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Examining Iranian Pre-Service and In-Service EFL Teachers' Digital Competence: Does Gender Make a Difference?

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Abstract

Nowadays, teachers are expected to demonstrate a notable level of digital competence. Therefore, the current study investigated Iranian male and female pre-service and in-service EFL teachers' digital competence. The study employed a mixed methods approach and three instruments including a questionnaire, structured interviews, and observations were utilized. Therefore, 157 Iranian in-service EFL teachers completed the DIGIGLO questionnaire. Also, 15 in-service and 15 pre-service EFL teachers participated in structured interviews. Moreover, 30 classes were observed. To analyze the qualitative data, thematic analysis was used and in the phase of quantitative analysis, descriptive statistics and independent sample t-tests were used. The results indicated that the level of Iranian in-service EFL teachers' digital competence was moderate to high. In addition, some similarities and differences could be seen in the interview questions between in-service and pre-service EFL teachers. Moreover, it was revealed that there were no significant differences between male and female in-service EFL teachers' digital competence. Furthermore, it was found that a majority of teachers incorporated digital technologies into their teaching practice. The results of this study can help curriculum developers and teacher educators realize a better conception of Iranian pre-service and in-service EFL teachers' digital competence and their practices of using digital tools.

Keywords: digital competence, pre-service teachers, in-service teachers

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1. Introduction

In recent decades, there has been an exponential surge in technological advancements, significantly reshaping various facets of human existence, including communication, labor, education, and leisure activities (Redecker & Punie, 2017). Education, as noted by Guillén Gámez et al. (2020), stands out as one of the domains experiencing profound transformations in response to these technological shifts. We presently inhabit a digital epoch characterized by the incessant creation and evolution of novel technologies. Consequently, individuals are compelled to acquire a repertoire of competencies essential for navigating this digitized landscape adeptly. As articulated by The European Parliament, among the indispensable competencies for lifelong learning is digital competence (DC), denoting the capacity to effectively employ specific digital technologies or software (Ilomäki et al., 2016). The rapid pace of technological innovation has, however, engendered a digital divide between many teachers and their students (Alarcón et al., 2020), underscoring the imperative for both teachers and learners to undergo training aimed at attaining a proficient level of digital competence conducive to enhanced efficacy in the teaching and learning milieu. Consequently, inquiries into teachers' digital competence (TDC) or pedagogic digital competence (PDC) have emerged as focal points of scholarly investigation, highlighted by Sarani and Rezaee (2017), teachers indisputably play a vital role in enhancing student achievement.

Digital education in Iran remained relatively overlooked until the onset of the COVID-19 pandemic in 2019, which prompted the closure of schools, universities, and educational institutions as a preventive measure. Subsequently, teachers were compelled to transition to remote teaching modalities, necessitating a reevaluation of teachers' digital competence and its enhancement. Existing literature underscores a conspicuous dearth of attention afforded to English as a Foreign Language (EFL) instructors within the Iranian educational landscape concerning digital competence. Consequently, the principal objective of this study is to scrutinize the digital competence of EFL teachers within the Iranian context, with a particular focus on discerning potential gender-based disparities in this domain.

The findings of this inquiry hold practical pedagogical ramifications for various stakeholders, including policymakers, teacher educators, instructors, and students. By appraising teachers' digital competence and scrutinizing gender differentials in this domain, a more nuanced understanding of EFL teachers' digital literacy emerges, facilitating informed policymaking and the development of requisite teacher training initiatives for both pre-service and in-service EFL teachers. As underscored by Shooshtari et al. (2019), research on the cognition –what Rashidi and Mohammadineku (2010) used "knowing" in their study– of second and foreign language teachers is a relatively recent development, with particular emphasis placed on the significance of investigating the cognitive frameworks of pre-service teachers due to the prevailing notion that they enter teacher training programs with firmly entrenched beliefs.

To address the existing research gap, this study delves into the nuanced examination of Iranian EFL teachers' digital competence, a domain that has remained relatively underexplored within the Iranian educational context. While prior research has acknowledged the significance of digital competence among educators, particularly in the wake of the COVID-19 pandemic, limited attention has been directed towards delineating the specific digital skills and competencies requisite for effective EFL instruction in Iran. By focusing on gender-based disparities in digital competence among EFL instructors, this study seeks to illuminate the intricate interplay between gender and digital literacy within the Iranian educational landscape. Furthermore, this study extends beyond the mere identification of disparities to elucidate the underlying factors contributing to differential levels of digital competence among male and female EFL teachers. Through a meticulous examination of these factors, this research aims to provide actionable insights for policymakers, teacher educators, and practitioners to tailor targeted interventions aimed at fostering equitable access to digital resources and enhancing the overall quality of English language instruction in Iran.

2. Review of Literature

2.1. Digital competence

Digital competence, a widely discussed concept in contemporary education, encompasses the proficient use of digital technologies across various domains, emphasizing critical thinking, responsibility, and safety (Ferrari, 2013). Tondeur et al. (2017) stress the increasing importance of technology in professional settings, highlighting the necessity for teachers to integrate digital tools into their teaching methods. However, it is crucial to critically examine whether this integration truly enhances educational quality. Guillén-Gámez et al. (2020) argue that teachers must not only incorporate digital technologies into their teaching but also demonstrate effective use as role models for their students. However, a critical exploration is needed to assess the effectiveness of teachers' digital integration efforts.

Early definitions of digital competence, such as Gilster's (1997), focused on competencies related to accessing, evaluating, and managing information, multimedia, and networks. While more recent definitions, like that of Guillén-Gámez et al. (2021), emphasize integrated and functional utilization of digital knowledge, skills, and attitudes, they may overlook potential drawbacks or unintended consequences of digital integration. Similarly, Ilomäki et al. (2016) identify four key facets of digital competence, including technical proficiency and critical assessment of digital technologies. However, a critical perspective prompts us to question whether these definitions adequately address the complexities and evolving nature of digital environments in educational contexts.

Digital competence is often depicted as essential for navigating media, the Internet, and information and communications technology (ICT), alongside job-related skills such as communication and problem-solving (Miguel-Revilla et al., 2020). However, the uncritical

promotion of digital competence may overshadow potential risks and challenges associated with technology use, such as privacy concerns and digital inequalities. The European Union's definition of digital competence emphasizes assured and discerning utilization of Information Society Technology (IST) for various purposes (Council of the European Union, 2018), yet it may overlook the unequal distribution of digital resources and skills across different social groups. Fraile et al. (2018) describe digitally competent individuals as those who effectively leverage the benefits of digital technologies while managing their limitations. However, a critical examination is needed to address the disparities in access to technology and the potential for digital technologies to exacerbate existing inequalities in educational settings.

Moreover, contemporary discussions on digital competence emphasize its fluid and evolving nature, highlighting the continuous need for its cultivation and integration into professional practice and ongoing development (Cantabrana et al., 2019). However, a critical examination of this discourse reveals potential oversights regarding the complex interplay between digital competence and broader socio-cultural contexts. Theoretical frameworks proposed by scholars such as Ala-Mutka (2011) and Janssen et al. (2013) attempt to delineate the components of digital competence, including instrumental skills and knowledge (ISK), advanced skills and knowledge (ASK), and attitudes toward social-ethical (ASE) knowledge and skills. While these frameworks provide a structured approach to understanding digital competence, they may overlook the nuanced socio-cultural factors that influence individuals' engagement with digital technology.

Furthermore, a critical perspective prompts us to question whether these frameworks adequately address power dynamics inherent in digital environments and the potential for technology to perpetuate existing inequalities. For instance, while technical proficiencies are essential, they do not exist in isolation from socio-cultural contexts and power structures. Additionally, the emphasis on ethical considerations within digital competence frameworks is commendable; however, it is essential to critically assess whose ethical norms and values are prioritized and whose perspectives may be marginalized in these discussions.

Therefore, while theoretical frameworks contribute to a deeper understanding of digital competence within educational paradigms, they must be critically evaluated to ensure they capture the complexities of digital engagement in diverse contexts. A critical approach acknowledges the need to go beyond technical skills and ethical considerations to interrogate the broader socio-cultural implications of digital competence, particularly within the context of educational settings.

2.2. Teachers' Digital Competence

The imperative incorporation of technology into the daily practices of educators and learners (He & Li, 2019) accentuates the imperative for educators to possess robust digital competence to effectively engage with contemporary societal demands. While frameworks such as Koehler et al.'s (2006) Technological Pedagogical Content Knowledge (TPACK) advocate for the integration of

technology, pedagogy, and content knowledge, a discerning analysis reveals potential limitations in addressing the rapidly evolving array of digital tools and their implications for teaching methodologies. Moreover, while situated cognition theory (Lave & Wenger, 1991) underscores the significance of authentic practice contexts in skill development, it may inadvertently neglect the intricate challenges educators encounter in adapting to new technological innovations and shifting educational paradigms.

Despite recognizing teachers' dual responsibility to enhance their own digital competence and cultivate that of their students (Instefjord & Munthe, 2017), there is a need for a critical examination of the efficacy of existing approaches in meeting these objectives. Bandura's Social

Cognitive Theory (1986), which emphasizes observation, modeling, and self-regulation in skill development, offers valuable insights into the impact of teachers' digital competence on student learning outcomes. However, a critical perspective urges us to scrutinize whether prevailing frameworks adequately address the socio-cultural dimensions of digital competence and their implications for teaching practice. For instance, while the concept of teachers' digital competence is depicted as multifaceted, encompassing social, cultural, pedagogical, ethical, and attitudinal dimensions (Lund et al., 2014), it is imperative to assess critically whether current conceptualizations fully comprehend the intricacies of teachers' digital engagement within diverse socio-cultural contexts.

While socio-cultural theories of learning, exemplified by Vygotsky's Zone of Proximal Development (ZPD), offer valuable insights into the impact of social and cultural factors on the development of teachers' digital competence, a critical analysis reveals potential limitations in addressing power dynamics and inherent inequalities within digital environments. Despite acknowledging the significance of socio-cultural contexts in shaping digital competence, it is crucial to examine whether these theories adequately address discrepancies in access to technology and digital resources. Furthermore, existing literature, while providing valuable insights into the multifaceted nature of teachers' digital competence, necessitates a critical perspective to challenge underlying assumptions and advocate for a more nuanced understanding that encompasses the evolving complexities of digital engagement in educational contexts.

Numerous scholars have delved into the significance of teachers' digital competence and the methodologies employed to evaluate it across diverse contexts. For instance, Krumsvik (2011, as cited in Casillas Martín et al., 2020) posits that digital competence among teachers entails the proficient utilization of Information and Communication Technologies (ICTs) within the professional sphere, complemented by a foundation of robust pedagogical and didactic acumen, coupled with an awareness of the instructional implications and impacts on student learning outcomes engendered by these technologies. This conceptualization underscores the dual emphasis on technical proficiencies and critical analytical capabilities requisite for the effective integration of technology within educational milieus. Røkenes and Krumsvik (2014) expound upon teachers' digital competence as the adept application of ICT within the professional domain, underscored by

discerning pedagogical-didactic aptitude. This competency encapsulates the instructor's cognizance of the instructional ramifications of ICT utilization vis-à-vis learning methodologies.

Within the realm of teacher education, there has been a discernible shift towards prioritizing digital proficiencies, instigating discourse on the augmentation of teachers' digital competence within the educational milieu. The construct of a teacher's digital competence is nuanced, enshrining diverse dimensions pertaining to culture, ethics, societal norms, educational paradigms, and attitudinal dispositions (Hatlevik & Christophersen, 2013, Salehizadeh et al., 2020). Numerous inquiries have been undertaken to scrutinize digital competence and its determinants. For instance, Benali et al. (2018) conducted an investigation involving 160 Moroccan English teachers utilizing the DigCompEdu Check-In instrument, revealing a salient positive association between DC and pedagogical experience. It was discerned that teachers with greater tenure exhibit heightened competency in navigating technological tools and applications.

Olofsson et al. (2019) undertook an inquiry to delineate the attributes characterizing an exemplary teacher endowed with sufficient digital competence (DC). This endeavor involved interviewing 25 Swedish teachers and conducting classroom observations. The resultant findings elucidated that teachers possessing adequate digital competence demonstrate adept utilization of diverse digital learning resources. They exhibit proficiency in navigating various educational software and digital tools, discerning the intrinsic value that digital technology contributes to students' educational endeavors. Furthermore, they exhibit foresight in anticipating potential challenges associated with students' engagement with digital technology and adeptly devise strategies to mitigate such challenges. In instances of resource constraints, these teachers exhibit acumen in identifying requisite digital technology acquisitions for the school, accompanied by a judicious selection process informed by discerning evaluation of cost-effectiveness and recourse to freely available digital learning resources accessible on the internet. Additionally, they evince proficiency in resolving minor technological impediments encountered in the classroom milieu. Moreover, they demonstrate a nuanced understanding of the delicate balance between technical exigencies and ethical imperatives. Ultimately, the researchers posit that the attainment of teachers' digital competence is contingent upon the contextual milieu and the teachers' intrinsic values.

Likewise, in 2020, Esteve-Mon et al. identified a positive association between computational thinking and digital competence through an examination of 248 Spanish student teachers. Employing the INCOTIC questionnaire and the TPC assessment tool, the authors discerned that individuals with elevated levels of digital competence exhibited greater proficiency in problem-solving tasks. Furthermore, gender disparities were evident, with female participants scoring lower than their male counterparts in both digital competence and computational thinking domains. In a separate inquiry, Hidalgo et al. (2020) conducted a comprehensive review of scholarly literature within the domain, proposing several strategies to fortify teachers' digital competence. These strategies include integrating media literacy into the curriculum, streamlining the conceptualization

of teachers' digital competence, and ensuring systematic evaluation of teachers and teacher training institutions, among others. In essence, the scholars underscored the imperative for universities and teacher training institutions to furnish requisite training programs aimed at fostering teachers' digital competence.

Employing a quantitative, descriptive, and correlational approach, Rubio Gragera et al. (2023) conducted an inquiry aimed at scrutinizing the digital competence of language instructors and delineating significant differentials in their digital competence predicated upon variables including pedagogical experience, educational tier, and confidence levels in Information and Communication Technology (ICT) integration in classroom settings, both pre-pandemic, during, and post the confinement precipitated by the COVID-19 pandemic. To this end, the study enlisted 104 teachers who completed the DigCompEdu check-in questionnaire. Employing descriptive statistical analyses and nonparametric contrast assessments, the investigation sought to fulfill its objectives. The findings unveiled a discernible prevalence of low levels of digital competence among the participating teachers, with conspicuous disparities noted in levels of ICT confidence and the frequency of ICT utilization in instructional settings relative to the teachers' experience with ICT. Notably, the duration of pedagogical tenure utilizing technology in classroom contexts utilization in instructional contexts. Furthermore, the study observed augmented confidence among teachers in integrating ICT within their pedagogical practices following the exigencies imposed by the COVID-19 crisis did not manifest as a significant determinant influencing teachers' digital competence levels. Conversely, a positive correlation emerged between pedagogical efficacy and the duration of ICT.

2.3. Teachers' Gender

The literature presents various hypotheses regarding the influence of teachers' gender on their digital competence, reflecting divergent perspectives on this issue. Some scholars argue for a gender disparity, suggesting that males exhibit superior levels of digital competence compared to females (Altun, 2013; Barragán-Sánchez et al., 2020; Casillas Martín et al., 2020; Esteve-Mon et al., 2020; Gonzalez & Martin, 2018; Jiménez-Hernández et al., 2020). However, this assertion warrants critical scrutiny, as it may overlook the nuances of digital competence development and the complex interplay of socio-cultural factors that shape individuals' engagement with technology.

Conversely, an opposing viewpoint suggests that females demonstrate greater proficiency in digital competence relative to males (Aesaert & Van Braak, 2015; Cored Bandrés et al., 2021; Karaca, 2015; Sánchez-Caballé & Esteve-Mon, 2022). However, a critical examination of this perspective prompts us to question whether it essentializes gender differences and overlooks the diverse experiences and contexts that influence digital competence development among teachers.

Furthermore, a subset of studies maintains that gender does not serve as a determinant factor in predicting digital competence levels (Hinojo-Lucena et al., 2019; Galindo-Domínguez &

Bezanilla, 2021; Guillén-gámez et al., 2019; Guillén-Gámez et al., 2021; Morante et al., 2023). However, a critical perspective challenges us to interrogate the methodologies employed in these studies and consider whether they adequately capture the complexities of gender dynamics and digital competence development.

Numerous investigations have been undertaken to explore the intricacies of digital competence and the determinants influencing its trajectory. Employing a quantitative methodology, Hinojo-Lucena et al. (2019) embarked on an inquiry aimed at scrutinizing the digital competence levels among teachers and elucidating the factors conducive to its enhancement. The researchers administered a comprehensive 91-item online Likert scale questionnaire, meticulously designed to probe five distinct domains: information and data literacy, communication and collaboration, digital content creation, security, and problem-solving acumen. The findings unveiled a prevailing trend of modest digital competence among the participants; however, discernible impacts were observed stemming from variables such as age, institutional affiliation, antecedent ICT training, academic qualifications, pedagogical tenure, and professional categorization, all of which exerted a positive influence on the cultivation of digital competence. Applying Gender Schema Theory (Bem, 1981) to these findings, one could explore how culturally defined gender roles influence individuals' perceptions of their digital competence. For example, societal expectations regarding gender roles may shape individuals' confidence in utilizing certain digital tools or engaging in specific digital activities. Noteworthy is the observation that gender exhibited no discernible effect on the participants' digital competence levels.

Similarly, Guillén-gámez et al. (2019) deployed a bespoke questionnaire to scrutinize the utilization of Information and Communication Technology (ICT) among 134 pre-service teachers enrolled in Spain. The findings revealed a lack of discernible disparity in digital competence (DC) between genders, with age exhibiting a negative correlation with DC. Moreover, motivation emerged as a salient factor influencing the proficiency level of prospective digital competence (PDC). Concurrently, Sánchez Prieto and colleagues (2020) endeavored to ascertain the presence of a gender differential in teachers' digital competence levels. The outcomes indicated a moderate proficiency level in ICT resource knowledge among the participants, with no notable gender disparities discerned concerning the application of e-skills by educational professionals.

Aligned with the endeavors of other scholars investigating the nexus between gender and digital competence, Grande-de-Prado et al. (2020) endeavored to discern and scrutinize teachers' self-appraisals of digital proficiencies and their interplay with gender dynamics. The cohort comprised 329 participants. The findings delineated distinct digital utilization patterns based on gender distinctions: males exhibited a predilection towards computer-centric activities encompassing browsing, downloading, and streaming, coupled with heightened confidence in device troubleshooting while espousing digital media as a preferred mode for information management and online collaboration. Conversely, females demonstrated a proclivity towards mobile phone utilization and manifested proficiency in navigating social media platforms, alongside

competencies in image manipulation, text processing, and graphic design facets. Furthermore, the investigation illuminated the prevalent utilization patterns, with women predominantly leveraging technologies for social engagement, whereas men gravitated towards their utilization for instructional or technical pursuits.

In a survey conducted by Jiménez-Hernández and colleagues (2020), the objective was to explore the digital competence of prospective teachers enrolled in the master's programs for secondary education teaching, vocational training, and language teaching in Spain, while also examining the associations between digital competence, gender, and field of specialization. Data analysis revealed that digital content creation exhibited the least development among all participants, whereas informational literacy emerged as the most proficiently developed digital competence. Regarding the nexus between gender and digital competence, findings indicated that females exhibited a lower level of proficiency compared to males across all domains, thus underscoring the influence of gender in shaping perceptions of competence. Intersectionality Theory (Crenshaw, 1989) can offer insights into the intersection of gender with other social identities, such as race and socio-economic status, in shaping digital competence. Understanding how these intersecting identities influence individuals' access to digital resources and opportunities can provide a more nuanced understanding of gender differences in digital competence.

More recently, Yoon (2022) undertook an investigation aimed at elucidating the educational requisites concerning digital competence as delineated by gender differentials. To accomplish this, a questionnaire comprising six overarching domains and 21 sub-competences was administered to 163 pre-service teachers, ultimately reduced to 157 due to incomplete data. Within this cohort, 46 participants were male and 111 were female. Subsequently, the analysis of outcomes revealed discernible disparities in the prioritization of sub-competences between male and female pre-service teachers. Female participants identified seven sub-competences across five domains of digital competence as primary concerns, whereas male counterparts identified five sub-competences within four domains. Additionally, three sub-competences were identified as educational imperatives by both male and female respondents. Drawing from Social Constructionist Theory, one could analyze how gender norms and expectations influence individuals' perceptions of the importance of certain digital competences. For instance, societal norms regarding gender roles may influence individuals' perceptions of which digital skills are considered essential or valuable.

After a thorough review of the relevant literature pertaining to teachers' digital competence, it becomes apparent that while extant scholarship underscores the pivotal significance of digital competence in language education, a conspicuous void exists in understanding potential gender-based differentiations among both pre-service and in-service teachers. Particularly, there is a dearth of studies discerning the digital adeptness of male and female EFL pre-service and in-service teachers within the Iranian educational context. Consequently, to partially bridge this lacuna in scholarly inquiry, the following research questions are formulated:

1. What is the level of Iranian in-service EFL teachers' digital competence?
2. What are the similarities and differences between Iranian pre-service and in-service EFL teachers in terms of digital competence?
3. What are the similarities and differences between the level of male and female Iranian EFL in-service teachers' digital competence?
4. What are Iranian in-service EFL teachers' actual practice in using digital technology in the classroom?

2. Methodology

2.1. Participants

The participants of this study were 157 in-service (41 males and 116 females) and 15 pre-service (5 males and 10 females) EFL teachers. Among 157 in-service teachers, 88 held MA degrees, 54 had BA degrees, and 15 possessed PhD degrees. Out of 157 in-service EFL teachers, 10 teachers were observed voluntarily. Each teacher was observed three times. Moreover, 15 in-service teachers (4 males and 11 females) and 15 pre-service EFL teachers (5 males and 10 females) were interviewed. The ages of the participants; that is both in-service teachers and pre-service teachers, ranged from 18 to 35. In Iran, students who are studying at different branches of Farhangian University are regarded as pre-service teachers who will be employed by the Ministry of Education.

2.2. Instruments

To achieve the goals of the study, three instruments were employed, including a questionnaire, structured interviews and an observation checklist.

2.2.1. A Tool for Assessing the Digital Competence of Educators

In-service teachers filled in a 29-item questionnaire developed by Alarcón et al. (2020) which is designed to assess the digital competence of educators in eight areas. Alarcón et al. (2020) demonstrated that the instrument's construct validity and psychometric properties establish its validity and reliability as a tool for assessing the digital competence of educators across the eight areas under consideration. In the present study, the researchers recalculated the reliability of the scale, revealing a reliability coefficient of .84. The respondents answered the questions to show the degree of their agreement or disagreement with the items of the questionnaire on a 6-point Likert scale.

2.2.2. Structured interviews

In order to shed light on the teachers' digital competence, they attended structured interviews. It should be mentioned that the interview questions (Appendix) were developed by the researchers and were obtained from the questionnaire. To evaluate the content validity, two experts in the field of qualitative research and TEFL were asked to judge the questions. There were two series of interview questions in this study. The first series was for in-service teachers, and the second one was for pre-service teachers. The interviews were conducted in English, utilizing an online platform and carried out through either voice messages or voice calls through the WhatsApp application. Participants were sought for consent regarding the recording of the interview session. Accordingly, the interviews were recorded, and subsequently, their responses were transcribed. The duration of each interview varied between 15 to 25 minutes.

2.2.3. Observation Checklist

10 in-service EFL teachers (3 males and 7 females) were observed three times in online classes to explore their actual classroom practices regarding the use of digital technology. Therefore, overall, 30 observations were conducted. The items on the checklist were developed by the researcher based on the six areas of digital competence in the DigComp (Ferrari, 2013) framework. This framework is currently one of the most comprehensive and contemporary models designed for digital competence (Siddiq et al., 2016). In DigComp, five general areas of digital competence are identified: (a) information and data literacy, (b) communication and collaboration, (c) digital content creation, (d) safety, and (e) problem-solving. DigComp was updated in 2017 distinguishing six areas in which educators' Digital Competence is expressed with a total of 22 competencies (Redecker & Punie, 2017).

2.3. Procedure

The data for the present study were gathered from in-service EFL teachers working in private language institutes and pre-service EFL teachers studying English at different branches of Farhangian University. The participants of the study were selected through convenience sampling. For the data collection procedure, three instruments were used. Firstly, 157 in-service teachers were asked to fill in the online version of the questionnaire (available at https://forms.gle/jVYTE7s869vBU71g9) which was sent to EFL teachers in different cities in Iran via Telegram. In the next phase, the second researcher observed 10 in-service teachers three times and overall, there were 30 observations to investigate the EFL teachers' actual use of technology in the classroom. It should be noted that the observed teachers were selected based on convenience sampling. Then, 15 in-service and 15 pre-service EFL teachers were interviewed. All the interviews were audio-recorded and transcribed with the participants' permission. The participants were

assured that their information would be kept confidential and secured. Finally, the collected data were analyzed using qualitative and quantitative data analysis procedures.

2.4. Data Analysis

Two approaches were used to analyze the data in this study; that is, qualitative analysis and quantitative analysis. The qualitative analysis encompasses the analysis of interviews and observations. On the other hand, quantitative analysis includes the analysis of the questionnaire. In the case of qualitative analysis, the researcher followed the stages of thematic analysis explained by Braun and Clarke (2006). First, the researchers were familiarized with the data. Then, some initial codes were generated and the potential themes were gathered. Then, a suitable name was allocated to each theme. Finally, the ultimate report was produced. An observation checklist was used to record the behavior of the participants regarding the actual use of technology in the class. The data gathered through the observation checklist were classified into two groups. The data collection process involved grouping the observed classroom activities into two distinct categories: routine practices and non-routine practices. A threshold of two-thirds was employed to differentiate between the two groups, whereby any item pertaining to technology usage that occurred in at least two-thirds of the observations was classified as a routine practice. Conversely, items that fell below this threshold were deemed non-routine practices. This methodology allowed for a nuanced examination of the frequency and consistency of technology integration in the sampled classrooms. In addition, the researchers ran quantitative data analysis for analyzing the data gathered through the questionnaire. In this regard, descriptive statistics were used to estimate the level of in-service EFL teachers' DC.

3. Results

3.1. Preliminary Analysis

The questionnaire was administered to the participants and Cronbach's alpha was conducted. The results are presented in table 1 below.

Table 1

Reliability Statistics for DIGIGLO Questionnaire

Cronbach's Alpha	Number of items	Factor
.938	29	digital competence

As can be seen in Table 1, the Cronbach's alpha value of the digital competence questionnaire is 0.938. Thus, the results of this test show that the research and the results of the questionnaire are reliable. To check the data in terms of normality, the Kolmogorov-Smirnov test was employed. The results are presented in table 2.

Table 2

One-Sample Kolmogorov-Smirnov Test

		Digital competence
N		156
Normal Parameters	Mean	4.0463
	Std. Deviation	.84095
Most Extreme Differences	Absolute	.048
	Positive	.033
	Negative	-.048
Test Statistic		.048
Asymp. Sig. (2-tailed)		.200

As depicted in Table 2 above, the normality of distribution for the scores of the aforementioned variables was supported and parametric statistics could be utilized.

Now, the results of each research question are provided below.

3.2. The Level of Iranian In-Service EFL Teachers' Digital Competence

As stated before, a Likert-scale questionnaire was used to collect the data required for identifying the level of Iranian in-service EFL teachers' digital competence. In this process, participants designating a score of 4 or above on the 6-point Likert scale were classified as digitally high-competent. Conversely, teachers opting for a score of 3 were categorized as medium competent, while those selecting scores below 3 were delineated as low-competent. The descriptive statistics were used and the results are presented in table 3 below.

Table 3

Descriptive Statistics For Iranian In-Service EFL Teachers' Digital Competence

Factor	N	Minimum	Maximum	Mean	Std. Deviation
Digital competence	157	3.25	4.66	4.04	1.38
Male	41	-	-	3.90	.12
Female	116	-	-	4.09	.08

According to table 3, it can be seen that the mean and standard deviation of Iranian in-service EFL teachers' digital competence were 4.04 and 1.38, respectively. The ultimate score was computed in the possible range of 1 to 6 (Mean=3.5). Thus, the level of Iranian in-service EFL teachers' digital competence was moderate to high.

3.3. Similarities and Differences between Iranian Pre-Service and In-Service EFL Teachers in Terms of Digital Competence

The results of interviews with in-service teachers which were analyzed through thematic analysis are summarized in table 4.

Table 4

In-Service EFL Teachers' Common Themes

Interview question	Themes		Frequency	Percentage
1	**Theme 1**	The teachers use technology for interaction and communication with colleagues, learners and parents.	15	100
2	**Theme 2**	The participants use technology to create digital resources.	5	33
2	**Theme 3**	The interviewees use technology to share digital resources.	12	80
3	**Theme 4**	The participants use technology before teaching in the class.	4	26
3	**Theme 5**	The participants take advantage of technology during their teaching practice.	10	66
3	**Theme 6**	The interviewees never use technology in teaching.	1	6
4	**Theme 7**	The participants assess the learners by means of digital tools.	7	46
4	**Theme 8**	The teachers do not use technology for assessment and prefer the traditional pen-and-paper method of assessment.	8	53
5	**Theme 9**	The participants empower learners to use technology.	10	66
5	**Theme 10**	The teachers do not do anything to empower learners regarding the technology use.	5	33
6	**Theme 11**	The teachers enable learners to use digital technologies creatively.	11	73
6	**Theme 12**	The teachers do not enable learners to use digital technologies creatively.	4	26
7	**Theme 13**	The participants believe that there is a suitable digital environment in their workplace.	3	20
8	**Theme 14**	The participants are not satisfied by their institution regarding the extrinsic digital engagement.	11	73

Structured interviews were also conducted with 15 pre-service EFL teachers to shed light on the teachers' digital competence. The responses are summarized in table 5.

Table 5

Pre-Service EFL Teachers' Common Themes

Themes		Frequency	Percentage
Theme 1	The participants can use technology for interaction and communication with colleagues, learners and parents.	15	100
Theme 2	The participants can use technology to create digital resources.	6	40
Theme 3	The interviewees can use technology to share digital resources.	12	80
Theme 4	The participants can use technology during their teaching practice.	10	66
Theme 5	The interviewees are not willing to use technology in teaching.	5	33
Theme 6	The participants cannot use technology for assessment and prefer the traditional pen-and-paper method of assessment.	12	80
Theme 7	The participants can empower learners to use technology.	9	60
Theme 8	The participants can enable learners to use digital technologies creatively.	8	53
Theme 9	The participants believe that digital environment in their workplace will not be satisfying.	10	66
Theme 10	The participants think that there should be an IT engineer in the institute to solve some of the technical digital problems.	13	86
Theme 11	The interviewees believe that the institute should plan constant meetings to improve teachers' ability in using technology for teaching.	3	20

3.4. Similarities and Differences between the Level of Male and Female Iranian EFL in Service Teachers' Digital Competence

To investigate the third research question and identify the similarities and differences between the level of male and female Iranian EFL teachers' digital competence, an independent sample t-test was run the results of which are summarized in table 6.

Table 6

Independent Samples Test for Iranian Male and Female In-Service EFL Teachers' Digital Competence

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Digital competence	Equal variances assumed	.45	.50	1.28	154	.20	.19	.15	-.104	.49
	Equal variances not assumed			1.35	77.86	.17	.19	.14	-.092	.48

As is evident in table 6, there were no significant differences between male and female in-service EFL teachers' digital competence. In other words, male and female EFL teachers are not significantly different in terms of their digital competence.

3.5. Iranian In-Service EFL Teachers' Actual Practice in Using Digital Technology in the Classroom

As pointed out before, the researcher observed 10 classes 3 times using an observation checklist. The results are tabulated in table 7 below.

Table 7

The Results of the Observation Checklist

No.	Items	Frequency	Percentage	Routine/non-routine practice
1	The teacher makes use of digital technologies to communicate with students.	20	0.66	Routine
2	The teacher uses the internet to find the resources for teaching.	15	0.5	Non-routine
3	The teacher uses various digital resources e.g. pictures, videos, applications, digital presentations in the class.	15	0.5	Non-routine
4	The teacher uses technology creatively to engage his/her learners in the learning process.	5	0.16	Non-routine
5	The teacher can solve typical problems related to technology use in the class.	24	0.8	Routine
6	The teacher can use digital tools easily in the teaching process.	25	0.83	Routine
7	The teacher uses digital devices for language assessment.	3	0.1	Non-routine
8	The teacher encourages students to use technology for learning.	10	0.33	Non-routine
9	The teacher teaches students how to use digital tools and solve technical problems.	10	0.33	Non-routine
10	The teacher informs students about the risks associated with the use of technology and their behavior in this respect.	1	0.03	Non-routine
11	The teacher guides the learners in using the technology for learning.	4	0.13	Non-routine
12	The teacher encourages learners to publish and share their digital productions.	5	0.16	Non-routine

As delineated in Table 7, the observation checklist designates items 1, 5, and 6 as constituting routine practices within the instructional methodologies employed by Iranian in-service EFL teachers. Conversely, the remaining items are characterized as non-routine practices encompassed within the instructional repertoire of Iranian in-service EFL teachers when integrating digital technologies in the classroom.

4. Discussion

The objective of this study was to examine the digital competence of Iranian pre-service and in-service EFL teachers and to ascertain whether gender exerted an influence on teachers' digital competence. In line with Ferrari's (2013) assertion regarding the significance of digital proficiency in educational settings and Tondeur et al.'s (2017) assertion regarding the imperative for teachers to incorporate digital resources in pedagogical approaches, the findings unveiled that respondents demonstrated a spectrum of digital competency spanning from moderate to high levels. This finding is consistent with prior research conducted by Sánchez Prieto et al. (2020) and Sánchez-Caballé and Esteve-Mon (2022), wherein Spanish teachers demonstrated a moderate level of familiarity with Information and Communication Technology (ICT) resources and perceived themselves as possessing intermediate digital competence, respectively indicating a consistent trend across diverse cultural contexts.

However, the outcomes of the current study diverge from those reported by Rubio Gragera et al. (2023) and Hinojo-Lucena et al. (2019), who documented low levels of digital competence among Spanish teachers. Furthermore, the findings of this study contrast with the research conducted by Baena-Morales et al. (2020), which identified low self-perceived digital competence among teachers in the Valencian Community (Spain). In contrast to Baena-Morales et al. (2020), who identified low self-perceived digital competence among teachers in the Valencian Community (Spain), our study suggests a more optimistic outlook on teachers' digital competence among Iranian EFL instructors.

Building on previous research emphasizing the importance of tailored professional development initiatives (He & Li, 2019; Krumsvik, 2011), the findings of the study offer significant contributions to the understanding of the digital competence of in-service EFL teachers in Iran, indicating a level of proficiency ranging from moderate to high. This outcome underscores the progress made by Iranian teachers in enhancing their digital capabilities, a development crucial for fostering effective teaching and learning within the contemporary technology-driven educational landscape. It is noteworthy that the study's results are consistent with certain prior investigations conducted in Spain, suggesting a parallel trajectory in the digital competence of teachers across diverse cultural contexts. Nevertheless, the study also unveils disparities when compared to other research endeavors, a phenomenon potentially attributable to variations in sample size, participant demographics, and contextual variables.

In further explication, the findings of the study suggest that in-service EFL in Iran exhibit a commendable grasp of utilizing technology for pedagogical endeavors. They demonstrate proficiency in navigating diverse digital tools and platforms, and possess adeptness in integrating technology into their instructional methodologies. Nonetheless, opportunities for enhancement persist, particularly in the realm of advanced digital competencies, such as crafting multimedia content, leveraging open educational resources, and deploying technology-infused assessment techniques. Moreover, the results of the study imply the existence of a disjunction between teachers' objectively assessed digital competence and their self-perceived competencies. Despite the majority of participants expressing a sense of ease with technology utilization, their interview responses unveiled certain deficiencies in their digital prowess. This incongruity underscores the imperative for continuous professional development initiatives tailored to the specific requirements of teachers, facilitating the cultivation of confidence in their digital capabilities.

Furthermore, the investigation offers an extensive examination of the digital competence exhibited by in-service EFL teachers in Iran, delineating both commendable aspects and domains warranting enhancement. The outcomes indicate a positive trajectory in the cultivation of digital competencies among Iranian teachers; however, there remains a discernible exigency for tailored interventions and professional development initiatives to propel their digital competence to greater heights. Through strategic investments in teacher education and supportive measures, stakeholders such as educators and policymakers can foster the adoption of effective pedagogical practices, thereby enriching the educational experiences of students and fostering advancement within the education sector as a whole.

The second research question of the study centered on investigating the parallels and distinctions between Iranian pre-service and in-service EFL teachers concerning their digital competence. Regarding similarities, both cohorts of teachers demonstrated akin perspectives regarding the integration of digital tools within the instructional framework. Notably, they commonly employed technology to foster communication and engagement with colleagues, students, and parents. Furthermore, a substantial proportion of participants from both groups exhibited proficiency in utilizing technology to disseminate digital resources, albeit a minority demonstrated the ability to create such resources. Moreover, a majority of teachers from both pre-service and in-service categories expressed a commitment to fostering student empowerment in technology utilization, with a notable portion incorporating technology into their pedagogical methodologies.

Conversely, discernible disparities emerged between the two cohorts. Concerning the utilization of technology for assessment purposes, approximately half of the in-service teachers exhibited a preference for traditional pen-and-paper modalities, abstaining from digital assessment methodologies. In contrast, a larger proportion of pre-service teachers (80%) expressed reservations regarding the suitability of technology for assessment, possibly stemming from apprehensions surrounding the security of digital assessment approaches. Another distinction

pertained to the digital ecosystem within their professional settings. Merely 20% of in-service teachers perceived their workplace as offering an appropriate digital milieu, whereas one-third of pre-service teachers expressed optimism regarding the digital infrastructure of their prospective workplaces.

Notably, pre-service teachers articulated a requirement for external assistance to augment their digital involvement. Specifically, a significant majority (86%) expressed the necessity for the presence of an information technology (IT) engineer or department within their educational institution to attend to technical challenges associated with digital tools. Furthermore, 20% of pre-service teachers proposed the implementation of regular meetings by the institution to enhance teachers' proficiency in utilizing technology for instructional purposes. It is noteworthy that the investigation into the parallels and disparities between pre-service and in-service teachers regarding digital competence has been relatively scant within academic discourse. Previous scholarly endeavors have predominantly concentrated on examining the influence of diverse factors, such as gender and educational attainment, on the digital competence of either pre-service or in-service teachers. Consequently, the outcomes of this study cannot be directly juxtaposed with prior research endeavors pertaining to this domain.

The examination of the third research question, aimed at elucidating the similarities and distinctions in the digital competence of male and female Iranian EFL in-service teachers, revealed a lack of significant correlation between teachers' gender and their digital competence. This finding finds corroboration in various scholarly investigations, including Kumaren and Sivakumaren (2019), Hinojo-Lucena et al. (2019), Guillén-gámez et al. (2019), Sánchez Prieto et al. (2020), Guillén-Gámez et al. (2021), Galindo-Domínguez et al. (2021), Cabero-Almenara et al. (2021), Dias-Trindade and Albuquerque (2022), and Morante et al. (2023), which similarly documented the absence of a discernible association between teachers' gender and their digital competence.

In contrast to these findings, alternative investigations conducted by Altun (2013), Gonzalez and Martin (2018), Barragán-Sánchez et al. (2020), Jiménez-Hernández et al. (2020), Casillas Martín et al. (2020), and Esteve-mon et al. (2020) have posited that males generally demonstrate superior levels of digital competence in comparison to females. However, it is imperative to acknowledge that these conclusions diverge from the findings of the present study. Conversely, divergent findings have been reported by researchers such as Karaca (2015), Aesaert and Van Braak (2015), Krumsvik et al. (2016), Cored Bandrés et al. (2021), and Sánchez-Caballé and Esteve-Mon (2022), who have noted a contrasting trend wherein females manifest higher levels of digital competence relative to males. This serves to further complicate the nuanced interplay between gender and digital competence.

The variegated outcomes underscore the intricate nature of the nexus between gender and digital competence within the realm of language pedagogy. Variables such as cultural milieu, pedagogical tenure, and technological accessibility may wield influence over the acquisition and

application of teachers' digital competencies. Consequently, it becomes imperative to account for these multifaceted factors when scrutinizing the interplay between gender and digital competence.

While certain studies imply a gender dichotomy in digital prowess, the present investigation elucidates the absence of a significant correlation between teachers' gender and their digital competence among male and female Iranian EFL in-service instructors. By acknowledging and mitigating potential disparities, educational institutions can cultivate inclusive educational environments conducive to addressing the distinct requirements of all teachers, thereby facilitating student achievement. These divergent findings underscore the necessity for continued exploration and comprehension of the determinants underpinning digital competence, transcending the scope of gender alone.

Based on the results of the observations, the final research question aimed to investigate the practical integration of digital technology within the instructional environment by Iranian in-service EFL teachers. The findings revealed that a significant proportion of these instructors incorporate digital technologies into their pedagogical endeavors, particularly for facilitating communication with their students. Moreover, they exhibit competence in utilizing digital tools and adeptly address common technology-related challenges encountered during teaching sessions. These practices have become ingrained as routine practices of their classroom methodologies. Correspondingly, the interview data corroborates the observational findings, with a majority of Iranian in-service teachers reporting the integration of technology for communication purposes and instructional delivery. Additionally, the observations substantiate the earlier assertion regarding non-routine practices. Notably, it was observed that teachers generally exhibit reluctance to employ technology for student assessment, a phenomenon substantiated by the observed classroom practices, wherein only a minority (10%) of teachers utilize digital tools for this purpose.

Supported by previous research highlighting trends in technology integration in education (Grande-de-Prado et al., 2020; Rubio Gragera et al., 2023), the findings derived from both observational data and interviews collectively indicate that Iranian in-service EFL instructors frequently integrate digital technology into their instructional practices, primarily for communication and pedagogical purposes. Their adeptness and fluency in employing digital tools, coupled with their capability to resolve technological challenges, underscore the normalization of technology integration as a routine practice. Nonetheless, there persists a hesitancy among teachers to employ technology for student assessment, as evidenced by the limited utilization of digital tools for this aspect of instruction. In summary, this study illuminates encouraging trends in the incorporation of digital technologies among Iranian EFL teachers, while simultaneously underscoring areas necessitating further attention and support. As professional development initiatives for teachers continue to evolve, the insights gleaned from this study can guide the development of tailored interventions aimed at bolstering teachers' confidence in utilizing technology for assessment purposes, thereby enhancing teaching and learning outcomes. This finding underscores the imperative for further exploration into the underlying reasons for this

hesitancy and the potential strategies to promote the integration of technology in assessment practices.

5. Conclusion and Implications

The primary objective of this study was to assess the digital competence of both male and female pre-service and in-service EFL teachers in Iran. Initially, the study sought to gauge the level of digital competence among Iranian in-service EFL instructors, revealing a generally commendable mastery of digital tools and technologies. The subsequent examination involved comparing the digital competence between pre-service and in-service EFL teachers, uncovering similarities and disparities through qualitative interviews. While both groups exhibited parallel patterns in areas like communication and resource utilization, disparities were observed in beliefs regarding technology application for student assessment and administrative tasks. Exploring the relationship between gender and digital competence among Iranian EFL in-service teachers revealed no significant association, indicating comparable levels of proficiency irrespective of gender. Finally, the study scrutinized the practical integration of technology in the classroom by Iranian in-service EFL instructors, highlighting their routine utilization of diverse digital tools to facilitate interactive and engaging learning environments.

As this study unveils its findings, it is imperative to explore both theoretical and practical implications for different stakeholders. The theoretical implications of this study underscore the significance of considering the digital competence of language teachers within the broader framework of language education theory. By examining the digital competence of Iranian pre-service and in-service EFL teachers, the study contributes to a deeper understanding of the role of technology in language teaching and learning. Insights gained from the study can inform theoretical models of language teacher development, shedding light on the interplay between teachers' digital competencies, pedagogical practices, and student learning outcomes.

The integration of technology in language education has transformative implications for language learning theory, as highlighted by the findings of this study. By leveraging digital tools effectively, language teachers can create dynamic and interactive learning environments that promote active engagement and collaboration among learners. Theoretical frameworks such as socio-cultural theory and constructivism provide valuable insights into the potential of technology to scaffold language learning experiences, facilitating meaningful interactions and knowledge construction. Additionally, theoretical perspectives on digital literacy and media education offer conceptual frameworks for understanding the complex relationship between technology, language, and culture in educational contexts.

Practically, the findings of this study hold significant implications for language teacher training programs, individual teachers, learners, and educational institutions alike. For language teachers, particularly both pre-service and in-service EFL instructors in Iran, the study underscores

the importance of continuous professional development in digital literacy. Workshops and training programs tailored to the specific needs of teachers can enhance their knowledge and skills in utilizing digital tools effectively. These programs could include hands-on training sessions on creating multimedia content, designing technology-infused assessments, and fostering student empowerment in technology use. Moreover, integrating media (digital) literacy into teacher training syllabuses, as suggested by Hidalgo et al. (2020), can equip teachers with the necessary skills to critically evaluate and utilize digital resources in their teaching practices.

For EFL learners, the integration of technology in language teaching offers opportunities for interactive and engaging learning experiences. The findings of this study highlight the potential benefits of technology-enhanced language learning environments, where learners can access diverse digital resources, collaborate with peers online, and receive timely feedback from their teachers. By incorporating digital tools effectively, language teachers can create dynamic learning environments that cater to the diverse needs and learning styles of their students.

For educational policymakers and institute managers, the study emphasizes the importance of investing in updated facilities and digital infrastructure to support teachers' digital competence. By providing the necessary resources and professional development opportunities, educational institutions can create a conducive environment for digitally competent teaching practices. Additionally, institutions can establish digital learning labs or resource centers where teachers and learners can access technology resources and receive support in utilizing digital tools effectively. By prioritizing the integration of technology in language teaching, institutions can enhance student engagement and learning outcomes, ultimately contributing to the advancement of language education.

To provide more specific and concrete, workshops or training programs could be organized by educational institutions to address the specific needs of language teachers, focusing on practical strategies for integrating technology into their teaching practices. These programs could include modules on creating multimedia content, designing technology-infused assessments, and fostering student empowerment in technology use. Furthermore, educational institutions can establish digital learning labs or resource centers where teachers and learners can access technology resources and receive support in utilizing digital tools effectively. By fostering a culture of innovation and collaboration, institutions can create sustainable models for technology integration in language education, benefitting both teachers and learners alike.

In conclusion, the present study contributes valuable insights into the digital competence of Iranian EFL teachers, underscoring the significance of cultivating digital competence among language teachers. Findings suggest that Iranian in-service EFL teachers demonstrate adequate digital competence, while pre-service teachers display comparable usage patterns. No substantial connection between gender and digital competence was detected. Moreover, observations confirmed that Iranian EFL in-service teachers habitually employ technology for teaching purposes. These results hold implications for the advancement of teacher training programs and

the promotion of effective technology integration in language education. The authors agree with the conclusion drawn by Sarani et al. (2014) who argued that it is pertinent to infer that an essential perspective grounded in critical pedagogy within ELT is most appropriate for the Iranian educational context.

The results of this study are not only relevant to the Iranian context but can also be applied globally. The findings highlight the importance of considering the digital competence of language teachers in the modern era, regardless of their location. As emphasized by Sarani and Ganji Khoosf (2014), understanding the inherent connection between language and culture is fundamental to the acquisition of a second language. With the increasing integration of technology in education, it is essential to ensure that language teachers are equipped with the necessary skills to effectively utilize digital tools in their teaching practices. The study's results provide valuable insights into the specific digital competencies that language teachers should possess and can serve as a framework for developing professional development programs aimed at enhancing digital literacy among language teachers worldwide. Furthermore, the study's focus on the perspectives of both pre-service and in-service teachers offers a comprehensive understanding of the challenges and opportunities faced by language teachers at different stages of their careers, making the results applicable across various educational settings. Therefore, the study's findings have significant implications for language teacher education and professional development programs globally and can contribute to the enhancement of language teaching and learning practices worldwide.

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Appendix

Interview questions (for in-service teachers)

Professional engagement

1. Professional engagement refers to interactions with colleagues, learners, parents via digital tools which is one of the areas of digital competence.

Do you use technology for interaction and communication with colleagues, learners and parents? Explain.

Digital resources

2. Nowadays, teachers access to a wealth of digital (educational) resources. The ability to use digital resources well is another component of digital competence.

Do you use technology to create, share or use digital resources? Explain.

Teaching and learning

3. Teaching and learning is the most important area of teachers' digital competence for a language teacher.

Do you use technology in your teaching practice? How?

Assessment

4. Assessment is an integral part of education.

Do you assess the learners by means of digital tools? Explain.

Empowering learners

5. One of the responsibilities of a teacher is to empower learners to use technology.

Do you empower your learners regarding the technology use? Explain.

Facilitating learners' digital competence

6. Facilitating learners' digital competence refers to enabling learners to creatively and responsibly use digital technologies for information, communication, content creation, wellbeing and problem-solving.

Do you enable learners to use digital technologies based on mentioned points? Explain.

Digital environment

7. Digital environment is defined as the availability of unrestricted access to digital resources, constant opportunities for CPD (Continuing Professional Development), availability of research tools and availability of complementary digital tools (other than those specific to teaching) in an institution.

Describe your digital environment.

Extrinsic digital engagement

8. Extrinsic digital engagement refers to overall digital implementation (all levels and users), constant update of tools available to users and immediate IT support to users at all levels.

What does your institution do in order to improve the quality of digital technology use and solve some of the related problems?

Interview questions (for pre-service teachers)

Professional engagement

1. Professional engagement refers to interactions with colleagues, learners, parents via digital tools which is one of the areas of digital competence.

Can you use technology for interaction and communication with colleagues, learners and parents? Explain.

Digital resources

2. Nowadays, teachers access to a wealth of digital (educational) resources. The ability to use digital resources well is another component of digital competence.

Can you use technology to create, share or use digital resources? Explain.

Teaching and learning

3. Teaching and learning is the most important area of teachers' digital competence for a language teacher.

Can you use technology in your teaching practice? How?

Assessment

4. Assessment is an integral part of education.

Can you assess the learners by means of digital tools? Explain.

Empowering learners

5. One of the responsibilities of a teacher is to empower learners to use technology.

Can you empower your learners regarding the technology use? Explain.

Facilitating learners' digital competence

6. Facilitating learners' digital competence refers to enabling learners to creatively and responsibly use digital technologies for information, communication, content creation, wellbeing and problem-solving.

Can you enable learners to use digital technologies based on mentioned points? Explain.

Digital environment

7. Digital environment is defined as the availability of unrestricted access to digital resources, constant opportunities for CPD (Continuing Professional Development), availability of research tools and availability of complementary digital tools (other than those specific to teaching) in an institution.

Can you describe your digital environment?

Extrinsic digital engagement

8. Extrinsic digital engagement refers to overall digital implementation (all levels and users), constant update of tools available to users and immediate IT support to users at all levels.

What can your institution do in order to improve the quality of digital technology use and solve some of the related problems?