners

Language learners' digital literacy is now equally paramount to traditional literacy (the ability to read and write) as requirements to function effectively in the 21st C society (Healey et al., 2008). Hence, learning how to use digital sources and ICTs is part and parcel from literacy in the 21st C (Godwin-Jones, 2000). We no longer talk about language learners literacy but literacies which encompass language skills and other skills such as using ICT to learn, communicate and collaborate. All of these literacies and competencies allow learners better job opportunities, more effective social interaction and more autonomous oriented language learning as well as a wider scale of entertainment options (Corbel & Gruba, 2004; Healey et al., 2008). Corbel & Gruba (2004) advance that language learners need for a variety of purposes such as:

- communicate effectively in society;
- interact with family and friends;
- function effectively in the workplace;
- learn new ideas and for fun and pleasure. (Cote & Milliner, 2018, p.72)

Digital literacy is for language learners as essential as it is for EFL teachers.

2.3. Digital Literacy and EFL Teachers

The literature on EFL teachers' digital literacy is to some extent wide as this topic has gained importance throughout time. A number of studies were conducted in order to investigate teachers' level of digital literacy, the importance of digital literacy and digital pedagogy skills in language teaching and learning, the effects of learners' and teachers digital literacy on the educational process.

With the technological developments the world has witnessed, the calls Computer-Assisted Language Learning (CALL) augmented to live up to the requirements of the digital era. Despite these facts, numerous reports have displayed that the level of teachers digital literacy is still lower than needed and expected. After conducting a study on Iranian teachers of English, Dashtestani cited that these teachers did not have a sufficient level of digital literacy for language teaching and the implementation of CALL (2014). As a recommendation of the study, Dashtestani suggested that computer literacy be required for the employment of English language teachers. The author recommended this to raises teachers' awareness of self-training in computer literacy skills.

Yet, Stockwell (2009) reported- in another study on four part-time teachers who had a self-directed training in CALL- that self-training requires time. Teachers would take time to know and decide which technological tools to use in language teaching to attain thoroughly and efficiently to the learners' needs. Therefore, Stockwell (2009) highlighted the importance of establishing and engaging in communities in order to support and empower teachers to avail all the possibilities of CALL with EFL pedagogical contexts. In another investigation of teachers' digital literacy skills, Son et al (2011) also accounted that Indonesian teachers had scarce digital skills and thus their use of ICTs and digital devices for educational purposes was unsatisfactory. Basing on the results of these studies, the need for CALL trainings for EFL teachers is exigent.

Accordingly, Kessler (2006) and Hubbard (2008) surveyed whether or not the EFL teachers' training programs included CALL. Surprisingly, the results of the surveys revealed that CALL was not included in these programs. Kessler reviewed 50 North American TESOL graduate program websites finding that less than 10 programs actually included CALL. Graduate students, as reported by Kessler, did not take any courses on teaching with technology. As a result, 90 % of the informants opted for extra courses besides their degree in teaching with technology. He advances: "language teachers have found the wherewithal to become 'self-trained' in CALL" (2006, p. 31). It is because teachers felt the urgent need for developing digital pedagogy skills. Cote & Miller(2018) mention that:

As for developing the skills of in-service language teachers, Kessler's focus group participants called for: (1) course leaders to create conditions for teachers to engage in more autonomous, self-directed learning relating to CALL, and (2) CALL projects to involve a broad cross-section of faculty as the most successful approaches for introducing technology-assisted instruction to teachers. (p. 74)

2.4. The Positive Effects of Digital Literacy on Language Teaching/Learning

The advances of technology and the massive availability of information have had remarkable effects on education and particularly on language education. The learners' exposure to computers, smart devices and other digital tools from early ages makes them but digital natives. It is the authors' assumption that most students are more advanced than their teachers regarding using technology; a fact which necessitates and prompts teachers to develop quite an acceptable level of digital literacy skills in order to integrate ICT in their language classrooms.

Besides language skills, the inclusion of ICT in education can improve other skills like practical skill and presentation skill (Ciroma, 2014). Houcine (2011) lists six positive effects of ICT in language classroom:

- The possibility to adapt easily the teaching materials according to circumstances, learner's needs and response;
- (2) ICT allows to react upon and enables the use of recent/daily news, it offers access to authentic materials on the web;
- (3) Quick feedback is made possible;
- (4) Possibility to combine/use alternately (basic) skills (text and images, audio and video clip...);
- (5) Lectures become more interesting and less ordinary which boosts learners' engagement;
- (6) ICT enables to focus on one specific aspect of the lesson (pronunciation, vocabulary...).
- (2011, pp. 1-2)

To wit, the benefits of integrating ICTs in the language classroom can be summed up in four main advantages:

Capacity to control presentation: computers, unlike books which have a fixed presentation, can offer different types of material such as visual and auditory in addition to their capacity to combine text to graphics and images or audios.

Novelty and Creativity: Materials can be renewed easily as they can also be created from scratch by teachers.

Feedback: Some digital devices can provide instant feedback through not only locating mistakes but also correcting them.

Adaptability: computers and other digital devices permit the adaptation of the materials to suit students' levels, needs and interests with respect to their differences. (Padurean & Margan, 2009)

Hence, digital literacy has become a core skill of the 21st C language teacher and learner with regard to all the advantages it provides to enhancing the educational process. But these benefits cannot be gained unless EFL teachers' digital literacy skills promote.

3. The Study

This study aims to investigate the importance of teachers' in-service training to enhance EFL teachers digital literacy skills. It surveys teachers digital literacy level and looks into the trainings they received in teaching with/through technology. The current paper also aims to look at the reality of the digital literacy trainings and the expectations from teachers to be digitally advanced in the Algerian context.

3.1. Data Collection

In order to collect data and for the purposes of the study, a questionnaire was delivered to English language teachers from different Algerian universities and university centers. Teachers were asked to answer the questionnaire voluntarily. The questionnaire is divided into three sections. The first section concerns the personal information of the participants which we prefer to keep anonymous for academic integrity. The second section is devoted to examining

the teachers experience with using computers and digital devices in pedagogical situations and the challenges they met. Lastly, the third section is related to the teachers' attitudes towards the importance of digital literacies and teachers' trainings to develop their digital pedagogy skills.

3.2. Participants

The participants in this study are 20 teachers of English language from a number of Algerian universities. The participants are aged between 25 to 65. They are from different backgrounds and genders as displayed in the following tables:

Table 1: Teachers' Age

Age	Number	Percentage %
25-35	7	35
36-45	8	40
46-55	3	15
56-65	2	10

Table 2: Teachers' Gender

Gender	Number	Percentage %
Male	9	45
Female	11	55

Table 1 demonstrates that the majority of participants are aged between 36 to 45 years old and Table 02 shows that the majority of participants are females with a percentage of 55 %.

4. Results

The results of the questionnaire are reported as they originally appeared in the participants responses with no changes. They are presented in forms of numbers (the frequency of the responses) and percentages (%). It is worth-mentioning that not all the questions are analyzed in this paper as the authors opted to select only the main ones respecting the given scope.

4.1. Teachers' Ownership of Digital Devices

Teachers were asked if they own digital devices and to specify the type of their devices. Before asking the teachers about using any digital device: computers, tablets, notebooks, etc, the researchers found it crucial to know if they own one. The participants responses are illustrated in Table 03:

Table 3: Teachers' Ownership of Digital Devices

Device	Number	Percentage %
Computer (PC or desktop)	20	100
Smart phone	20	100
Tablet	05	25
Notebook	01	5
Other	01	5

The data in table 03 evidence that the ownership of digital devices is very high since all participants have both computers and smart phones. On the other hand, Table 3 monitors that a very small number of the respondents own other types of digital devices such as Notebook, tablets and smart watches.

4.2. Experience of Using Digital Devices in the Class

The data in Table 03 and the average age of the participants may suggest the expectation that teachers may have been using digital devices in the classroom since a long period of time.

Table 4: Experience of Using Digital Device in Class

Expeirience	Number	Percentage%
01-03 years	11	55
04-06 years	6	30
More than 06 years	3	15

Despite the high percentage of digital devices ownership among respondents, it is noticed through Table 4 that most of teachers have very recent experience using them in the classroom. It might be due to the epidemic and the emergency online and blended teaching modes that these teachers started using ICTs while teaching. The ages of the majority of teachers in this study is between 36 and 45. Their age allows them to be labeled as digital natives. The data above is an evident indicator that teachers realized recently the importance of CALL in language teaching/learning.

4.3. Frequency of Using Digital Devices in the Class

Participants were asked how often they use these digital devices in the class. Their responses are reported in Table 05:

Table 5: Frequency of Using Digital Devices in the Class

Frequency	Number	Percentage %
Never	00	00
Rarely	4	20
Often	13	65
Always	3	15

It is observable that teachers tend to use these devices often in the classroom despite their very recent experience using ICTsin the class as shown in the previous table.

4.4. First Experience Using Digital Devices in the Class

For the purposes of this study, it is important to know how teachers first thought about using ICTs in the class to understand their motivation. Table 06 shows partipants' answers to the question: " When have you first used this (ese) device(s) in your English Class?":

Table 6: When have you first used this (ese) device(s) in your English Class?"

Option	Number	Percentage
When I first owned it	02	10
When I felt it pedagogically necessary	5	25
When I saw my colleague(s) using it	10	50
When asked by the administration	1	5
After I received a training	2	10

It seems that other teachers' experience motivated 50 % of the participants to integrate technology in their class. Also, a quarter of the sample have felt the pedagogical necessity to integrate technology in the language class. Only 10 % have started using technological devices in their class after a training. This low percentage raises questions whether all teachers have been trained and whether the training was effective.

4.5. Learning Sources

Table 7: How Did You Learn Using The Digital Devices?

Option	Number	Percentage%
Myself	16	80
Informal training (friends, family, or colleague)	3	15
Formal Training	1	5

Table 07 unearths that a great portion of the participants (80 %) depended on themselves to learn using the digital devices. 16 out 20 participants consider themselves as the source of learning viz, they can be considered as autodidactic in regard to their digital literacy. Formal training, however, has the least percentage (05 %). This very low percentage compared to the high percentage of self-directed training signifies that formal trainings in higher education institutions is not taken into serious account within teacher training programs.

4.6. Teachers' Digital Literacies Skills Self-assessment Grid

Digital literacies include computer literacy skills, software literacy skills and internet literacy skills. The grid included tasks which reflect all of computer, software, and internet-related skills which teachers were asked to rate their competency in these skills for language- teaching- purposes on a scale from 00 to 04 where 01 indicates highly incompetent, 02 average, 03 competent and 04 completely competent.

Table 8: Digital Literacies Self-assessment Skills Grid

Skills	Rate			
	01	02	03	04
Computer Literacy skills	00%	05%	40%	10%
Software Literacy skills	40%	0%	25%	5%
Internet Literacy Skills	00%	5%	45%	40%

The data above reflect that teachers evaluated their computer literacy as mostly average to competent whereas they assessed their internet skills from competent to highly competent. As far as software Literacy skills are concerned, the majority rated themselves as completely incompetent while only one respondent labeled themselves as highly competent.

4.7. Teachers' Digital Tasks Self-assessment Tasks

To elucidate which digital tasks the participant teachers can do with ease or difficulty, they were required to assess their level in doing some technology-based tasks in the class. Their responses are presented in Table 09:

Table 9: Digital Tasks Self- assessment

Digital Task	Poor	Average	Good	Excellent
Word processing	00%	00%	35%	65%
Creating PPT presentation	00%	10%	85%	5%
Using the email with students and colleagues	00%	25%	10%	65%
Web browsing	10%	00%	5%	85%
Installing programs	15%	45%	35%	5%
Online conferencing	5%	30%	55%	10%
Social media networking	5%	15%	55%	25%
Blogging	45%	25%	30%	00%
Logging in to e-learning platforms	00%	10%	10%	80%
Using e-learning platforms to share information and interact with learners	5%	55%	35%	5%
Assessing learners online	60%	15%	10%	15%

The tasks listed in the Table 9 are tasks which can be of great help to teachers in the language classroom. The majority of respondents stated that they have a good to excellent level in computer based tasks such as word processing and PPT presentations. The table also attests that most of teachers do not find a difficulty logging in to e-learning platforms and uploading lessons or interacting with students. Nonetheless, 60 % of them evaluated their level as poor in assessing learners' online. Only 03 respondents (15 %) believed their level was excellent in online assessment. Indeed, online assessment and blogging seem to be the most problematic digital tasks for teachers.

4.8. Difficulties in Using Digital Devices in the Language Classroom

The second section of the questionnaire investigates as well the challenges and difficulties which impede the use of digital devices in the language classroom.

Table 10: Difficulties Impeding the Use of Digital Devices in EFL Class

Difficulty	Lack of teachers' training	Lack of teachers' interest	Limitation, of the curriculum	Time management issues	Lack of equipments in the institutions	Lack of students interest and engagement
Number	18	02	10	5	20	14
Percentage	90 %	10 %	50 %	25 %	100 %	70 %

Table 10 demonstrates that teachers find the lack of equipments in the institutions as the main challenge for teachers. After that, lack of teachers' training is the second main challenge for teachers. Students' engagement also appears to be an obstacle for teachers to teach with/through technology.

4.9. Teachers' Attitudes towards the Importance of Digital Literacy in EFL Teaching

The last section of the questionnaire relates to teachers' attitudes towards the importance of digital literacies in language teaching and the importance of trainings for in-service teachers.

Table 11: Teachers Attitudes and Perceptions

Statement	Strongly agree	Disagree	I don't know	Agree	Strongly Agree
I prefer having a lesson without resorting to digital because I find them useless and a waste of time.	00 %	90 %	00 %	10%	00 %
I feel uncomfortable when using a computer or any device in the class	10 %	75 %	00 %	5 %	10 %
I enjoy using digital devices in the class	15 %	5 %	10 %	35 %	35 %
I often feel that I need to integrate technology more in my class	10 %	10 %	5 %	70 %	5 %
I plan to enroll to trainings to improve my digital literacy skills	5 %	40 %	00 %	40 %	15 %
I think that the university should include more CALL trainings for language teachers	00 %	5 %	5 %	10 %	80%
CALL should be officially integrated in graduation curricula for English language students at university	00 %	00 %	00 %	10 %	90 %

As evidenced in Table 11 the majority of teachers display readiness to implement technology-based language teaching. Most of them disagreed with the statement: "I prefer having a lesson without resorting to digital because I find them useless and a waste of time.", which mirrors their positive attitude towards the use of digital devices in the language class. More importantly, when responding to the statement: "I plan to enroll to trainings to improve my digital literacy skills", the number of teachers who agreed (08) and disagreed (08) is equal. Besides, teachers opine that CALL integration is critical in teachers training programs as well as students curricula.

5. Discussion

The foci of this study were to measure the level of digital literacy of the Algerian university teachers, their perceptions towards the importance of digital pedagogy skills and the importance of in-service teachers' trainings in digital literacy skills.

The teachers experience using digital devices and computer-assisted language learning is not very long rating between 01 to 03 years. It could be explained that the shift to online and blended learning during and post the Covid-19 era (starting from 2020) necessitated the use of internet-based and computer-based tasks by teachers. Online and blended learning modes were imposed by the Algerian government as an emergency solution.

In a section where teachers were asked to reflect on their experience, a teacher stated that: "I felt embarrassed when my students asked me how they can use Moodle platform to access lessons and activities. Some even asked me to have their tests online but I was too much afraid and did not feel comfortable enough to do it. I already felt threatened because I noticed that my students are more advanced than me in technology". Other teachers would relate to this experience due to the lack of trainings in using e-learning platforms before 2020.

On a general footing, the teachers assessed their level as good in digital literacy skills. They mentioned some difficulties mainly those related to software literacy skills. Furthermore, the participants expressed their weakness in online assessment. The latter has become very important since the post Covid-19 pandemic era. Teachers also expressed through the questionnaire that they have a good to excellent level in computer literacy skills and internet literacy skills such as video conferencing, social networking, using emails, and web browsing.

On the whole, teachers exhibited a positive attitude towards the value of digital literacy in EFL teaching/learning. They, on the other hand, communicated their negative attitudes towards the lack of training at university on digital pedagogy skills and CALL. As earlier-mentioned, the shortage of these trainings is considered as a barrier towards a more technology-oriented EFL teaching/learning.

Among the limitations of the study is that the teachers were asked to self-assess their levels and digital literacy skills. Self-assessment might be subjective depending on the individual's perspective on what is "competent", "poor" or "excellent". In actual fact, the questionnaire was distributed via email. Following the questionnaire, teachers were asked to do other tasks to compare their performance to their self-assessment. Nevertheless, less than 05 respondents completed the tasks. It could be justified that these teachers could not do the tasks because they did not master these skills as it can be attributed to time limitations and teachers commitments notably that the questionnaire was sent during the second semester exams period. The latter is a very hectic period in Algerian universities.

6. Conclusion

Throughout this paper, the researcher has attempted to probe English language teachers digital literacy skills level at different Algerian universities and examine the extent to which in-service teachers' trainings are effective in raising teachers' awareness and levels of digital pedagogy skills. The attitudes of teachers towards digital literacy and trainings have been explored.

The findings of the study uncover the readiness and positive attitudes of teachers towards integrating CALL in EFL pedagogical situations. Moreover, the eagerness of

teachers to receive trainings to promote digital pedagogy skills has been brought to light through this paper. It has been brought to light that Algerian universities need to have more trainings for teachers to cope with the plan of action by the ministry and government to digitalize sectors like education and administration.

It is undeniable that the small number of participants is a limitation to the generalization of the findings of the study. Still, the data provided in this paper can serve as a starting point for further practical research. Further research can include investigations of students' digital literacy levels, their expectations of the 21 C digitalized class and different teaching methods and techniques to go in accordance with the requirements of the 21 C job market.

The author of this paper recommends that the universities avail more practical trainings for teachers in digital skills in the language class. In addition, they recommend that teachers build cooperative communities and support the engagement in these communities to raise teachers' awareness of the utility of digital pedagogy skills. Lastly, it is of great importance that CALL be integrated in students' curricula since English language graduates are mostly oriented and expected to be future teachers.

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