CHAPTER 5

CONCLUSION DISCUSSION AND RECOMMENDATIONS

The research study "A Guideline for Developing Administrators' Digital Competence in the Next Normal Era at Kampong Chhnang Provincial Teacher Training Center, Cambodia", the researcher presents the conclusion, discussion, and recommendations as the following.

Conclusion

The research study objectives were: 1) To study administrators' digital competence in the Next Normal Era in Kampong Chhnang Provincial Teacher Training Center (PTTC), 2) To analyze administrators' digital competence in the Next Normal Era in Kampong Chhnang Provincial Teacher Training Center (PTTC), and 3) To offer a guideline for developing administrators' digital competence in the Next Normal Era in Kampong Chhnang Provincial Teacher Training Center (PTTC). To archive the research objectives, the researcher used a qualitative method to conduct the study and adjusted a dialectic of the research spiral from a guide for the teacher researcher (Mills. 2018 : 25–27) and the action plan development of a private vocational school using a balanced scorecard approach with soar analysis (ChansongAeng. 2018 : 120), which consists of 5 steps: 1. Identifying an area of focus 2. Collect data; 3. Analyze and interpret data; 4. A Guideline for Developing Administrators' Digital Competence (ADC), and 5. Offering a Guideline for this research study. In-depth interviews and focus groups were used in data collection.

The concentration population was to study administrators' digital competence in the Next Normal Era in a teacher training center, not as a whole educational systematic intervention. The study was conducted at Kampong Chhnang Provincial Teacher Training Center (PTTC), Cambodia. The population of the study consisted of administrators, technical supervisors, and teacher trainees who are currently working and studying at the training center. The key informants were 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 a sample because the researcher believes such participants are significant enough to include (Taherdoost. 2016 : 23). The key informants were chosen based on the researcher's assessment of who could provide the best

information for the research study's objectives. As a result, the researcher selected 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 began in the second year and enrolled in a computer course at the training facility, as the key informants. So, in total, there were 15 key informants selected: 7 administrators, 4 technical supervisors, and 4 teacher trainees.

Based on the findings, the digital performance of administrators at Kampong Chhnang Provincial Teacher Training Center consists of five key areas: Information and Data Literacy, Communication and Collaboration, Digital Content Creation, Safety, and Problem Solving. Furthermore, the administrators had a positive attitude toward developing digital competence, as reflected in their regular use of tools such as smartphones, Telegram, Facebook, and Messenger for communication and coordination. Despite this positive outlook, it indicated that their actual competence in these five key areas was limited, particularly in areas involving advanced tools, content creation, secure digital practices, and independent problem-solving. Therefore, they need to be supported in terms of building the skills and sharpening their mindset to use digital technology so they can engage themselves more effectively and proactively. The guideline for developing administrators' digital competence in the next normal era in Kampong Chhnang Provincial Teacher Training Center is followed by three main factors: 1) stakeholder support; 2) teacher training center policy and strategic plan; and 3) administrators' personal vision.

It is essential to start with the stakeholders, particularly those relevant ministries and departments that can empower the teacher training center. They need to provide guidance and resources regarding the use of ICT to the teacher training center. The center therefore has to be responsive and make an attempt to include ICT use within the center. It must set up policy and strategy planning for the center in order to advocate using digital technology at school, particularly having a common vision for administrators and personnel to engage themselves in using digital technologies. The administrators, meanwhile, need to have a personal vision in terms of shaping personal and professional growth since this will motivate them to embrace new practices, particularly digital technologies, which have influenced and been integrated into Cambodian education in the digital era.

Discussion

The researcher studies, analyzes, and offer a guideline for administrators' digital competence in the Kampong Provincial Teacher Training Center regarding five main areas: 1) Information and Data Literacy, 2) Communication and Collaboration, 3) Digital Content Creation, 4) Safety, and 5) Problem Solving.

In Information and Data Literacy area, administrators use social media and online platforms are the sources of information in the digital era. Similarly, one of the research reports prepared by JSBP (2021) had a similar finding regarding applications and online platforms used in school, as it found that Zoom is commonly used for online study, Telegram is the primary platform to share files and documents as it maintains a high solution, YouTube is for extra research, and Google is another option for gathering information. Even though gathering information is a great source for learning and school development, it is also important to know which information is trustworthy and can be used. To ensure its reliability, administrators rely on various evidence, such as information posted on the websites, which includes accurate sources, authors' names, a clear location with an address, the' institution's name and logo, an account recognized by the ministry with a legal license, and a seal from the president of the institution. It indicates that in order to determine whether or not they can trust the news, it is imperative that they obtain proof from the uploaded information. As Vedder and Wachbroit (2003 : 212) suggested, to know whether the information is reliable, it would depend on the available evidence and how that evidence supports the information.

In Communication and Collaboration area, administrators use social media to communicate with each other, and it is considered a quick and popular platform for communicating. (Ihsaniyati and et al. online.2023) conducted a study and revealed that the use of social media for knowledge sharing in the context of development, communication, and social change is significant, interesting, and in demand by many people. Even though there are various platforms used for communication, Telegram is found to be the primary one because it is easy to use and can hold a large number of documents safely and clearly. Slimily, (Filatova and et al. online.2023) discovered that the Telegram bot is one of the most convenient and simple services for automating the work of a specialist in an educational institution. The bot allows you to get an instant response to a request without requiring the participation of any other person, while the response is instant.

In the Digital Content Creation area, administrators create educational content by using the internet as a source of information, and digital devices are the supporting tools. Likewise, (Szymkowiak and et al. online.2021), the advancement of technology has had an effect on how we learn and gather knowledge. The Internet, on the other hand, provides instant access to information technology across a range of industries, which boosts productivity and saves time. The use of internet technology is given special attention in new approaches to learning and education. Even though the internet has made it easy to access information and sources, it is important to keep in mind that the source of the information must be acknowledged. When it comes to giving credit to sources, administrators affirm by putting the source in brackets or making it bold, including references, listing the authors' names, listing page numbers, confirming with the documents' logo, and indicating the documents' sources. It proves that administrators are aware of the implications of using the source they obtained and what makes it a reliable source of information. In the same way, (Santini. online. 2018) presented that good referencing includes attention to detail, such as the correct page number, the spelling of the author's names, and the accuracy of relevant facts that will be stated in the paper. Attention to referencing not only makes you a better researcher, but it also enhances your reputation amongst editors, reviewers, and readers.

In the Safety area, administrators at the Kampong Chhnang Provincial Teacher Training Center find that it is important to protect their privacy because it can prevent various risks, such as preventing their personal data from being hacked, preventing their digital devices from opening freely, and keeping documents and information safe. Although the outcome indicates that administrators are aware of the necessity to secure their personal data, technological advancements also require them to have a solid foundation in abilities. Torres and Gallego (2023 : 399) stated that a modern phenomenon called "data culture" encourages us to consider how we value our data. However, despite the fact that technology offers a lot of benefits for education, it also creates data in volumes that were unimaginable in the past. Given this approach, educators' attempts to secure data are more vulnerable, partly as a result of a lack of preparation. In order to protect their devices, administrators use different approaches, such as setting passwords, installing antivirus protection, clearing viruses often, shutting the devices correctly, beware of using plugs, cleaning dust from the devices, keeping the devices in a safe and clean place with a good temperature, and turning off the devices when they are not in use. Meanwhile, they mention viruses that propagate over the internet

and USB, as well as frequent power outages in their region, as the causes of the damage to the digital devices. When asked what may help them deal with all the hazards, they mostly focus on developing new abilities so they can share their experiences and knowledge with one another.

In Problem Solving area, administrators have used their own initiative when faced with technological difficulties. Instead of abandoning their task, they seek further assistance to address the problem at hand. To improve their digital competence, all components of the innovative digital education concept, which can improve people's competence, must be taken into consideration based on their identified demands. Similarly, Ilomäki and Lakkala (2018 : 28) suggested that when aiming for improvements, local and national school administrations focus on schools as knowledge work organizations, such as increasing the quality of pedagogical and knowledge practices in schools using digital technology. All aspects of the innovative digital school model should be considered, and the first step should be to commit the staff to change by developing shared visions and goals for pedagogical development through digital technology and by supporting school-level practices that include both students and teachers.

Even though digital technology was found to be integrated to be used at the center, the findings, however, show that all the administrative tasks have not yet been completely implemented by using technology, as the competence of the administrators and personnel in the center is still limited and needs further training and encouragement to get engaged with digital use in education. Based on the study and analysis, the researcher suggested a conceptual comprehension in the following, as shown in Figure 5.

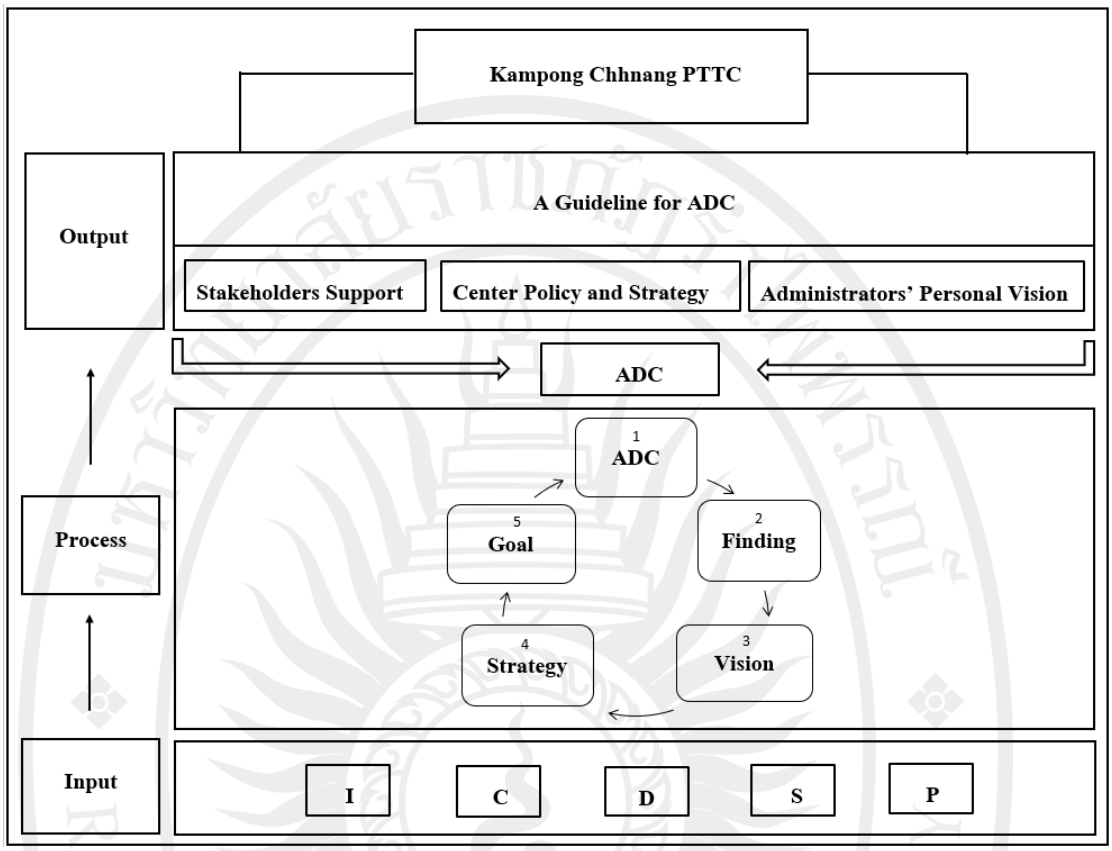

Figure 5 Conceptual Comprehension

It begins with identifying an area of focus, which consists of five main areas: Information and Data Literacy (I), Communication and Collaboration (C), Digital Content Creation (D), Safety (S), and Problem Solving (P). They are the essential aspects to consider in order to develop administrators' digital competence. Similar to one of the European reports, it indicates that these skill agendas were created for improving the quality and relevance of training and other methods of acquiring skills, making skills more visible and comparable, and improving information and understanding of skill intelligence to help people make better career choices, find quality jobs, and improve their life chances (Centeno and et al. 2019 : 3).

Then it is followed by the process, which consists of the following components: identifying an area of focus (ADC), finding, vision, strategy, and goal. After identifying the ADC, it discovers a finding that indicates that, although administrators in the Kampong Chhnang provincial teacher training center have a positive attitude toward digital technology, their current level of skill sets needs further development. Consequently, establishing a shared vision matters for the teacher training center in order to develop school administrators' digital competence. Likewise,

Llomaki and Lakkala (2018) suggested that when aiming for improvements, local and national school administrations focus on schools as knowledge work organizations, such as increasing the quality of pedagogical and knowledge practices in schools using digital technology. All aspects of the innovative digital school model should be considered, and the first step should be to commit the staff to change by developing shared visions and goals for pedagogical development through digital technology and by supporting school-level practices. Following this, it comes up with a strategy in which the center needs to pay attention to providing guiding material and assistance, providing training courses, ensuring digital devices, ensuring internet access, ensuring electricity, and providing emotional support. These are critical factors to address in order to develop administrators' digital competence in the Kampong Chhnang provincial teacher training center.

In a comparable manner, (Apsorn and et al. online.2019) stated the components of ICT school administrators' leadership should include developing plans for improving administrators' and supporting staff's technological skills; managing, supporting, and facilitating an atmosphere conducive to the use of ICT; and providing information technology (IT) resources. Additionally, this approach can help direct the way to accomplish the goal of developing administrators' digital competence in Kampong Chhnang Teacher Training Center regarding five main areas of focus: Information and Data Literacy, Communication and Collaboration, Digital Content Creation, Safety, and Problem Solving.

To accomplish the goal, having a guideline for developing administrators' digital competence is necessary. It is essential to start with the stakeholders, particularly those relevant ministries and departments that can empower the teacher training center. They need to provide guidance and resources regarding the use of ICT with strong support and encourage the center to have further engagement for the benefit of advancing the administrators' profession and enhancing their school administration management. As Heng (2021) mentioned, the use of Information and Communications Technology (ICT) in Cambodia's education system remains restricted, and the government must engage in digitalizing education, supporting Information and Communications Technology (ICT) research and development, increasing public-private partnerships, encouraging autonomous learning, and enabling the adoption of blended learning. Stakeholders such as educational institutions, instructors, parents, students, and the commercial sector will also play an

important part in realizing Cambodia's digital transformation of education. Meanwhile, the ministry of education in Cambodia has designed and implemented a strategy to accelerate education in Cambodia at all levels so that students, educators, and administrators can use Information and Communications Technology (ICT) and digital tools not only for study and work but also for their careers (MoEYS 2018).

The center therefore has to be responsive and make an attempt to include ICT use within the center. It must provide additional courses to help administrators sharpen their skills and ensure enough technical equipment, wifi, and electricity to support practice and work. More importantly, there needs to be experts that can help them hand in hand once they encounter technical issues. Further motivation and encouragement from the leaders are also necessary, as it is a great inspiration for administrators to learn and keep themselves updated with technological advancements. This aspect aligns with one of the goals and strategies of the center, which is to enhance the level of all staff members, including administrators, by providing further training, including digital technologies (PTTC. 2023). Meanwhile, Soeung and Chim (2022) proposed that, for school resumption, a digital working environment be fostered at the school level for both teachers and school administration staff. Training, internet connection infrastructure (hardware and software), digital competence, and the teaching and learning tactics of academics are all critical (Sá and Serpa. online.2020). The entire school administration must be better prepared and taught to function digitally, and 3) Adapt content and curriculum: Once administrative capability is established, one believes that the emphasis may shift to effectively adapting material for digital platforms (IIEP-UNESCO online.2020).

The administrators, meanwhile, need to have a personal vision in terms of shaping personal and professional growth since this will motivate them to embrace new practices, particularly digital technologies, which have influenced and been integrated into Cambodian education in the digital era. Along with that, they need to continue to keep up with the latest technological advances. Apart from this, they need to develop themselves by doing extensive research on the internet and other online platforms such as YouTube and Google and gathering any general knowledge posted on social media such as Facebook, TikTok, Telegram, or any other platforms that are popular and easy for them to access. In addition, they need to put effort into

practicing and using technology for their job, a hobby, or online portfolios. More significantly, they need to be willing to learn new things and attend any extra courses prepared by the center and other relevant stakeholders regarding digital technologies. Gewerc and et al. (2020) indicated that teleworking abilities, self-regulated learning skills of the individual engaged in digital environments all of these variables reveal a desire for deep, critical, and ongoing learning that will enable people to stay in control of their own lives. According to, (Ilomäki. online. 2011) one of the components of digital competence is motivation to participate in the digital culture while Van Dijk and Deursen (2014) raise similarly that the most natural approach to learn digital technologies is to do and seek supports from others in their social surroundings.

Recommendations

Stakeholders

- Provide guidance and resources regarding the use of ICT for the Teacher Training Center.

- Support and advocate digital technologies within the Teacher Training Center.

Teacher Training Center

- Be responsive and make an attempt to include ICT use within the center.

- Set up policy and strategy planning particularly having a common vision for administrators to engage themselves in using digital technologies.

- Provide additional courses to help administrators sharpen their skills.

- Ensure enough technical equipment, wifi, and electricity to support practice and work.

- Provide experts that can help them hand in hand once they encounter technical issues.

- Motivation and encouragement administrators and personnel to engage themselves in using digital technologies.

Administrators

- Establish a personal vision to shape personal and professional growth.

- Keep up with the latest technological advances.

- Do extensive research on the internet and other online platforms.

- Put effort into practicing and using technology for their job, a hobby, or online portfolios

- Be willing to learn new things and attend any extra courses prepared by the center and other relevant stakeholders regarding digital technologies.

Further Research

- The larger population and key informants can be expanded.

- Different approaches may be tried in the future since they may reveal additional factors.

- Be well prepared, be more attentive, and coordinate with the interviewee when any of them express longer than the time provided.

- A friendly rule can be established before the interview, depending on the actual situation.