

EFL Teacher's Strategies and Challenges in Developing Digital Competency: A Narrative Inquiry

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ARTICLE INFO

Article history:

Received

February 11th, 2023

Revised

April 28th, 2023

Accepted

May 6th, 2023

ABSTRACT

The sudden changing of teaching and learning systems from face-to-face classes to online platforms because of the Covid-19 pandemic urged EFL teachers to develop digital competency. This study aims to investigate the ways teachers develop strategies and cope with challenges, as well as to identify the level of teachers' digital competency (TDC). The narrative inquiry method was applied by conducting a semi-structured interview with three EFL teachers of secondary levels. The questions were developed based on the UNESCO ICT Framework for Teachers (ICT-CFT) which include the components regarding curriculum and assessment, teaching and learning process, collaborative learning, and professional development. The interview results were then transcribed into written texts verbatim and excerpts were selected for inclusion in the narrative stories, specifically dealing with strategies and challenges. To identify the TDC, thematic analysis was done by coding and categorizing components that were also taken from the indicators of the UNESCO ICT-CFT which include the competencies of technological ability, communicative ability, pedagogical ability, management ability, and research ability. The findings revealed that the three EFL teachers had various but similar strategies by learning themselves through various digital platforms, joining webinars and training, as well as asking to and sharing with colleagues. Challenges were found mostly from the students' inability and reluctance of using digital tools. The TDC covered most competencies but only reached the exploration and integration level, not the innovation level yet. Recommendations for future actions and studies are mentioned in this study.

Keywords: *digital; developing digital; digital competency framework; EFL teachers; narrative inquiry.*

How to cite	Priyantini, T., & Herawati, H.,. (2023) EFL Teachers' Strategies and Challenges in Developing Digital Competency: A Narrative Inquiry. <i>Pedagogy : Journal of English Language Teaching</i> , 11(1). 1-14 DOI 10.32332/joelt.v11i1.6570 .
Journal Homepage	https://e-journal.metrouniv.ac.id/index.php/pedagogy This is an open-access article under the CC BY SA license https://creativecommons.org/licenses/by-sa/4.0/

INTRODUCTION

Several facets of life, including education, have been severely impacted by the Covid-19 pandemic. Schools, colleges, and universities have been forced to close as a result of educational institutions throughout the world switching the system to distant learning modalities.. The curriculum and lesson plans were automatically updated, existing exams were rescheduled, and a range of technology tools were used to provide online learning resources for students in all academic years. Although technology has improved significantly over the last several decades, this sudden shift has created several difficulties. For instance, not all institutions provide online learning platforms (Morgan, 2020).

The sudden changing situation, of course, impacts the way the teachers teach as well. They need to change their strategy, methods, and techniques, using digital platforms which for those who seldom get in touch with the digital environment will cause depression. Although many of them are conversant with digital tools, this does not always mean that they use them for educational objectives (Spiteri & Rundgren, 2017) while the role of teachers is increasingly demanding (Vidosavljevic & Vidosavljevic, 2020) and the use of technology is demanding urgently. In this case, the concept of TPACK needs to be comprehended more, not only the relationship between content and pedagogy but also the technology integration (Swallow & Olofson, 2017) because when teachers are faced with the difficulties that modern technologies provide, teaching using technology becomes even more challenging (Koehler et al., 2013).

A teacher may be good at digital literacy but, may not be digitally competent. Digital competence includes the capacity of teachers to utilize ICT in a professional context, link to pedagogical knowledge, and comprehension of the use of learning techniques to create a productive learning environment for students (Martin et al., 2020). Krumsvik (2011) proposes three levels of digital competence for teachers including basic digital skills (how teachers use ICT tools, access information, and communicate), didactic ICT competence (how to integrate technology into pedagogy), and learning strategies (how to learn and upgrade ICT competence).

A professional digitally competent teacher has the capacity to create learning processes through the selection of learning objectives, the selection of the methods and types of evaluation, and the choice of the most suitable technology to facilitate this interaction (Helleve et al., 2020). According to a study by Zhang (2020), a teacher will enhance their digital competency depending on the amount of institutional time given to improve their current abilities and how much teacher autonomy they exercise.

In determining the indicators or standards of a digitally competent teacher, different organizations or institutions have different descriptors which classify the competencies that teachers have to be developed. Almenara et al. (2020) in their study, ranked 8 types of frameworks based on the expert judgement of their digital competency. The final judges of 155 experts found the highest 3 ranks of digital competency frameworks which include the European Framework of Digital Competency for Educators (DigCompEdu),

Common Framework of Digital Competence for Teachers of the ‘Spanish Institute of Educational Technology and Teacher Training’ (CDCFT), and UNESCO ICT Competency Framework for Teachers (ICT CFT).

Previous studies regarding teacher digital competence found inadequate ICT training for teachers (Fernández-Batanero et al., 2020). The pandemic has led to the establishment of ICT training and webinars for teachers including in Indonesia to develop their digital literacy and competence which were provided by the government and academic institutions. However, it seemed like teachers still found challenges in implementing the digital tools in terms of integrating them into the pedagogy and content knowledge. One of the factors is teachers have a low ability to use digital technology which led to low digital literacy and digital competency. Astuti et al. (2021) conducted a study in a vocational school and the findings revealed that not only the students but also the teachers had a low category of maturity level of digital technology. It is also in line with Mutohhari et al. (2021) that the utilization of digital technology is obviously in the low range, demonstrating the need for better teaching capacity. The improvement of digital technology abilities depends on training programs, self-development, and motivation.

Spiteri & Chang Rundgren (2020) reviewed 27 studies regarding teachers’ use of digital technology and it was found that teachers’ knowledge, attitudes and skills, which were influenced by the school culture, were the factors that affected teachers’ digital competency. They recommended that teachers need training in the use of technology in teaching. It is

supported by Fernandez-Batanero et al. (2020) who reviewed 21 studies and highlighted that teachers had low digital competency and most studies revealed that it was because of a lack of teacher training and insufficient ICT training. Hinojo-Lucena et al. (2019) also stated that the low digital competence of teachers may be influenced by insufficient ICT training, besides age, degree, teaching experience, and professional category.

Similar studies were conducted in EFL teaching practice in which EFL teachers were also assessed for their digital competency. A study by Al Khateeb (2017) found that English language teachers were found to not have advanced levels of digital competence because of their lack of experience, training, and prior knowledge, or just being poor performers. According to Rokenes and Krumsvik (2016), the elements which influence EFL teachers’ advanced levels of digital competency may include access to resources and assistance, modelling, scaffolding learning experiences, connecting theory with practice, reflection, novel assessment methods, and collaborative learning. EFL teachers should be digitally competent for currently, students tend to use technology assistance for language learning. In this case, EFL teachers’ motivation might be the strongest point to achieve those elements of developing their digital competency.

EFL teachers must understand the importance of technology integration in English classes since many digital learning applications use English and they even provide interactive English learning. When EFL teachers integrate those digital applications into class learning activities, previous studies found them to give good impacts on learning outcomes. Argawati &

Suryani (2020) conducted a study about the use of digital-based instructions and the results revealed that it could engage pupils, improve digital literacy, spark their creativity, and develop new applications. To build students' digital literacy, for sure, teachers must build their digital competency.

Previous studies have explored teachers' digital competency, however, there was not any comprehensive research regarding strategies and challenges of the development, specifically among EFL teachers. A study by Al Khateeb (2017) suggested further research to find out the challenges of EFL teachers that make them lack of integrating technology in English language classes and build their digital competency. However, since we found that the Covid-19 pandemic was believed to force EFL teachers to integrate technology into English language teaching, we considered to just dig further investigation in terms of how they develop strategies and overcome challenges. The results are expected to help EFL teachers notice the current demands and challenges of technology integration in English language teaching so that they can create more effective and meaningful learning.

Furthermore, there was a need to identify the level of their digital competency since previous studies did not explore clear frameworks to assess the levels while the results might be taken as a basis for schools or educational institutions to give them clearer guidance before designing training programs for teacher professional development, specifically in terms of teachers' digital competency (TDC). Therefore, to gain thorough data, the following research questions are addressed:

1. How do EFL teachers develop their digital competence and what are the challenges?
2. What is the EFL teachers' level of digital competency?

METHOD

The narrative inquiry method was applied in the study which focuses on how someone uses stories to understand their experiences from certain perspectives (Barkhuizen et al., 2014). Since this approach allows teachers to describe their own stories or experiences, narrative inquiry enables researchers to present real experiences (Drajati, 2022) which may influence teachers to reflect on what they have done and support their professional development.

Data were collected by using oral narratives of the semi-structured interview via a synchronous platform. The respondents were 3 teachers of English, teaching at different secondary schools in the West Java area, with a minimum 5-year teaching experience. They were selected based on their frequent and various use of digital media during distance learning. Data were gathered by asking the respondents a series of guided questions about their experiences in developing their digital competence and the challenges they faced. The question prompts were developed based on the UNESCO ICT competency framework for teachers or ICT-CFT (UNESCO, 2018), which include the components regarding curriculum and assessment, teaching and learning process, collaborative learning, and professional development. Here are the questions that were asked to the respondents.

1. What do you understand about digital literacy and how do you implement ICT to support curriculum and assessment?
2. How do you integrate technologies, tools, and digital content to support the teaching and learning process? How do you find that technology integration helps students learn and solve their problems?
3. What kind of technological tools and software/networks do you use frequently to create a digital learning environment and support students' critical thinking and problem-solving skills?
4. How do you use digital tools to facilitate students to work in a learning community, and encourage their self-management and collaborative learning?
5. How do you use technology to interact with professional networks to support professional development? Do you also share best practices with other teachers? How?
6. What are the challenges of implementing or integrating digital tools in terms of curriculum and assessment, teaching and learning process, and collaborative work?
7. What are the challenges in developing your digital competency for professional development?

The results of the interview were transcribed into the written text verbatim, and we selected excerpts which specifically related to the strategies and challenges. To analyze the level of teachers' digital competence, thematic analysis was done in which the data were read repeatedly, coded, and categorized under the thematic

headings and presented in discussion (Cresswell & Poth, 2018). The coding and categorizing components were also taken from the indicators of the UNESCO ICT competency framework for teachers which includes the competencies of technological ability, communicative ability, pedagogical ability, management ability, and research ability. Each ability has three levels: exploration, integration, and innovation. The analysis results indicate whether the findings support the previous studies, and they are presented as descriptive analysis.

RESULT AND DISCUSSION

Results

Three respondents answered differently regarding the strategies and challenges in developing their digital competency. The Indonesian spoken words have been transcribed verbatim into the written ones and translated into English, and excerpts were selected for inclusion in the narrative stories, specifically dealing with strategies and challenges so the narrative stories are not written as direct quotations. The respondents' names are pseudonyms.

Ms Yeni's Story

I consider the implementation of ICT to support the learning process very important because we can develop students' awareness of digital applications. We can urge and motivate ourselves to learn applications we can use during our learning process. I think it is a good point that teachers need to improve themselves in the digital thing. Integrating technology is challenging for me because I need to learn new things which I don't think I'm not very good at but for sure, I need to get along with them. For example, when my friend was coaching me on Canva, I learned how to make a presentation with it. Then I gave my students a worksheet in

which they could directly check whether the answer is correct or not. To facilitate students to have collaborative learning, I assigned them to work in group discussions to create a product using Canva and upload the results to Google Classroom. For building my professional development in the use of technology, I used Zoom Meeting or Google Meet to interact with my professional networks. I also access the 'Merdeka Mengajar' platform, provided by the Ministry of Education, and use a kind of LMS like Moodle that provides materials and tests. I haven't got a chance to share best practices through a webinar but I sometimes have a small group discussion with the English Teachers' Organization (MGMP). I found the challenge from myself as a teacher since I need to learn more applications to provide my students with different kinds of activities. Moreover, it is not easy to find appropriate tools or applications for materials and evaluations. However, I feel fortunate that I have some friends who are willing to teach me how to use digital tools even though I develop my digital competency very slowly.

Ms Lina's story

Before the pandemic, I did not use technology much, but during the pandemic, I was forced to use various platforms for teaching such as Google Classroom, YouTube and Google Meet for teaching. I also used Google Forms and Quizziz for assessment. To build a digital learning environment, I created videos via YouTube, explored Google Classroom, and communicated via Whatsapp. However, it did not help students learn significantly, compared to when they were learning in the classroom. For my professional development in building digital competency, I learned from YouTube and joined a program held by the Ministry of Education which was called PemBATIK or ICT-based training but I did not accomplish the whole parts of the program because the process was

getting more difficult and fewer interactions and feedback from the instructors. Regarding the challenges, I felt that even though my digital competency was increasing but not all students could accept the implementation of digital tools in learning. Some students did not do the tasks because of device matters and unclear reasons. Another challenge came from me when I had to struggle with laziness in learning. Moreover, when facing problems with technology integration, I could not ask my colleagues since they also lack digital competency so I just found my solution by watching YouTube videos.

Ms Nina's Story

As an English teacher, during the pandemic, I used ICT to make the class more interesting and easier for the students to understand. I used any tools the school provided such as an LCD projector and a sound system. Our school also provided LMS called SCOJA that was used to conduct the assessment and give materials when students learned online. I also used Wordwall, Quizziz, Mentimeter, Padlet, and so on. I learned how to use them from my colleagues and the English Teachers' Organization (MGMP). I also once attended a conference about TELL to enrich my knowledge. I have a few challenges in building my digital competency and it is more on myself since I am the vice principal of curriculum. I don't only teach but also do other tasks. Moreover, even though I have tried my best to explore technology in learning, I found that not all students had good cell phones that could access applications I suggest they use. Moreover, not all teachers understand technology, especially old teachers who are reluctant to learn new ways of assessment.

Teachers' Digital Competency (TDC) Level

Referring to the five components of digital competency, the EFL teachers' narrative stories were identified to match the level of TDC. Each competency has three levels which include exploration, integration, and innovation. For technology ability, all teachers reach the level of exploration and integration since they recognize a wide range of technological tools and some ways of integrating them into educational practice. Moreover, they use various technological tools in the teaching and learning process. However, they still cannot use them for the design of innovative learning environments, and therefore they have not reached the innovation level.

In terms of communicative ability, the teachers were considered to reach all levels. They are able to explore various channels and languages associated with ICT to communicate with the educational community, develop collaborative work strategies for learning ICT in the school with colleagues, and participate in communities in virtual spaces. However, in the level of innovation, it is only Ms Lina who specifically publishes her products of English learning videos via YouTube.

Teachers' pedagogical competency combines the use of ICT to support the teaching and learning process and the recognition of technologies in students' development process and teachers' professional development. From the narrative stories, it can be identified that teachers reach the exploration and integration level through their ability in identifying new strategies and methods with ICT integration and suggesting learning strategies with ICT to foster

students learning. However, they still need to learn deeper about developing differentiated learning environments based on the students' needs and interests which is the indicator of the innovation level of the pedagogy ability.

The ability to use ICT for effective planning, organization, administration and evaluation of teaching practices and institutional development is included in the management ability. The stories reveal that the teachers only reach the exploration level in which they organize activities of their professional work with the use of ICT. However, there are not any statements that show that they incorporate ICT to improve the management, academic, administrative and community-related processes of their institutions, and even lead actions for improving school management. Therefore, they still don't reach the integration and innovation level in the competency of management.

The last competency level deals with research ability and it is identified from the stories that all of the teachers have not reached all the levels since they do not use ICT to record and track the teaching and learning process as well as observe their teaching practices and the students. Furthermore, they do not lead their own research projects and develop innovative educational strategies that include collective knowledge generation.

Discussion

The narrative stories show that the teachers realize the importance of digital competency in teaching English, especially in the pandemic situation in which online learning was done most of the time. The changing situation forced them to explore more about technology use in English

language teaching and learning to achieve digital competency by learning themselves from various platforms and joining ICT webinars and training. The phenomenon changed the paradigm before the pandemic. A few studies revealed that teachers had low digital competency for their lack of ICT training.

The pandemic was assumed to change the paradigm of teachers' lack of ICT training. The Indonesia Ministry of Education and educational institutions have provided many facilities for teachers to develop their digital literacy and competency through webinars, online workshops and training. However, it does not guarantee that teachers will grab all the opportunities for their professional development. Different factors may influence the ways teachers develop their digital competency.

The three teachers were seen to show their high efforts in learning by themselves through various platforms and their digital competency was increasing whenever colleagues shared and helped each other. In this case, supports from the schools or institutions is also needed to facilitate teachers for collaboration that might solve the problems of reluctant teachers to learn new ways of teaching digitally. It might not be beneficial to see digital competence as a singular actor-level phenomenon. Instead, it may be seen as an organizational activity that is impacted and motivated by a variety of contextual elements that are entrenched inside and throughout a larger school organization (Pettersson, 2018).

Developing digital competency for teachers cannot also be separated from pedagogical competency which is described in the TPACK concepts. Teachers might have excellent digital competency,

but when it comes to students' inability to use digital applications for some reason, they should look back to the pedagogy. Teachers' pedagogical abilities and competencies now include a new dimension as a result of digitalization, which is called "Pedagogical Digital Competence" (PDC) which refers to "the ability to consistently apply the attitudes, knowledge and skills required to plan and conduct, and to evaluate and revise on an ongoing basis, ICT-supported teaching, based on theory, current research and proven experience to support students' learning in the best possible way" (From, 2017).

Becoming a professional digitally competent teachers does not only attend ICT training, explore new technologies, and apply them in class. They must have the capacity to create learning experiences that are aligned with learning objectives, to decide how best to assess learning, and to pick the methods and types of evaluation (Helleve et al., 2020). This becomes a challenge for teachers to learn, relearn, and unlearn further about TPACK concepts. The TPACK-aligned competencies that are explicitly focused on the skills and capacities required to integrate digital resources to enhance topic learning are extended by the TDC framework (Falloon, 2020). The role of schools and institutions is still considered necessary here. The amount of time provided by the institution for teachers to improve their present pedagogical skills and how they use their level of teacher agency will determine how much digital competence they develop (Zhang, 2020).

Teachers' development of digital competency will surely develop their students' digital skills as well. The problem

of students' reluctance to apply digital applications in learning might be decreased. From the results, in the level of pedagogical ability, teachers do not reach the innovation level when they should implement differentiated learning based on students' needs and interests. This could be one of the factors that decreases students' engagement in using digital tools in learning. Teachers need to learn more about how to conduct scaffolds of technology tools as it is suggested by (Pöntinen & Rätty-Záborszky, 2020) that teachers focus on assisting students in comprehending how they learn to use and control digital devices. It is believed that when students are engaged, they will have good learning outcomes. Therefore, teachers need to know how to effectively use new technology and how to create learning environments that promote success, and this deals with the term 'digital pedagogy' (Howell, 2012).

Finally, regarding the level of TDC, it is considered that the EFL teachers in this study reach a quite high level because they fulfil most of the competencies, even though the innovation level has not been achieved well. In addition, they still can not reach the research ability while this competency is needed to develop as a reflection for teachers to identify the strengths and weaknesses during the teaching and learning process. To attain a quality education and enable adaptability to present and future challenging circumstances, training teachers in reflective practice should be done (Teresa Fuertes - Camacho et al., 2021).

A study by Saputra et al. (2020) investigated teachers' beliefs in teaching and learning English and whether their beliefs were implemented in their practices.

The findings revealed that there were inconsistencies between the teachers' beliefs and their classroom practices for several factors. Thus, it is advised that teachers upgrade their teaching journey with a self-reflective tool to assist them in self-evaluating their practices concerning how they instruct in the classrooms. By doing this, instructors' educational expertise might regularly be enhanced.

In terms of determining the level of TDC, using different frameworks may result in different competency standards since each of them has its indicators with their strengths and weaknesses (Yang et al., 2020). The teachers' characteristics and the country's policy may also affect teachers' ways of developing their TDC. Moreover, frameworks of teacher competencies must rely on stakeholders' agreement on what constitutes quality teachers, including the competencies they need and how they are perceived and articulated (Caena & Redecker, 2019). This study took the indicators of TDC from the UNESCO ICT framework for teachers because it was adopted by the Indonesia Ministry of Education in the program of *PemBATIK*.

One problem that we highlight is we find that currently after the pandemic, ICT training for teachers is not established as frequently as in the pandemic era. It is suggested that the ICT training for teachers should be done continuously to achieve sustainable development goals for TDC. Moreover, there should be further studies related to TDC in the post-pandemic as it is the only method to create a comprehensive teaching innovation panorama. The development of digital teaching competency must continue to be a problem for the educational system that must be addressed. It will also continue to be a

significant issue in the preparation of existing teachers (Artacho et al., 2020)

CONCLUSION

This study concludes that EFL teachers just started developing their digital competency when the Covid-19 outbreak happened since they had to change the learning system to online settings. Since the pandemic happened of a sudden, teachers acted fast to search for appropriate strategies by using technology to continue the teaching and learning process. Different teachers had different strategies for developing digital competency, but all of them had similar actions which were learning by themselves through various platforms and joining webinars and online training held by the Indonesia Ministry of Education and other educational institutions. In addition, asking colleagues' help is included in the strategy and sharing with each other at school or the EFL teachers' organization (MGMP) as well.

The strategies, the EFL teachers also face challenges but do not specifically deal with obstacles during the TDC development since they have been facilitated by online webinars and training and even some schools created a platform such as LMS for teachers and students. Instead, the challenges came from their students. During online learning, the EFL teachers have implemented various digital applications to help students learn and to conduct evaluations, however, a few students did not participate in the online activities and they even did not accomplish the tasks. All teachers mentioned that it happened mostly because of the device matters. One teacher stated that many parents could not afford to get their

children good devices for online learning. Network connection and inability to buy internet data were also other factors that made students unable to get involved in online learning.

Those matters relate much to the level of TDC. From the analysis of the narrative stories, the researchers found that the EFL teachers have reached most of the TDC competencies based on the UNESCO ICT-CFT, which include technological, communicative, pedagogical, and management ability. The research ability is not achieved yet for they have not used ICT to convert existing knowledge and create new knowledge. Regarding the competency level, all teachers achieve the most on the exploration and integration levels. They are able to use various technological tools and integrate them into the teaching and learning process, but they still found difficulties in determining appropriate tools to support differentiated learning and conducting assessments for students. Therefore, the innovation level is not achieved yet, specifically in terms of technology and pedagogical ability.

In this case, the schools and educational institutions still need to establish intensive ICT and pedagogy training for teachers, by using the term 'ICTPDC' training which covers the training of ICT and PDC so that EFL teachers can gain a deeper understanding of how to integrate technology and pedagogy in teaching and learning to reach a higher level of digital competency. The post-pandemic, in which the learning system returns to offline classes, may influence teachers' digital competency. Continuity and consistency in learning will develop better competency. Life-long

learning should not only be applied to students but also to teachers.

ACKNOWLEDGEMENT

The researchers would like to express the highest appreciation to the respondents and to all people who have contributed to the accomplishment of the study.

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