

## CHAPTER 1

### INTRODUCTION

#### **Background of the Study**

Digital Competence has become increasingly important in society, including daily communication and working environments. The management and operations of many different types of businesses have changed due to the quick advancements in digital technology (Laorach and Tuamsuk, Online. 2022). Using digital is the high need for the 21<sup>st</sup> century as it is considered as one of the most important skills among the others. With that, it has been served in every sector, including the education field. In a society with a rapidly evolving electronic environment, a set of skills, knowledge, and attitudes known as "digital competence" are necessary for educational routes, professional integration, and civic engagement (Schola. 2020 : 3). Entering the digital world now offers more than just a chance to stay updated and keep up with technical advancement. Teachers, project teams, politicians, health experts, governments, and society should all engage in multidisciplinary discussion on the need to promote equity and social inclusion for the older adult population during and after the epidemic. However, it is important to consider the issue of those who lack digital skills and how these abilities might be acquired without attending in-person sessions (Kerolyn and et al. online 2021). The transition of society to a digitalized environment requires knowledge, attitudes, and digital competency abilities (Eri and et al. 2021 : 4).

To fulfill the demands of Cambodia's Information and Communications Technology (ICT)-focused education agenda, administrators' digital competence is important and needs to be strengthened. As Ukanwa and Chiemeka (2021 : 915) stated, Information and Communication Technology (ICT) is presently common in schools because it makes administrative tasks like data storage, knowledge management, and decision-making easier. Therefore, it is necessary to improve and promote the use of digital education in Cambodia. According to the Cambodian Ministry of Education, Youth and Sport (MoEYS), the competitive advantage of nations is driven by their human resource capabilities in 21<sup>st</sup> century capabilities, particularly the strategic use of Information and Communication Technology (ICT). Additionally, Ministry of Education, Youth and Sport (MoEYS) will enhance its capacity to guide Information and Communications Technology (ICT) for Education innovation throughout the industry through the Department of Information

Technology (DIT). DIT will evaluate the relevance of international best practices for the Cambodian environment while advising Ministry of Education, Youth and Sport (MoEYS) technical line departments on potential ways to improve their use of information technology (MoEYS. 2018 : 5). In early 2020, COVID-19 severely hampered efforts to modernize the educational system in Cambodia. However, the pandemic has also provided a chance to enhance the use of Information and Communication Technology (ICT) and contemporary technology in education as well as deepen educational reforms. In reality, the pandemic is a driving force behind the modernization and transformation of the educational system. In order to sustain Information and Communication Technology (ICT) adoption and integration in education, all essential stakeholders particularly the Ministry of Education, Youth and Sport (MoEYS) need to capitalize on the crisis and build on the current momentum (Heng. 2021 : 7). Accordingly, administrators' digital competence development has to be prioritized in order to meet the needs of the new adoption of the Next Normal Era.

Administrators, teacher trainers, and teacher trainees from the Kampong Chhnang Provincial Teacher Training Center (PTTC) have been sent to engage in various digital education training, such as MOOCs and Digital Development for Digital Economy (PTTC. 2023). However, administrators in Kampong Chhnang Provincial Teacher Training Center (PTTC) find that their digital competence is still insufficient. An ICT teacher trainer in PTTC is encouraged to train and share technology knowledge among colleges and administrators in order to strengthen the use of digital technologies in teaching and administrative management (PTTC. 2022). The factors that make the administrators' digital competence improve are still limited because of the lack of training and insufficiency of Information and Communication Technology (ICT) resources. According to the previous study, before the COVID-19 disruption era, there was a dearth of Information and Communication Technology (ICT) organization development. UNESCO noted difficulties with the project, such as a lack of Khmer language resources, inadequate English proficiency of the trainers and trainees, inadequate infrastructure, a lack of hardware, and a lack of action by the Ministry of Education, Youth and Sport (MoEYS) to put the current Information and Communication Technology (ICT) in education policy into practice (Richardson. 2008 : 72). Consequently, the educational institution administrators in Cambodia, including those in Kampong Chhnang Provincial Teacher Training Center (PTTC) lack digital competence and were unprepared to adjust

to the COVID-19 crisis. To illustrate, the whole institute just shut down on March 16, 2020, according to the announcement from Ministry of Education, Youth and Sport (MoEYS), and all the trainees were sent home and did not get to have proper training during the pandemic (MoEYS. 2020 : 3). The social media platforms used for accessing the documents and communicating were Telegram, Messenger, and Facebook. During the crisis, the Ministry of Education, Youth and Sport (MoEYS) also put efforts into developing other platforms, such as Google Meet and Zoom, and encouraged all the administrators, educators, and trainers to use them. However, the performance was still low due to a lack of training, digital tools, and internet access. In Kampong Chhnang Provincial Teacher Training Center (PTTC), administrative management is still carried out using conventional methods with little support from Information and Communication Technology (ICT) facilities. Therefore, the goal of this research is to study, analyze and offer a guideline for the administrators in the Next Normal era in Kampong Chhnang Provincial Teacher Training Center (PTTC), Cambodia. It is also hoped that the findings will be helpful for the center as well as other educational institutions in Cambodia in the future.

### **Research Objectives**

1. To study administrators' digital competence in the Next Normal Era at Kampong Chhnang Provincial Teacher Training Center (PTTC).
2. To analyze administrators' digital competence in the Next Normal Era at Kampong Chhnang Provincial Teacher Training Center (PTTC).
3. To offer a guideline for developing administrators' digital competence in the Next Normal Era at Kampong Chhnang Provincial Teacher Training Center (PTTC).

### **Research Benefits**

The research objectives aim to study, analyze, and offer a guideline for developing administrators' digital competence in Kampong Chhnang Provincial Teacher Training Center (PTTC) in the Next Normal Era.

Optimistically, the study will drive effectiveness in ICT school management and make its process more convenient. Moreover, this will also contribute to the national response and recovery plan in the education system in Cambodia in terms of using ICT in education, as the

Ministry of Education, Youth and Sport (MoEYS) stated that they would implement a new management and administrative strategy to modernize procedures, improve governance and performance monitoring, and incorporate ICT as a teaching, learning, and knowledge-sharing tool across the education sector for the transition into the 21st-century workplace (MoEYS, 2018 : 2-3).

Last, but not least, it is hoped that the guideline for developing ADC Administrators' Digital Competence (ADC) will tackle the problem of administrators' digital competence at the Kampong Chhnang Provincial Teacher Training Center (PTTC) and provide critical success factors for strengthening their abilities in managing school administration tasks with digital technologies more efficiently and confidently with modernization to meet 21st-century skill needs. It is envisioned that this guideline can be implemented not just in the setting of the teacher training center but also in other educational institutions in Cambodia.

### **Scope and Limitation**

This research study has defined the scope and limitation as the following:

#### **Population and Key Informants**

##### **1. Population**

The scope of the research is to study administrators' digital competence in the Next Normal Era in a teacher training center, not as a whole educational systematic intervention. The study is conducted at Kampong Chhnang Provincial Teacher Training Center (PTTC), Cambodia, and its purpose is to study, analyze, and offer a guideline for administrators' digital competence in the Next Normal Era. The population of the study consists of administrators, technical supervisors, and teacher trainees who are currently working and studying at the training center.

##### **2. Key Informants**

The key informants are selected by using judgmental sampling, also known as the purposive method. This method is one such skill that needs to be applied and used so as to be effective for a qualitative research study (Tongco, 2007 : 155). It occurs when a researcher adds instances or people to sample because the researcher believes such participants are significant enough to include (Taherdoost, 2016 : 23). The key informants are chosen based on the researcher's assessment of who can provide the best information for the research study's objectives. As a result, the researcher selects administrators, with at least five years of experience and currently working

at Kampong Chhnang Provincial Teacher Training Center (PTTC), technical supervisors, who are also currently employed there, and teacher trainees, whose roles as course and class presidents both come from the second years and who are enrolled in a computer course at the training facility, as the key informants. So, in total, there are 15 key informants selected: 7 administrators, including a director and vice-directors, 4 technical supervisors, and 4 teacher trainees.

### **Variable Study**

This research studies administrators' digital competence regarding the following areas:

1. Information and Data Literacy
2. Communication and Collaboration
3. Digital Creation
4. Safety
5. Problem Solving

### **Definitions**

#### **Administrators' Digital Competence:**

Administrators are those who plan the activities and arrange the administrative management process. While digital competence is defined as the capacity to confidently utilize electronic media for work, entertainment, and communication, in addition to logical and critical thinking, managing information, and high-level communication skills. In light of the definitions provided above, it can be concluded that the term "administrators' digital competence" refers to the capacity to confidently utilize electronic media for work, including entertainment, communication, and information management, at a high level with the critical and logical thinking of people who plan the activities and organize the administrative management process.

1. Information and Data Literacy: is defined as the ability to manage digital information and data by identifying, locating, filtering, retrieving, storing, organizing, analyzing, and managing it while determining its applicability.

2. Communication and Collaboration: is defined as the ability to communicate in digital spaces, exchange resources using online tools, connect with others and work together using digital technologies, engage in community and network interaction.



3. Digital Creation: is defined as the ability to produce creative works and media products, repurpose and modify digital content, and deal with and put into practice intellectual property rights and licensing.

4. Safety: is defined as the ability to measure security, make it safe and sustainable to use, protect data, personal safety, and digital identity.

5. Problem Solving: is defined as the ability to identify digital requirements and resources, address conceptual difficulties using digital methods, apply technology creatively, update one's own and other people's competencies, and solve technical challenges.

**Administrators** are those who plan the activity and arrange the administrative management process.

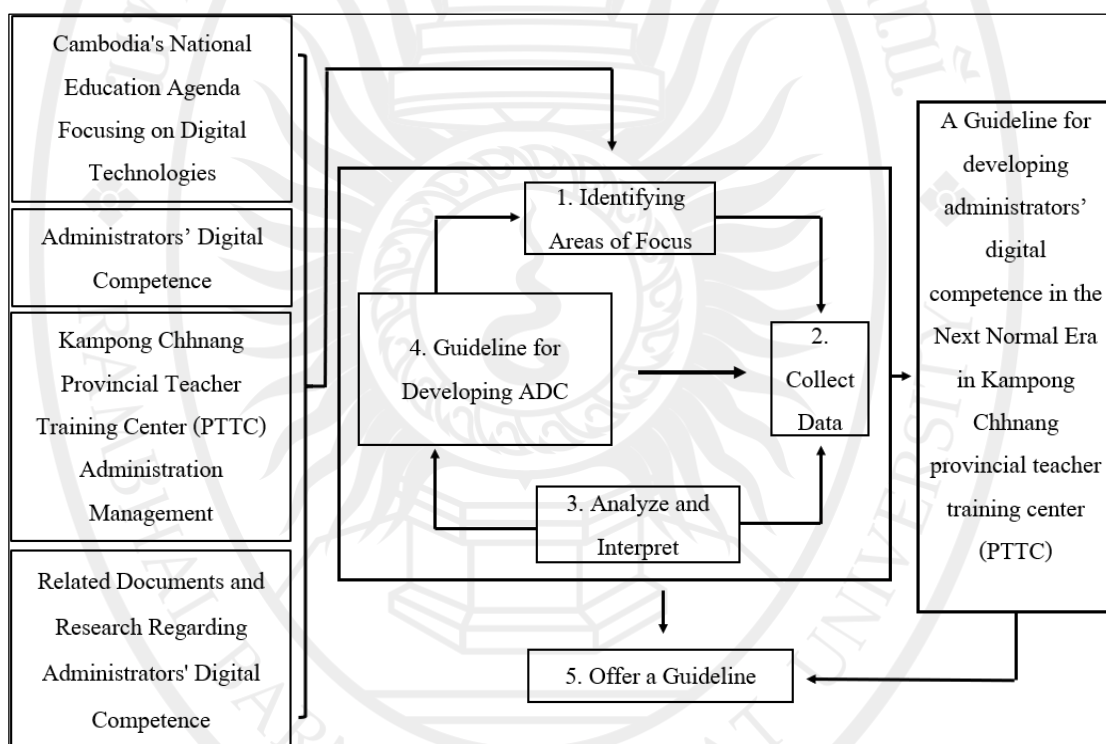
**Digital Competence** is defined as the capacity to confidently utilize electronic media for work, entertainment, and communication, in addition to logical and critical thinking, managing information, and high-level communication skills.

**Next Normal Era** time before COVID-19 and the post-eradication world in which everything will return to normal.

### **Research Conceptual Framework**

The research aims to study, analyze, and offer a guideline for developing administrators' digital competence in the next normal era in Kampong Chhnang Provincial Teacher Training Center (PTTC), Cambodia. The researcher has studied, analyzed, and summarized the concepts of previous studies such as (Heng 2021 : 3) ; (Richardson. 2008 : 72) ; (MoEYS. 2018 : 2-3) ; (Dionys. 2012) ; (Mathew and et al. 2009 : 2) ; (Heng and Sol. 2021 : 34) ; (Phonnong and Keeratichamroen. 2022 : 15) ; (Kanoksilapatham. 2022 : 346) ; (Joungtrakul and et al. 2021 : 31) ; (Banga and Velde. 2020 : 1) ; (Em. 2023 : 1) ; (IIEP-UNESCO. 2020) ; (Park. 2016 : ) ; (Nguon. 2015 : 60) ; (MoEYS. 2004 : 14) ; (MoEYS. 2021 : 5) (UNESCO. 2020 : 6) ; (Lindley. 2009 : 4) ; (Surya.2011) ; (Sonsaard and Darbavasu. 2019 : 528) ; (Serhan. 2019 : 29) ; (Sombunsin and Wannasri. 2022); (T Bashkireva and et al. 2020 : 4); (Ilomäki and et al. 2011 : 8); Techataweewan and Prasertsin (2017 : 217) ; (Van Dijk J.A.G.M van Deursen A.J.A.M. 2014) ; (Garcia and et al. 2021 : 198) ; (Centeno and et al. 2019 : 3) ; (Tsankov and Damyanov. 2019 : 4) ; (García and et al. 2023) ; (Guitert and et al. 2020 :

1) ; (Redecker. 2017) ; (Kelentric and et al. 2017 : 1) ; (Krumsvik. 2011 : 48-49) ; Calvani and et al. (2010 : 161-162) ; (Sá and Serpa. 2020) ; (Gewerc and et al. 2020 : 374) ; (Trubavina and et al. 2021 : 4) ; (Moreno and et al. 2021 : 13) ; (Cho F and Nagoya C K (2018 : 1) ; (Luk and et al. 2022 : 30) ; (PTTC. 2019) ; (PTTC. 2020) ; (PTTC. 2022) ; (PTTC. 2023) ; (Llomaki and Lakkala. 2018) ; (Apsorn and et al. 2019) ; (Soeung and Chim. 2022) ; (Asio and Bayucca. 2021) ; (Oznacar and Dericioglu. 2017) ; (Yuliani and et al. 2023) ; (Rina and Sugiarto. 2022) ; (Ellis and et al. 2021) ; (Luecha and et al. 2022) ; (Suksai and et al. 2021) ; (Balakrishnan, 2023) and developed the conceptual framework shown in the following diagram (Figure 1).



**Figure 1** Conceptual Framework