

INVESTIGATING THE DIGITAL TECHNOLOGY COMPETENCE OF PHILOLOGY TEACHERS AT THE SECONDARY SCHOOL LEVEL IN SOME PROVINCES IN THE NORTHERN MOUNTAINOUS REGION OF VIETNAM

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ABSTRACT

In recent years, in order to adapt to the situation of teaching and learning in the context of the Covid-19 pandemic and enhance digital transformation in education, many schools have focused on improving the digital technology competence of teachers. In addition to regularly improving professional competence, teachers also need to actively train themselves in information technology to be able to perform their duties well in a digital society. This article only focuses on investigating the digital technology competence of Philology teachers at the secondary school level in some provinces in the northern mountainous region of Vietnam. The survey results show that although teachers have tried very hard to access and improve their information technology competence, there are still many limitations in its application in teaching due to both objective and subjective conditions.

Key Words: Competence, Digital Technology, Teachers, Philology, Ethnic Minorities.

1. INTRODUCTION

The application of information technology in teaching is an inevitable trend in education. It makes the teaching and educational process more effective and convenient. Besides, it not only ensures uniformity and consistency among localities and levels but also shapes development trends in terms of goals, contents, forms, and ways of organizing activities in teaching and educating students...

The role of the application of information technology in teaching and education has been clearly confirmed: "It is identified as one of the fields with social impact, people's daily life, change perception fastest, bring efficiency and help save costs. The education sector has increased the application of information technology from basic to advanced levels, ensuring that schools have websites, Internet connections, computer labs, presentation equipment, and digital transformation in teaching" [Module 9; p. 47]. To increase the application of information technology in schools, it is necessary to pay attention to the digital competence of teachers. Teachers' digital competence is understood as their responsiveness to teaching and working in a digital society. Philology in secondary school is defined as a compulsory subject. It takes up a lot of time and is paid great attention by teachers and students. If the application of information technology is good, the subject will help to form the competence and good qualities of students, and at the same time create attractiveness and high efficiency for the subject. In mountainous areas with difficult socio-economic conditions and many limitations in the lives of ethnic minorities, improving the digital competence of teachers is important, but it also faces many challenges. After the recent Covid pandemic, teachers in this area are aware of the importance of information technology in teaching and education, so they have made a lot of efforts in improving their digital

technology competence to meet the educational requirements in a variety of contexts. In this article, we conduct a study on the digital competence of Philology teachers at the secondary school level in some provinces in the northern mountainous region of Vietnam.

2. RESEARCH METHODS

In the research process, we use theoretical research methods (analysis, synthesis, statistics, classification...) and practical research methods (observation, survey, etc.). We synthesize and analyze relevant documents, thereby giving directions for our research. We observe the teaching and learning activities of teachers and students; conduct surveys and collect opinions on necessary content. After the survey results are available, we conduct statistics, classification and synthesis to draw appropriate conclusions.

We have interviewed 274 teachers of Philology at the secondary school level in mountainous provinces in the North of Vietnam such as Cao Bang, Bac Kan, Lang Son, Tuyen Quang, Ha Giang, Thai Nguyen... The area we surveyed is a mountainous area with many difficulties, with many ethnic minorities living, such as Mong, Dao, Tay, Nung, San Diu, Lo Lo... The teachers we selected are those who are from ethnic minorities and currently teaching Philology at secondary schools in mountainous areas with difficulties. We conduct surveys in many different forms, such as face-to-face, email, telephone, sending and receiving ballots by post, using Google Form tool...

The main topics we are interested in collecting opinions are:

1/ Investigating teachers' conditions for teaching using digital technology: Do you use technological platforms, such as Google, Zalo, Facebook, Microsoft... to connect with people? Have you participated in online teaching at the secondary school level? Have you participated in online teaching of Philology at the secondary school level? Do you use LMS hosting? Do you use the internet to explore course materials? To teach online, how often do you use a laptop? Do you use any form of Wifi connection to participate in online teaching?

2/ Investigating software commonly used by teachers in teaching Philology at the secondary school level: Have you participated in online teaching using Zoom supporting tool? Have you participated in online teaching using Microsoft Teams supporting tool? Have you participated in online teaching using the Google Meet supporting tool? Have you participated in online teaching using Skype supporting tools? Have you participated in online teaching using Zalo supporting tool? Have you participated in online teaching using Facebook supporting tools?

3/ Investigating the effectiveness of using digital technology in teaching Philology at the secondary school level: Please rate the utility for dialogue in the online classroom; Please rate the extent to which students engage in dialogue in the online classroom; Does online teaching make learning interesting for students? Does online teaching encourage students' analytical and critical thinking? When teaching online, do you provide guidance, advice and orientation for students? Does online teaching facilitate practice, application, testing, and assessment? Does online teaching enhance students' self-study and self-research competence? Does online teaching help make learning resources richer? Please rate your level of mastery of technical problems during online teaching hours; Please rate the level of helping students actively learn during your online teaching hours; Please rate the level of helping students confidently present and express their opinions in the online teaching hours; Please rate the level of control and regulation of the amount of information exchanged during your online teaching hours...

3. CONTENT

3.1. Survey results

The results of investigating teachers' conditions for teaching using digital technology are presented below.

Question	Level		
	<i>Usually</i>	<i>Sometimes</i>	<i>Never</i>
Do you use technological platforms, such as Google, Zalo, Facebook, Microsoft... to connect with people?	86.1%	13.1%	0.8%
Have you participated in online teaching at the secondary school level?	41.6%	40.9%	17.5%
Have you participated in online teaching of Philology at the secondary school level?	40.1%	38%	21.9%
Do you use LMS hosting?	21.2%	50.4%	28.4%
Do you use the internet to explore course materials?	86.1%	13.1%	0.8%
To teach online, how often do you use a laptop?	87.6%	5.1%	7.3%
Do you use any form of Wifi connection to participate in online teaching?	89.8%	9.5%	0.7%

The results of software commonly used by teachers in teaching Philology at the secondary school level are presented below.

Supporting tools	Level			
	<i>Never</i>	<i>Seldom</i>	<i>Usually</i>	<i>Always</i>
Have you participated in online teaching using the Zoom supporting tool?	15.3%	27%	47.4%	10.3%
Have you participated in online teaching using the Microsoft Teams supporting tool?	29.2%	41.6%	22.6%	6.6%
Have you participated in online teaching using the Google Meet supporting tool?	17.5%	30.7%	41.6%	10.2%
Have you participated in online teaching using Skype supporting tool?	65.7%	29.2%	5.1%	0%
Have you participated in online teaching with Zalo supporting tool?	14.6%	32.8%	40.1%	12.5%
Have you participated in online teaching using Facebook supporting tool?	38.7%	46%	13.1%	2.2%

The results of teachers' opinions on the effectiveness of using digital technology in teaching Philology at the secondary school level are presented below.

Content rated	Level				
	<i>Very weak</i>	<i>Weak</i>	<i>Average</i>	<i>Good</i>	<i>Very good</i>
Question 14: Please rate the utility for dialogue in the online classroom.	0%	2.2%	45.3%	48.2%	4.3%

Question 15: Please rate the extent to which students engage in dialogue in the online classroom.	1.5%	2.9%	63.5%	29.2%	2.9%
Question 16: Does online teaching make learning interesting for students?	0%	4.4%	64.2%	29.9%	1.5%
Question 17: Does online teaching encourage students' analytical and critical thinking?	0%	6.6%	67.9%	24.8%	0.7%
Question 18: When teaching online, do you provide guidance, advice and orientation for students?	0%	0%	32.1%	65%	2.9%
Question 19: Does online teaching facilitate practice, application, testing and assessment?	1.5%	5.1%	56.9%	34.3%	2.2%
Question 20: Does online teaching enhance students' self-study and self-research competence?	0%	5.1%	64.2%	27.7%	3.0%
Question 21: Does online teaching help make learning resources richer?	0%	0.7%	41.6%	54%	3.7%
Question 22: Please rate your level of mastery of technical problems during online teaching hours.	0%	1.5%	50.4%	46.7%	1.4%
Question 23: Please rate the level of helping students actively learn during your online teaching hours.	0%	2.2%	59.9%	37.2%	0.7%
Question 24: Please rate the level of helping students confidently present and express their opinions in the online teaching hours.	0%	2.2%	55.5%	40.1%	2.2%
Question 25: Please rate the level of control and regulation of the amount of information exchanged during your online teaching hours.	0.7%	0.7%	54.7%	42.3%	1.6%

3.2. Comment

- Most of the teachers have equipped themselves with equipment to be able to apply information technology in teaching such as laptops and Internet connection service. Most of the teachers have access to and use the software for online teaching and the Internet to exploit documents. However, due to the difficult conditions of students in the area, many students do not have Internet, smart phones, computers, etc., so it is also difficult for teachers to teach online and apply information technology to improve teaching quality. The level of application of the software also stops at a normal level, mainly to connect with others, but not yet usable at a high and complex level.

- Teachers also only use software that is inexpensive, supported and easy to use, such as Zoom, Google Meet, Facebook, Zalo... This is also due to their poor economic conditions and low level of information technology application.

- Teachers always try to prepare, guide and orient students but still not really effective because ethnic minority children in mountainous provinces are often afraid to communicate, so the

interaction, dialogue and criticism ... in online classes are often limited, requiring teachers to work harder to keep students interested.

- Teachers have only applied software for the transmission of one-way knowledge, but have not yet exploited the software to perform testing, assessment, increase student interaction and create attractiveness for class. Students' self-study ability is not promoted. Teachers are still limited in the application of information technology in testing and assessment, encouraging students to self-study. This is also a limitation that needs to be overcome and fostered by teachers.

- Teachers have prepared and tried, but on the student's side, there is still a lack of initiative, confidence, and the ability to self-study well. Therefore, the teaching effect will not be good.

3.3. Solutions

In order to effectively apply information technology in teaching and learning, Philology teachers need to be conscious to regularly self-study and improve their digital technology competence.

Teachers need to have specific and detailed instructions for students in preparing lessons and assigning tasks to individuals and groups so that students can be more active in performing learning tasks.

Teachers should flexibly combine methods, a variety of software and teaching equipment. Based on the specific conditions of each student, they need to have appropriate teaching methods and flexible and diverse forms of assessment to help improve students' learning competence and efficiency.

Teachers should be flexible and creative to design and organize learning activities for students, thereby helping students to be confident and active in the learning process. Besides, teachers should coordinate with students' families to manage and capture students' emotions, learning situation, and encourage students to actively participate in learning activities.

With the goal of "Improving online teaching skills for teachers, adjusting the organization of online teaching in the direction of increasing the active working time of students, reducing the time of real-time connection..." [2; 5], in recent years, the education sector has organized many training courses for teachers to help them to choose and use a number of tools and information technological platforms for teaching and education.

4. CONCLUSION

Teaching and learning in the new era requires teachers and students to change their perception to adapt "Like many other subjects, teaching equipment for the subject of Philology is necessary in the context of audio-visual development. In view of the developing world, the application of multimedia in solving learning and labor problems is being focused, especially in approaching the industrial revolution 4.0" [3; 34]. In the current context, the requirements for teachers in general and teachers of Philology in particular are increasing, requiring them to regularly self-improve their competence. The strong development of information technology has helped teachers with many advantages but also created many challenges. To teach well, teachers need to have an appropriate digital competence foundation. In the northern mountainous area, there are still many difficulties, to help teachers perform their duties well, it is necessary to have the help of the education sector and the local government to strengthen the facilities and organize practical courses for teachers.

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