



EFL TEACHERS' PERCEPTIONS OF DIGITAL TRANSFORMATION READINESS: A CASE IN A VIETNAMESE EDUCATIONAL INSTITUTION

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Abstract:

The development of digital technology has significantly affected Vietnamese education in recent years, presenting both challenges and opportunities. In many educational institutions, digital transformation has helped to improve the learning experience for both students and teachers through interactive and customizable learning. Various uses of digital teaching and learning may include providing diverse choices of online learning such as participating in classes through mobile apps or web applications, enhancing self-directed learning, and using technology to track students' progress. Although digital transformation has become a worldwide topic recently, particularly in the new normal, limited research has explored this subject in the context of EFL teaching and learning in Vietnam. This empirical study aims to explore teachers' perceptions of their readiness for the digital transformation at a center of foreign languages. The results revealed that teachers were relatively ready for this important change, although a number of typical challenges can have a negative influence on the effective implementation of the process. Many suggestions for improving teaching quality thanks to digital transformation were also presented.

Keywords: digital transformation, readiness, teaching quality, perceptions, technology

1. Introduction

Digital transformation in education has changed ways of teaching and learning from incorporating new technology into the classroom, to monitoring and assessing the students' performance. It is commonly accepted that changing the use of digital tools is important for digital transformation; however, the process is more related to changes in mindset, way of working, and management in a digital environment (Sklyarov et al., 2020). Educational institutions can adjust and design many activities according to current conditions to help teachers and students to have advanced digital-level capabilities.

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For teachers, in order to shift from traditional classroom instructions to a digital teaching environment, teachers have to be prepared and need to acquire the necessary technical and pedagogical skills to teach effectively and efficiently. The successful implementation of digital transformation in any educational institution relies heavily on teachers' readiness and willingness to adopt technology ([Al-Awidi](#), & [Aldhafeeri](#), 2017). A thorough understanding of teachers' perceptions towards digital transformation is necessary for both teachers and educational administrators to make appropriate recommendations to implement the process effectively (Nguyen et al., 2022). This study refers to the teachers' perceived readiness for the implementation of digital transformation at a center of foreign languages in Vietnam, which will provide valuable findings firstly to teachers themselves, followed by researchers on education and organizational development, and school administrators on the implementation of digital transformation in education.

2. Literature review

2.1 Digital transformation in education

In a general context, the terms like digitization, digitalization, and digital transformation can be sometimes used interchangeably but they may be confusing as these terms refer to distinct concepts. While digitization is concerned with transforming analogue objects into digital representations, digitalization is concerned with improving processes by the use of digitized data and programs, also known as automation. Digital transformation is mainly concerned with transforming organizational processes; build new competencies and models through digital technologies in a profound and strategic way (Marks et al., 2020). In the educational sector, the term of digital transformation generally refers to an educational change realized by means of digital technologies to create collaborative, interactive and personalized learning experiences (Balyer & Öz, 2018).

2.2 Digital teaching and learning

Digital teaching and learning refer to the ability to achieve educational goals through digital literacy, inventive thinking, effective communication, and high productivity (Qoura, 2020). While traditional classroom instructions generally cannot provide an immediate evaluation and more engagement digital teaching and learning can take these advantages (Haleem et al., 2022). Current literature on digital transformation has indicated the four components of digital teaching and learning including digital curriculum, digital tools, digital delivery, and autonomous learning (Dash, 2022).

In the digital environment of teaching and learning, curriculum materials are no longer exclusively associated with textbooks but also with information and communication technologies. The so-called digital curriculum refers to electronic books, digitalized data, or contents presented with other digital methods. Digital tools are currently available through the use of various digital devices including computers, tablets, smartphones, or smart TV allows students and teachers to interact with electronic

curriculum effectively (Blundel, et al., 2016). Digital tools help teachers manage their classrooms, communicate with students and parents, enhance learning with videos, simulations, and other multimedia accouterments, and assess student learning. Digital delivery refers to various learners' learning activities through the Internet. Instructions can be delivered over the internet or a corporate Intranet to browser-equipped learners. Contrary to traditional classrooms, digital teaching and learning allows teachers and learners to participate in an organized learning experience regardless of their physical location. Autonomous learning focuses on learners' responsibility for their learning success through digital learning (Muhammad, 2020). Research suggests a self-sufficient, autonomous learner is more efficient than their partner who is teacher-dependent. In digital learning environment, technology greatly helps learners improve their competencies and performance levels (Pratiwi & Waluyo, 2023). More significantly, foreign language learners can be provided with opportunities for independent learning outside the classroom with various applications, websites, videos, online lectures, or electronic materials. Learners should be responsible for their learning, take an active role in the learning context and methods, and evaluate their progress (Choi & Lee, 2020).

2.3 Teachers' readiness for digital transformation

Digital transformation in education does not simply involve the use of digital devices for teaching and learning but it requires the readiness and involvement of all stakeholders, especially teachers who are responsible for a radical change in the learning system (Latifah et al. 2022). As research suggests, two main types of teachers' preparation for digital transformation include technological readiness and pedagogical readiness.

2.3.1 Technological readiness

The development of digital teaching and learning poses various challenges for teachers, especially with the increasingly rapid development of technology. Teachers must be prepared to use technology and to integrate it into learning content. Digital transformation in teaching means that teachers must use technology to solve problems and reflect on their learning activities (Nguyen et al., 2022). To prepare teachers to fully and effectively integrate technology into their teaching, it is suggested that institutional administrators need to develop a comprehensive plan for digital transformation. The preparation plan must help teachers gain confidence in their abilities to implement the digital curriculum. Teachers also need ongoing training to develop a digital curriculum (Al-Awidi & Aldhafeeri, 2017).

2.3.2 Pedagogical readiness

To be effective with digital transformation, teachers need to understand teaching theories and know how to select appropriate technology to support their teaching. Teachers need to be prepared for digital pedagogy (Cabanero et al., 2022). In a simple explanation, digital pedagogy is teachers' effective attempt to use technology to change their teaching and learning in a digital environment. Some typical examples of digital pedagogy include

using various types of media in the classroom, getting learners to use digital tools to develop ideas, or evaluating the learning progress (Aditya, 2021).

3. Methodology

3.1 Research context

The Center for Foreign Languages of Can Tho University (CFL) is a leading foreign language center in the Mekong Delta region. Currently there are 56 teachers providing courses in English, French, Japanese, Chinese and Korean. In response to the Covid-19 pandemic and the country's period of social distancing, the Center shifted to online teaching and learning in early May of 2021 and has provided more online classes in the new normal. With the shift to online instruction, the Center has adjusted the course content of all its programs, reorganized the syllabi, trained teachers in online pedagogical approaches, and, most practically, prepared the necessary technological facilities, such as Internet connectivity and Zoom service licenses to conduct online classes. These practices are, basically, prerequisites for implementing digital transformation as a revolutionary trend in education in the future.

3.2 Research design

In the current study, a descriptive survey design with an online questionnaire was employed with a group of EFL teachers at a center of foreign languages in Vietnam. Teachers' perception survey is feasible and efficient as the data of a large sample can be promptly collected and analyzed.

3.3 Instruments

Teachers' perceived readiness for digital transformation was assessed by an online survey which was developed by [Al-Awidi](#) and [Aldhafeeri](#) (2017), consisting of 3 main sections. The first section requested personal information. The second section consisted of closed-ended questions in three parts: the first part asked the participants to indicate their level of technological readiness, using a five-point Likert-scale ranging from 0 (not ready at all) to 4 (much ready); the second part asked teachers to indicate the level of pedagogical readiness, also using a five-point Likert-scale; and the third part asked teachers to indicate their perceived importance of digital transformation. In the third section, the respondents were asked to provide free responses to the two open-ended questions asking about typical challenges and suggestions for the Center to help teachers to implement the process effectively and efficiently.

3.4 Participants

Participants of the study were teachers at a center of foreign languages in the South of Vietnam. All the teachers were invited via personal e-mail to participate in an online questionnaire. In response, 36 out of 56 teacher participants (64.3%) completed the survey. The basic characteristics of the participants are shown in Table 1.

Table 1: Demographics details of participants (N = 36)

Characteristics	Number	Percentage
Gender		
Female	25	69.4%
Male	11	30.6%
Experience of teaching		
1-2years	4	11.1%
3-5years	9	25%
More than 5 years	23	63.9%

4. Results

The results are presented and discussed based on the closed-ended and open-ended questions of the survey.

4.1 Closed-ended questions

4.1.1 Teachers' technological readiness for digital transformation

It is natural that teachers need to acquire basic knowledge and skills of technology to integrate digital technology into curriculum (Al-Awidi & Aldhafeeri, 2017). In this study, the level of teachers' competence in technology greatly varies as presented in Table 2. The highest mean score of 3.33 is for the statement "I am competent in using e-mail". The result is explainable the popularity of using email in teaching is widely recognized and teachers are able to use this tool most effectively (Almashham, 2018).

The following statements "I am able to download and upload files from/to the Internet", "I take with me a mobile device connected to the Internet everywhere I go", "I am competent in using presentation software such as PowerPoint", "I have the equipment needed to implement digital transformation in my teaching", and "I can use social media such as Facebook, LinkedIn, Twitter, YouTube to communicate with my students" have relatively high mean scores. These features of technological readiness are closely related to the learning effectiveness and reasonably, most teachers are highly prepared for them (Geng et al., 2019).

In this study, it is somewhat unexpected that the statement "I am competent in using word processing software" had relatively low mean score of 2.83 as there are many advantages of word processor programs in teaching (Aladwan, 2021). It is possible that the teacher participants were less self-efficacious with some complex functions of this software or they might need more training to use word processing program to develop digital curriculum; however, this explanation needs further investigation.

Table 2: Teachers' technological readiness for digital transformation (N = 36)

	M	SD	Scale				
			0	1	2	3	4
I am competent in using e-mail.	3.33	.632	-	-	3	18	15
I am able to download and upload files from/to the Internet.	3.31	.920	-	1	8	6	21
I take with me a mobile device connected to the Internet everywhere I go.	3.25	.906	1	-	5	13	17
I am competent in using presentation software such as PowerPoint.	3.19	.822	-	2	3	17	14
I have the equipment needed to implement digital transformation in my teaching.	3.19	.710	-	1	3	20	12
I can use social media such as Facebook, LinkedIn, Twitter, YouTube ... to communicate with my students.	3.03	1.028	1	3	3	16	13
I am competent in using word processing software.	2.83	.941	1	1	10	15	9
I am able to use learning management systems such as Google Classroom, Moodle, Canvas, Edmodo ... to supplement my teaching.	2.69	1.064	-	7	6	14	9
I am able to convert the printed content and activities to the digital form in the curriculum.	2.42	1.105	2	6	8	15	5
I am able to publish my lessons and classroom activities on the Web.	2.31	1.064	2	6	11	13	4
I am familiar with and can create a blog.	1.94	.893	1	10	17	6	2
I am familiar with and can create wikis or Web sites.	1.61	.871	3	14	13	6	-

The two statements “I am familiar with and can create a blog” and “I am familiar with and can create wikis or Web sites” had the lowest mean scores of 1.94 and 1.61, respectively. The results are relatively in accordance with previous study, indicating several typical challenges of creating blogs (Alsamadani, 2018) or establishing websites (Tubin & Klein, 2007).

4.1.2 Teachers' pedagogical readiness for digital transformation

Pedagogical readiness for digital transformation refers to teachers' preparation for important changes in digital teaching and learning. Specifically, teachers need to be better equipped with new pedagogical functions including facilitation, collaborative learning, and assessment in an online environment (Toktarova & Semenova, 2020). As presented in Table 3, several statements such as “I am organized and plan to apply technology-based teaching”, “I am familiar with the ways of integrating technology into my teaching activities”, “I believe that digital curriculum is as effective as printed curriculum”, and “I feel comfortable communicating online and feel that I am able to convey my message writing” had relatively high mean scores. The results indicate teachers' positive perceptions towards digital transformation in terms of teaching methods. These features of pedagogical readiness are important to help teachers fulfill their new role as digital teachers (Zhang, 2020).

Table 3: Teachers' pedagogical readiness for digital transformation (N = 36)

	M	SD	Scale				
			0	1	2	3	4
I am organized and plan to apply technology-based teaching.	3.14	.683	-	-	6	19	11
I am familiar with the ways of integrating technology into my teaching activities.	3.08	.806	-	1	7	16	12
I believe that digital curriculum is as effective as printed curriculum.	3.08	.692	-	-	7	19	10
I feel comfortable communicating online and feel that I am able to convey my message writing.	3.00	.632	-	-	7	22	7
I am flexible in dealing with students on such issues as due dates, absences, and makeup assignments.	2.94	.791	-	2	6	20	8
I can develop electronic learning activities that engage my students in online learning environment.	2.94	.791	-	2	6	20	8
I am able to design online quizzes and use them in teaching my classes.	2.94	.924	-	4	4	18	10
I can manage and control students learning in a technology-enriched classroom.	2.75	.770	-	2	10	19	5
I am able to use online discussions in my classes.	2.89	.979	-	4	7	14	11
I believe that high quality learning experiences can occur without interacting with students face-to-face.	2.47	.971	1	5	10	16	4

The statement "I believe that high quality learning experiences can occur without interacting with students face-to-face" had the lowest mean score of 2.47. The result is not unexpected because classroom interactions are always emphasized in English teaching and learning environment. It is commonly assumed that EFL teachers generally need more physical interactions in certain skill development subjects such as speaking (Daar, 2020).

4.1.3 Teachers' perceptions of implementing digital transformation

In this part of the survey, the participants reported their perceived necessity of implementing digital transformation. As presented in Table 4, the mean scores of these five statements were relatively high. It is worth noting that the statement "Digital transformation is cost-effective" had the lowest mean score of 2.75. It is possible that the teacher participants were uncertain about the efficiency or cost benefits of the process, especially at the beginning of the process (Nigam et al., 2015).

Table 4: Teachers' perceptions of implementing digital transformation (N = 36)

	M	SD	Scale				
			0	1	2	3	4
It is necessary to implement digital transformation at the Center.	3.44	.558	-	-	1	18	17
Digital transformation will benefit my teaching.	3.42	.604	-	-	2	17	17
Digital transformation will work at the Center.	3.31	.668	-	-	4	17	15
It is timely to implement digital transformation at the Center.	3.06	.826	1	-	5	20	10
Digital transformation is cost-effective.	2.75	.937	-	5	6	18	7

4.2 Open-ended questions

Besides the close-ended questions in the survey, the participants were also invited to present the typical challenges and specific suggestions to implement the process of digital transformation successfully.

4.2.1 Typical challenges

Most of the participants indicated major problems to implement digital transformation at the Center. Their perceived challenges were classified into the three main issues including unstable Internet connectivity, lack of technological competence and support, and lack of appropriate training for the change.

While Internet has grown in popularity over the past decades, a consistent connection with decent speed in Vietnam is still a problem. Without a stable Internet connection for learners or teachers, online learning process is hardly successful. Some common responses to this problem were as follows.

"The quality of Internet connection is a big challenge to me because I frequently cannot upload files or share the screen."

"Poor Internet connection is a big problem since many users are on at the same time. If we can't access any e-platforms, our planned activities online are impossible."

"The Wi-Fi system at home and at the Center is frequently weak and inconsistent. During one class session, I may be interrupted several times due to poor Internet connectivity."

Lack of necessary technological practice and support is also a common obstacle the successful digital teaching and learning (Ghavifekr et al., 2016). Several teachers were concerned about their limited knowledge of computer skills which are not sufficient for developing digital curriculum and providing effective online instructions.

"I sometimes encounter technical issues; for example, I can use the break-out room function in Zoom. It is better to have immediate technical support."

"I am not good at computers, so new software or digital tools can be challenging."

"My computer literacy is relatively basic, so I am not very ready to try new digital tools or software."

Lack of training is another issue which may hinder the process of digital transformation. As new technologies are developed rapidly, teachers should stay updated with the newest trends and integrate these innovations through continuous training (Oliveira & Souza, 2022).

"To have this change (digital transformation) effectively, we need specific guidance and support such as pedagogical training."

"We need more information and training to understand digital transformation. I think teachers can only fully ready for the change when the Center can provide us with specific guidance."

"Technology is fast and it is challenging to keep up with the latest technology trends."

4.2.2 Suggestions

For digital transformation to be effective, many teachers indicated specific suggestions, which can be classified into two main themes: assisting with Internet and digital tools and providing appropriate training.

The teachers strongly required the Center to provide good and available Internet and Wi-Fi access so that teachers and students can engage in online learning effectively. Additionally, digital tools and necessary software for teaching and assessment should be better equipped and updated to support digital teaching and learning.

It is widely recognized that training is vital for implementing digital transformation at any level (Mustapha & Jallal, 2022). In this study, the importance of training or experience sharing is emphasized for this successful change.

5. Conclusion

This study aims to analyze the readiness of Vietnamese teachers in response to the process of digital transformation. The results revealed that teachers recognized the importance of the change and were highly ready for implementing the process although a number of identified challenges were addressed for solutions. Digital transformation is a revolutionary trend and to be successful, educational administrators, teachers and students should work together to lead the change.

Conflict of Interest Statement

The author declares no conflicts of interest

About the Author

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