

MANAGING ONLINE TEACHING ACTIVITIES AT VOCATIONAL COLLEGES: CURRENT STATUS, POSITION, ROLE AND SOLUTION ORIENTATION

GESTÃO DE ATIVIDADES DE ENSINO ONLINE EM FACULDADES PROFISSIONAIS: ESTADO ATUAL, POSIÇÃO, PAPEL E ORIENTAÇÃO PARA SOLUÇÕES

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ABSTRACT

Online teaching activities in recent years have achieved certain results. Most teachers and administrators of colleges and intermediate schools have practical experience in online training. However, this activity is still not highly effective due to a lack of systematicity and synchronization. Specifically, technical means for teaching and learning in difficult and remote areas are inadequate; Online teaching methods are unattractive. Besides, the classroom management method is not really appropriate. Based on an overview of previous studies, 203 people were surveyed (n = 203); in which, the management staff is 22 people (n1=22), the lecturers of vocational colleges are 181 people (n2=181). This study shows that if we want to improve online teaching activities at Vocational education establishments need to have appropriate management measures. This study also clearly shows the role and importance of managing online teaching activities at vocational education institutions. At the same time, based on assessing the current situation and analyzing the causes of problems, this study recommends management solutions to improve the quality of online teaching activities at vocational education institutions.

Keywords: Management, management measures, online teaching activities, vocational colleges.

RESUMO

As atividades de ensino online nos últimos anos têm alcançado determinados resultados. A maioria dos professores e administradores de faculdades e escolas intermediárias possui experiência prática em treinamento on-line. No entanto, esta actividade ainda não é altamente eficaz devido à falta de sistematicidade e sincronização. Especificamente, os meios técnicos para o ensino e a aprendizagem em áreas difíceis e remotas são inadequados; Os métodos de ensino online não são atraentes. Além disso, o método de gestão da sala de aula não é muito adequado. Com base numa visão geral de estudos anteriores, foram entrevistadas 203 pessoas (n = 203); em que o quadro de gestão é de 22 pessoas (n1=22), os docentes das escolas profissionais são 181 pessoas (n2=181). Este estudo mostra que se quisermos melhorar as atividades de ensino online nos estabelecimentos de ensino profissional necessitamos de medidas de gestão adequadas. Este estudo também mostra claramente o papel e a importância da gestão das atividades de ensino online nas instituições de ensino profissional. Ao mesmo tempo, com base na avaliação da situação atual e na análise das causas dos problemas, este estudo recomenda soluções de gestão para melhorar a qualidade das atividades de ensino online nas instituições de ensino profissional.

Palavras-chave: Gestão, medidas de gestão, atividades de ensino online, escolas profissionais.

Introduction

In the era of the fourth industrial revolution (4.0) with the strong development of information and communication technology, especially in the context of epidemics, natural disasters, etc. Online teaching is an inevitable trend in the education industry in general, and vocational education institutions in Ho Chi Minh City in particular because of its superiority such as flexibility, ease of access; rich content; saving costs and time; global; meets the diverse learning needs of learners very well. Online teaching was born as a revolution in teaching and learning, becoming an inevitable educational trend of the era, of education (4.0), this educational trend is “exploding” in many countries around the world, especially in the current context of globalization.

In recent years, due to the impact of the Covid-19 pandemic, many schools have switched to online teaching. Initial online teaching activities have achieved certain results. Online teaching, from its passive birth in the context of the epidemic, has transformed into a new teaching method, adapted to the information technology era. Thanks to online teaching, the information technology competency level of teachers and students has been improved, and the outstanding advantages of online teaching have been discovered. However, the birth of online teaching is mainly to

handle situations where students cannot attend school because of the pandemic. The birth in such a context makes online teaching contain inadequacies right in the process of formation, online teaching is carried out without systematicity, or synchronization and is not highly effective (Institute for Research Education Development Cooperation, 2022, p.74). The cause of that situation is mainly due to management. That creates the need to research, summarize, and evaluate the current situation, find the causes of advantages and limitations, draw practical lessons, and adjust management methods in online teaching (Thuan & LongAn, 2022).

In the future, with the development of information technology, online teaching will become an official teaching channel that exists alongside face-to-face teaching. Online teaching will have new and more diverse developments. Many subjects and teaching content will be digitized and included in the school's regular online teaching (Institute for Research and Development of Education Cooperation, 2022, p.24). That raises the need to research and find management solutions to anticipate the development of online teaching to meet the requirements of the fourth industrial revolution. If you want to improve the quality of online teaching, you must first find an online teaching management method that is suitable for practice (Duchiep, et al., 2022).

To address the issues raised, this study focuses on addressing the following specific questions:

What is the position and role of online teaching activities and management of online teaching activities at vocational education institutions in the context of educational innovation?

What are the causes of shortcomings and weaknesses in the management of online teaching activities at vocational education institutions in the context of educational innovation?

What measures are needed to improve the quality of online teaching management at vocational education institutions in the current context of educational innovation?

Literature Review

Context of educational innovation

Vietnam education (including training, hereinafter referred to as education) has achieved many achievements and results, making an important contribution to the victory of building and defending the Fatherland. However, in the process of development, education has revealed weaknesses and inadequacies, including issues that cause lasting social frustration and have not met the requirements of industrialization modernity internationalization, and integration. Educational innovations in recent times have been inconsistent and patchy; many policies, mechanisms, and solutions on education that were once effective have now become no longer suitable for the country's new development stage and need to be adjusted and supplemented.

The work of building and protecting the Fatherland in the new situation, especially the requirement to transform the growth model in depth and restructure the economy towards quality, efficiency, and high competitiveness, requires education must meet the diverse learning needs of the people, quickly contributing to creating a high-quality workforce. If we do not fundamentally and comprehensively innovate education and training, human resources will be a factor hindering the country's development.

Our country is in the process of increasingly deepening international integration; the rapid development of science and technology, educational science, and fierce competition in many fields between countries require education to innovate. Today's essence of competition between countries is competition in human resources, science, and technology. The general trend of the world entering the 21st century is to carry out strong innovation or educational reform.

Faced with the above reality, the Resolution of the XIth National Party Congress (2011) determined to "Fundamentally and comprehensively innovate education in the direction of standardization, modernization, socialization, democratization, and international integration" and "Rapidly develop human resources, especially high-quality human resources, focusing on fundamentally and

comprehensively innovating the national education system". At the same time, Resolution No. 29-NQ/TW (2013) "On fundamental and comprehensive innovation of education and training, meeting the requirements of industrialization and modernization in the context of a market-oriented economy Socialism and international integration" was approved by the 8th Central Conference (term XI).

Fundamental and comprehensive reform of education is an extremely important task. The Central Government issues a Resolution to unify awareness and action; promote the intelligence of the entire Party and the entire people, and mobilize resources with the coordination of many agencies, departments, and social organizations for the cause of education. Fundamental and comprehensive innovation in education and training is innovation of major, core, and urgent issues, from perspectives and guiding ideas to goals, content, methods, mechanisms, policies, and conditions to ensure implementation; innovation from the Party's leadership, the State's management to the governance of educational and training institutions and the participation of family, community, society and the learners themselves; innovation at all levels and majors. Innovate to create strong changes in the quality and effectiveness of education, better meeting the requirements of the cause of building and protecting the Fatherland, and the learning needs of the people.

Concept of online learning

Online learning (E-Learning) is a form of learning that has appeared under the development of information technology. In it, learners will participate in virtual classes on the Internet instead of going to traditional physical classes. Below are some examples that will help learners understand better.

According to Van, D. D. (2018), the impact of the 4.0 Industrial Revolution on online teaching today, along with the application of IoT technology in developing digital teaching and virtual reality technology in teaching will almost completely change the form of teaching in universities. In teaching activities, the role of lecturers will gradually shift from imparting knowledge to guiding students to

discover new knowledge. At the same time, teaching management must also change in an open and flexible direction to meet the diverse learning needs of learners.

According to Hong, B. V. (2019), Industrial Revolution 4.0 is based on the integration of a series of technologies such as artificial intelligence, the Internet of Things/IoT, big data, and cloud computing. (cloud computing), etc. is growing very quickly and has a strong impact on all aspects of socio-economic life, including the field of online training.

Based on practical surveys as well as inheriting research from colleagues, it shows that currently, online teaching activities are divided into two forms, which are:

Real-time online learning: Teachers and learners will interact in real time through chat applications and online conferences. This form is similar to the traditional teaching method. Participants can be flexible about their study location (Duc, 2018; Tran, 2019; Institute for Educational Development and Cooperation Research, 2022; Van, 2022a).

Study available courses: Learners will participate in pre-designed courses via video. The instructor will teach the lecture content in the video, then there will often be some exercises to test knowledge. Depending on the course, learners can take the exam to get a certificate (Hong, 2018; Tran, 2019; Institute for Educational Development and Cooperation Research, 2022). With this form of learning, learners just need to log in to their account to study anytime, anywhere, easily review lectures, and perform review exercises many times.

Advantages and disadvantages of online learning

About advantages:

Save time and study costs: Learners and teachers will not waste time traveling from home to class. For those who go to school or teach far from home, they can also save on rent and food costs. With online courses on platforms, learners can study many courses at the same time, and even learn many degrees and

certificates in a short time. This will help them optimize their learning time and save money compared to traditional learning methods that take months.

Promote proactive learning in learners: Learners proactively choose online courses that suit their personal development needs. They can learn at a pace that suits them without being affected by fixed study programs that last for many months like traditional classrooms.

Expanding learning opportunities: Developing online learning helps learners take classes in other regions and countries. Thanks to that, you can easily access the knowledge you want to learn without having to travel far.

Helps learning not to be interrupted due to external factors: Factors such as epidemics, natural disasters, etc. will make in-person classes impossible. At this time, online learning will become an effective solution, helping learning and teaching take place normally, avoiding delaying learners' learning and graduation time.

About disadvantages:

Dependence on the Internet: To study online, you need to be connected to the Internet. This is an obstacle for local learners who do not have Internet access. On the other hand, the Internet connection is sometimes unstable, causing images and sounds to be interrupted, making it difficult for learners to hear the content.

Reduce direct social interaction between people: Learners and teachers will not directly meet and interact with each other, which sometimes leads to boredom. Over time, it can affect dynamism and communication ability, especially for kindergarten and elementary school students.

Requires high discipline from learners: When learning online, teachers cannot pay close attention to learners like in class, so they will require learners to actively focus and study seriously. However, this is especially difficult for elementary school students who are active and easily distracted.

Managing online teaching

In 2006, the American E-Learning Research Council (Sloan Consortium) proposed a classification of classes as Table 1. According to the general assessment of Sloan Consortium (2006), classes that apply Internet technology levels: C and D are considered eLearning classes. Massive open online courses (MOOCs) today are often designed based on open-source code, allowing changes in component configuration and working interface. The content of online courses is very diverse, often not framed by any program of any unit or training facility. It closely follows and meets the diverse learning needs of learners and provides practical skills, research capabilities, or careers in society.

In reality today, vocational colleges also provide formal training programs through online teaching, granting certificates and diplomas at the end of the course (certificate at the end of the course, diploma at the end of the course). Full online teaching is operated through a system of courses in the following 4 main formats:

Independent courses: For non-formal teaching, learners choose and register according to their needs, abilities, and interests, and in accordance with personal conditions;

Simultaneous course: learning activities take place in an online environment at the same time as scheduled in advance;

The course is not concurrent: Learning activities take place at different times, and the results of teaching activities are stored and shared. The course integrates tools for assessment;

Blended course: A combination of synchronous and asynchronous teaching.

The most common point of fully online teaching is that teaching activities take place in a virtual environment with simulation and reproduction activities that increase the opportunity to access information, knowledge, and learning conditions for students. learning while also creating a huge learning space and data resources to share in society.

Online teaching management is the process of purposeful, planned impact of the management entity (including different levels of management from the Administrators of vocational colleges (Principal, Vice Principal), Faculties, and

Training Centers) on the subjects. management (including lecturers, students, managers, and training staff) to carry out training activities on the application of electronic equipment, software, and telecommunications networks. According to Tran (2019; Chung, 2018; Institute for Educational Cooperation and Development Research, 2022; Vuhong, 2022), management through the application of management functions and means to help the training process operate effectively, improving the quality of teaching and learning in education and training. Factors affecting online teaching management at universities are the organization's awareness of online teaching; the capacity and qualifications of the online teaching management team; the application of information technology in training management; and the organizational structure of the online teaching unit.

Research Methods

Theoretical research methods

This method is used to analyze, synthesize, and systematize scientific information collected from documents related to research issues, perspectives, and theories on ensuring the quality of education and training. training in the context of educational innovation. From there, draw conclusions related to the research problem. This research method aims to explore theoretical issues associated with online teaching activities and management of online teaching activities in vocational colleges in the context of educational innovation in order to build theories about the topic "Improving the quality of educational management" and collect scientific information about the history of online teaching activities and management of online teaching activities in vocational colleges in the context of innovation education.

Investigation and survey method

Purpose of investigation and survey: The author uses the questionnaire survey method to collect data on positions, roles, necessity, and limitations in management measures. online teaching activities at vocational education

institutions in the context of educational innovation, and at the same time identify management measures to improve the quality of online teaching activities at educational institutions career in the near future.

Content of investigation and survey: Collect information about the current status of online teaching activities at vocational education institutions and manage online teaching activities at vocational education institutions in the context of change. new education. We also used questionnaires to investigate the necessity and feasibility of measures to improve educational quality in the context of educational innovation.

Subjects of research and survey: This study has the participation of 203 people (n = 203), who work in the field of state management of education, teachers, and educational management teams who are working in education. Teaching and doing management work at a number of vocational education institutions (Vocational colleges). Specifically, 22 managers (including 08 Principals, 14 Vice Principals, n1 = 22) and 181 lecturers (teachers at vocational colleges, n2 = 181).

Designing a questionnaire for investigation and survey: Questionnaire related to online teaching activities at vocational education institutions and management of online teaching activities at vocational education institutions career in the context of educational innovation. Questions about gender, age, education level, seniority, and work position were added to the questionnaire (table 1).

Table 1 - Classification of survey objects

The information	Personal Characteristics	Frequency (person)	Ratio (%)
Age	Under 30	67	33.00
	From 30 to 40	65	32.02
	From 40 to 50	70	34.48
	Over 50	1	0.50
	Average age = 34.25 years old		
Degree	Intermediate level	30	14.78
	College	56	27.59
	University or higher	117	57.63
	Other	0	0.0
Position workplace	Teacher	144	70.94
	Administrators of vocational college (Principal, Vice Principal)	22	10.84
	Head of department, Deputy head Department; Dean of Faculty, Vice Dean of Faculty	37	18.22
Seniority of work	From 1-5 years	37	18.22
	From 5 to less than 10 years	65	32.02
	10 to 20 years	72	35.47
	Over 20 years	29	14.29
	Average number of years working = 13.09 years		
Management seniority	1 to 5 years	3	12.5
	5 years to less than 10 years	12	50.00
	10 years to 20 years	9	37.5
	20 years or more	0	0.0

Source of the author's survey: n=203.

The question is divided into five levels with conventional scores (table 2).

Table 2 – Table of Scale Conventions

Medium score	$1.00 \leq \bar{X} \leq 1.80$	$1.81 \leq \bar{X} \leq 2.60$	$2.61 \leq \bar{X} \leq 3.40$	$3.41 \leq \bar{X} \leq 4.20$	$4.21 \leq \bar{X} \leq 5.0$
Convention point	1	2	3	4	5
Convention point	Not important	Less important	Rather important	Important	Very important
Level of achievement	Weak	Medium	Rather	Good	Very good

Processing survey data: Use the formula to calculate the average score:

$$\bar{X} = \frac{\sum_{i=1}^k X_i K_i}{n}$$

\bar{X} : Medium score. X_i : Score at level i . K_i : Number of participants rated at X_i level. n : Number of people participating in the assessment. Meaning of using \bar{X} : The average score in the statistical results represents the degree of representation according to a certain quantity criterion of the sum of many units of the same type. The average score reflects the average level of the phenomenon and compares two (or more) populations of the studied phenomena of the same type, not of the same scale.

Results and Discussion

The position and role of online teaching activities and management of online teaching activities in vocational colleges

Position and role of online teaching activities:

To determine the position and role of online teaching activities in vocational colleges, the author conducted a survey of 203 people (including 22 managers and 181 teachers). Of the 203 managers and teachers surveyed, 98.02% of managers and teachers perceived that online teaching activities in vocational colleges have an “important” and “very important” position. Of these, up to 55.17% of awareness is

at the “very important” level (table 2). This result reflects the correct awareness of managers and teachers in online teaching activities in vocational colleges.

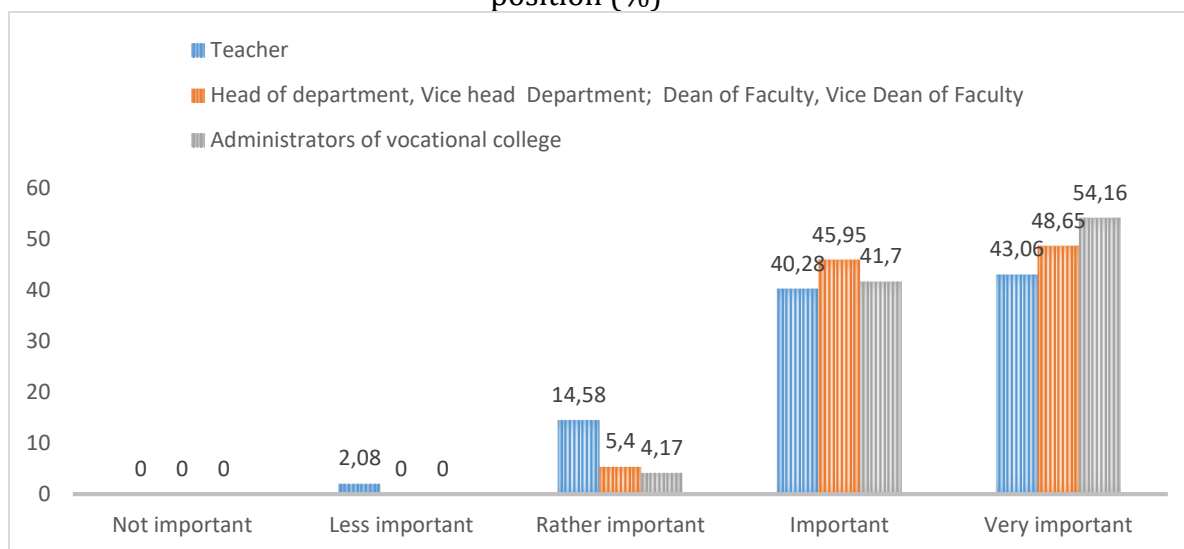
Table 2 – Perception of the position and role of online teaching activities

Evaluating	Frequency (People)	Percent (%)	Percent valid (%)	Cumulative percentage (%)
Not important	00	0.0	0.0	0.0
Less important	01	0.50	0.50	0.50
Rather important	03	1.48	1.48	1.48
Important	87	42.85	42.85	42.85
Very important	112	55.17	55.17	55.17
Total	203	100.0	100.0	100.0

Source of the author’s survey: n=203.

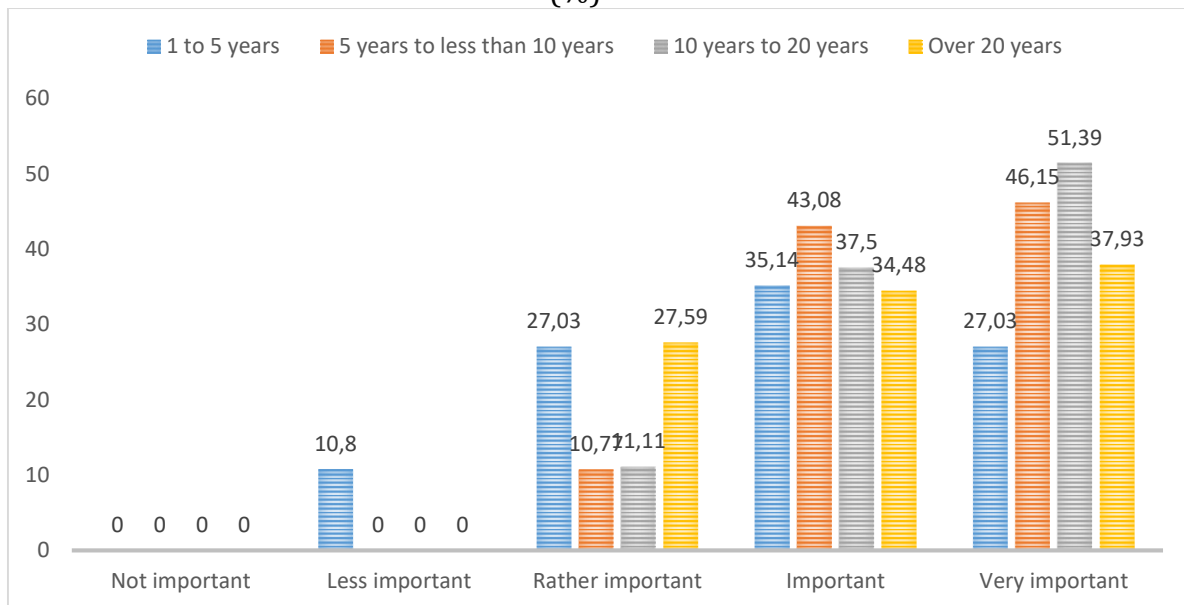
When comparing survey results by job position and seniority, the results are shown in chart (figure) 1 and chart (figure) 2 below:

Figure 1 – Perception of the importance of online teaching activities by work position (%)



Source: Author’s survey results.

Figure 2 – Perception of the importance of online teaching activities by seniority (%)



Source: Author's survey results.

The general trend can be seen very clearly when the ratio in the “important” and “very important” columns is always very high. For example, in chart 1, when comparing by job position, the good news is that the “Administrators of vocational college” group has the highest awareness with 54.16% rating it at the “very important” level. When compared according to seniority, in the group with the longest working experience, “over 20 years”, all of them rated it as “quite important” or higher.

Position and role of managing online teaching activities:

To determine the position and role of online teaching activities in vocational colleges, the author conducted a survey of 203 people (including 22 managers and 181 teachers). Of the 203 managers and teachers surveyed, 90.64% of managers and teachers perceived that online teaching activities in vocational colleges have an “important” and “very important” position. Of these, up to 36.45% of awareness is at the “very important” level (table 2). This result reflects the correct awareness of managers and teachers in online teaching activities in vocational colleges.

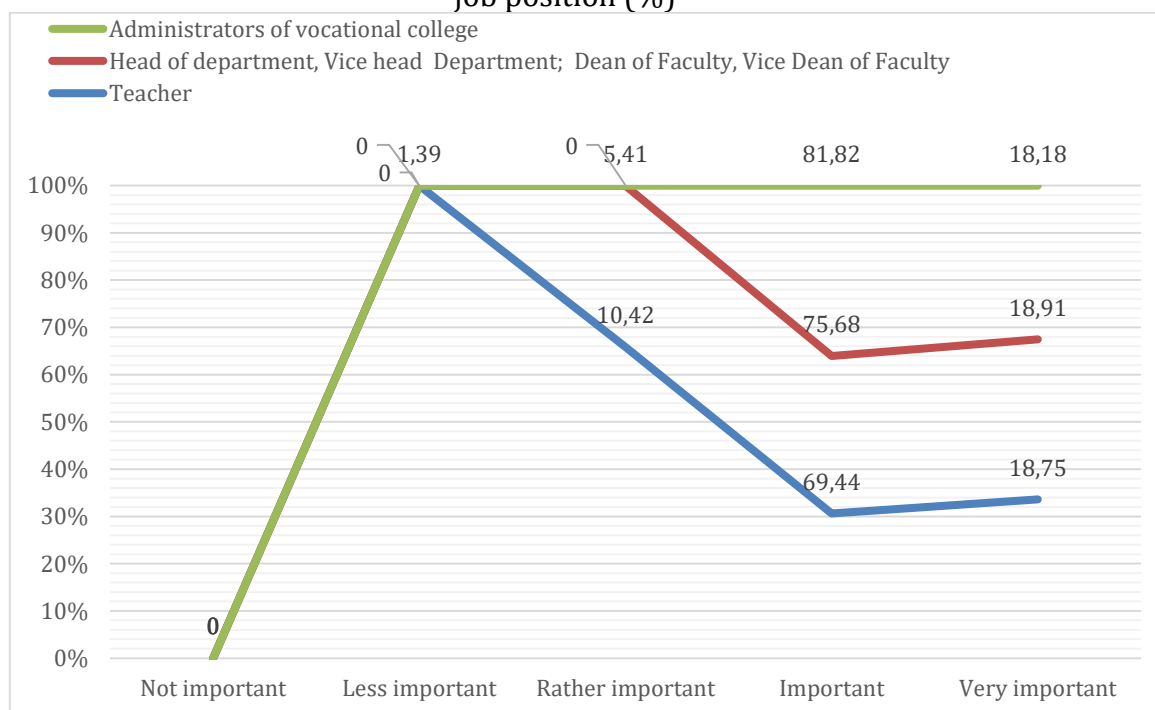
Table 3 – Perception of the position and role of managing online teaching activities

Evaluating	Frequency (People)	Percent (%)	Percent valid (%)	Cumulative percentage (%)
Not important	00	0.0	0.0	0.0
Less important	02	0.99	0.99	0.99
Rather important	17	8.37	8.37	8.37
Important	110	54.19	54.19	54.19
Very important	74	36.45	36.45	36.45
Total	203	100.0	100.0	100.0

Fonte: Pesquisa do autor, n = 203.

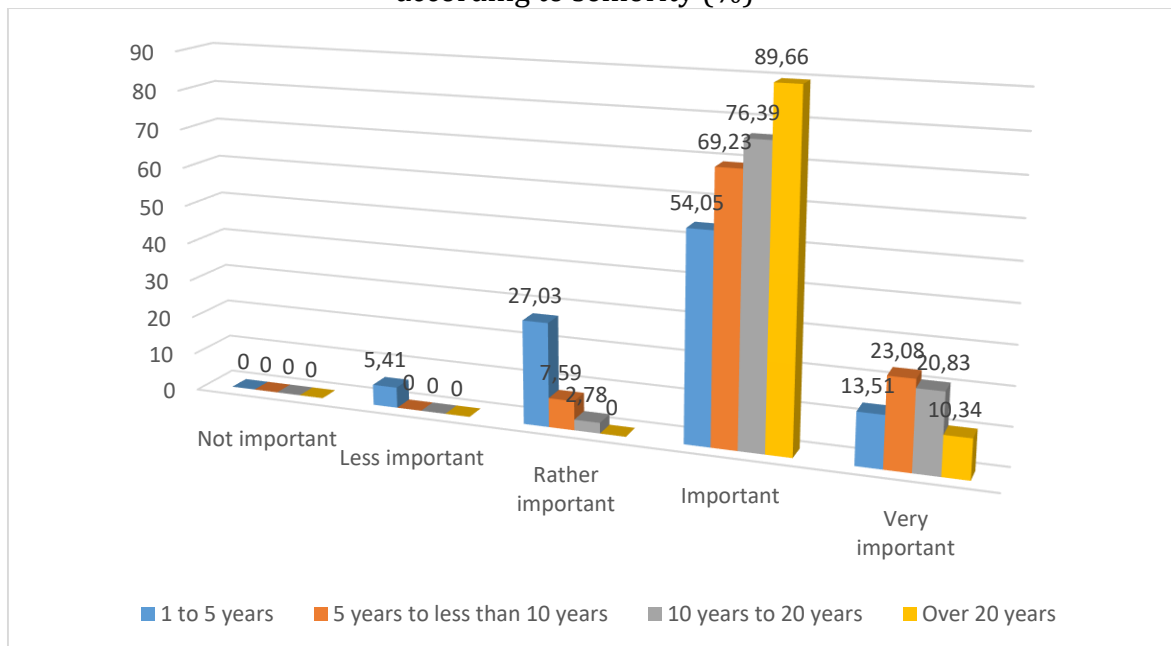
When comparing survey results by job position and seniority, the results are shown in chart (figure) 3 and chart (figure) 4 below:

Figure 3 – Perception of the importance of managing online teaching activities by job position (%)



Source: Author's survey results.

Figure 4 – Perception of the importance of managing online teaching activities according to seniority (%)



Source: Author's survey results.

The general trend can be seen very clearly when the percentage in the “important” and “very important” columns always accounts for a very high percentage, in which the “important” percentage accounts for the most. For example, in chart 3, when comparing by job position, the good news is that the group “ Head of Department, Vice Head Department; Dean of Faculty, Vice Dean of Faculty” and “Administrators of vocational college” have the highest awareness with 18.91% and 18.75% respectively rating it at the “very important” level. When compared according to seniority, in the group with seniority from “10 to less than 20” years and “over 20 years”, all managers and teachers rated it as “quite important” above. Particularly for the group “over 20 years” or more, all rated it as “important” and very important”.

Current status of management of online teaching activities in vocational colleges

Vocational colleges have not expanded online teaching for the following main reasons: 1) The cost of designing electronic lectures is very high, especially practical modules that require a lot of machinery and equipment; 2) Students have difficulty

absorbing knowledge, especially practical modules, and have difficulty practicing practical skills and internships; 3) It is difficult for lecturers to accurately assess students' learning outcomes. Currently, the majority of the above vocational colleges apply the online teaching model described in Figure 1.

The online learning schedule is announced in advance to lecturers and students at the beginning of each semester. Lecturers will come to class at school according to schedule to present lectures. Students go to online classes anywhere with the internet to follow the lecture, ask questions to the lecturer, and receive answers immediately afterward. Instructors can provide additional materials and assign assignments for students to submit during the online lesson or after the time specified by the instructor. The lecture will then be recorded and posted on the website for students to review or for students not participating in the online lesson. At the end of the semester, all qualified students will gather to take the exam (offline) at the school or a training location affiliated with the school.

To evaluate the current situation of managing online teaching activities in vocational colleges, the article delves into research on online teaching management at a number of vocational colleges in Ho Chi Minh City. The survey subjects included 3 subjects: Administrators of vocational college (Principal, Vice Principal), lecturers, support staff, and lecturers of the online teaching program. To determine the position and role of online teaching activities in vocational colleges, the author conducted a survey of 207 people (including 22 managers and 181 teachers). After counting the votes, 4 votes were invalid because the information was not filled in completely. Therefore, 203 valid votes were used to process the investigation results.

The content of the questionnaires was built based on Tran (2019); Institute for Educational Cooperation and Development Research (2022); Thuan & AnLong DangNguyen (2022 & 2023), et al., for managers and lecturers of online teaching programs to learn about the current situation of online teaching management of schools with a scale of 5 levels: (1) Very good, (2) Good, (3) Rather, (4) Medium, (5) Weak with 4 contents, specifically as follows:

(ND.1) Teaching plans are developed periodically and fully;

- (ND.2) Organize and implement teaching according to plan;
- (ND.3) Directing teaching activities to ensure quality and effectiveness;
- (ND.4) Monitor the teaching process and evaluate the effectiveness of teaching activities.

The results of testing the Cronbach's Alpha scale show that all seven independent variables have high reliability (table 4).

Table 4 – Testing Cronbach's Alpha scale

Order	Content (scale)	Number of variables accepted	Cronbach's Alpha
1	(ND.1) Teaching plans are developed periodically and fully;	6	0.779
2	(ND.2) Organize and implement teaching according to plan;	5	0.765
3	(ND.3) Directing teaching activities to ensure quality and effectiveness;	5	0.747
4	(ND.4) Monitor the teaching process and evaluate the effectiveness of teaching activities.	7	0.755

Source of the author's survey, n=203.

After evaluating the reliability of the scale using Cronbach's Alpha coefficient, 23 variables of the scale of factors affecting the management of online teaching activities at vocational colleges were included in the factor analysis. Through EFA analysis, we identify 4 factors affecting the management of online teaching activities in vocational colleges.

The principle of questionnaire investigation is that each subject independently answers a survey. Before answering, subjects were given detailed instructions to clearly understand the purpose and response requirements in the contents of the questionnaire. To collect more information to supplement the qualitative information obtained in a wide scope of investigation, we also conducted in-depth interviews. The subjects included 16 managers, lecturers, and staff participating in online teaching at the universities selected for the study. The interview content is about the current status of online teaching, the current status of online teaching management, and the factors affecting online teaching

management. Depending on the subject, the interview addresses this situation in different aspects consistent with the role of the management subject participating in online teaching management. Interviews are conducted in the best setting to obtain accurate information.

Table 5 – Survey results on the current status of online teaching management

Content	Very good		Good		Rather		Medium		Weak		\bar{X}
	Frequency	Ratio (%)	Frequency	Ratio (%)	Frequency	Ratio (%)	Frequency	Ratio (%)	Frequency	Ratio (%)	
ND.1	5	2.46	16	7.88	47	23.15	101	49.75	34	16.75	3.70
ND.2	7	3.45	17	8.37	47	23.15	99	48.77	33	16.26	3.66
ND.3	8	3.94	18	8.87	49	24.14	95	46.80	33	16.26	3.63
ND.4	8	3.94	19	9.36	49	24.14	95	46.80	32	15.76	3.61
Total	7.00	3.45	17.5	8.62	48.00	23.65	97.50	48.03	33.00	16.26	3.65

Source of the author's survey, n=203.

The survey results presented in Table 5 show that: All XTBs are in the range of $3.41 \leq \bar{X} \leq 4.20$, reaching the “important” level, there are no XTBs that the survey subjects rated as “not important”, “less important” and “quite important”. In which, ND1. “Teaching plans are periodically developed and fully” is rated highest with $\bar{X} = 3.70$. This is because vocational colleges periodically make teaching plans to assign and arrange lecturers. For each class, schools have planned teaching activities associated with the learning materials and resources used in the teaching process. Most vocational colleges consider online teaching to play a role in supporting regular training, so planning work is combined with traditional learning, so online teaching activities are identified as supporting and there are no specific regulations. In general, the teaching planning work at schools has responded to the characteristics of online teaching and is suitable for students’ distance learning. Students’ learning plans are developed by schools based on the training program

and ensuring regulations of the Ministry of Education and Training; Ministry of Labor, War Invalids and Social Affairs and made public to lecturers and students very early. Some schools that focus on student support services have advised students to register for study plans suitable to their abilities and time conditions and create study plans for each student.

The remaining contents are all assessed at a good level of implementation (average score from $\bar{X} = 3.61$ to $\bar{X} = 3.66$ within the range of $3.41 \leq \bar{X} \leq 4.20$). This is because the overall organization and implementation of teaching is according to plan, however, because online teaching instructors have to multitask, some modules are carried out later than prescribed. Directing and supervising the process of online teaching activities to ensure quality and effectiveness has not been carried out in a methodical and rigorous manner like traditional teaching. This is understandable because up to now, the assessment of the quality of this type of training has not yet had an official document from the education management agency and is still receiving comments.

Cause of existence

Survey results and previous research results have shown that: there are many reasons leading to limitations and inadequacies in managing online teaching activities, specifically as follows:

Firstly, the quality of online teaching and learning is not guaranteed, due to many objective factors such as the quality of the transmission line being unstable, some teachers, especially teachers, Older adults have difficulty applying information technology to teaching. The quality of online teaching is partly affected because the equipment used for teaching is limited in both quantity and quality (Thanh, 2019). The management of students during the learning process is not very effective. Although the Government has launched the program “Wave and Computer for Children”, it has not met real needs (Matei & Iwinska, 2016; Thang, 2019; Vu, 2022).

Second, prolonged online teaching and learning has caused health problems for teachers and learners when they have to sit in contact with electronic devices for long periods of time and are inactive for long periods of time. Anxiety arises when

interaction with teachers and friends is reduced. While many parents do not interact properly with their children during online learning, teachers develop psychological pressure when they teach hundreds of hours per lesson. The eyes, audience, and listeners of teachers during online lessons are now not only students but also students' parents, public opinion, and social networks (Hong, 2022).

Third, the role of the teacher has not been clearly defined in online teaching, and there is no set of rules for teachers to implement. Online teaching and learning is not something that is done regularly; therefore, when the COVID-19 epidemic broke out, teachers were extremely confused about implementation techniques. There are many reasons, but the main one is that many teachers' ability to apply information technology to teaching is limited, and the use of online learning software is not proficient, leading to ineffective implementation. Furthermore, most teachers are used to being in the face-to-face space in front of their students. Now standing in the online space to give lessons, many teachers will be confused or not confident when delivering the lesson (Duchiep, et al., 2022).

Fourth, although students are quite active in applying information technology to exploit lecturers' lectures, in reality, the circumstances and physical conditions of the student's family will greatly influence the situation of online learning activities. Because, not every family can equip the internet, computers, and smartphones for their children to study, especially in remote and extremely difficult areas. Furthermore, due to the characteristics of online learning, the management of students' learning habits and awareness is not direct, which will affect students' learning results. When teaching and learning, the interaction between teachers and students is a very important factor. If in classroom lectures, interaction is promoted effectively, then in online learning, teachers mainly conduct one-way lectures, and students receive them online, through various means, interaction needs to be through a system of questions and exercises afterward, not directly. This will affect the quality of the lecture.

Solution for managing online teaching activities for vocational colleges

From the above analysis, to enhance the management of the online teaching process and support learners to ensure training quality, universities need to implement the following solutions:

(i) Promulgate regulations on online course design; process of organizing teaching activities, online teaching support activities develop a detailed training program with teaching content, teaching methods, and teaching activities to deploy in online classrooms based on go to the detailed course outline (Chung, 2018). The team participating in the construction includes subject lecturers, training plan developers, and training support staff. Lecturers are responsible for expertise and staff develop training plans and control content designed to comply with the course outline requirements; training support staff provide technical support to develop designs and post them to online classrooms for students to follow.

(ii) Organize training in online teaching skills, online teaching management, information technology application, and pedagogical methods for lecturers; online learning skills for students; Develop a reasonable remuneration regime for the team participating in the online teaching program; develop a reasonable remuneration regime for lecturers working in the online environment; Planning for training to improve E-Learning e-lesson editing capacity and online teaching skills for online teaching instructors is one of the fundamental solutions to improve teaching quality. It is necessary to actively improve the ability to apply ICT (Han, 2023), and skills to proficiently use online learning management systems and information technology facilities for lecturers in the online teaching environment. The school must also strengthen the development of facilities to ensure the implementation of online teaching activities such as studios, learning management software systems, virtual classroom systems, forum systems, etc. These tools need to be continuously upgraded and developed with new functions and utilities to meet the needs of lecturers and students.

(iii) Build a mechanism to promote and control interactive activities between lecturers - students and students - students to improve teaching and learning effectiveness. It is necessary to promote the above tools, utilities, and software.

Online learning system to deploy classes such as discussion forums, virtual classrooms, and chat applications. Depending on the tools and communication environment, teaching activities are carried out through discussion of situations and projects. On the other hand, the school also needs to develop a process for organizing teaching activities and a monitoring and inspection mechanism for lecturers, students, and program support staff to implement. Monitoring classroom activities needs to be done regularly to ensure the maintenance and promotion of interactive activities. Student discussions and questions must be controlled so that lecturers can respond and promptly detect discussion content that violates the rules. Monitoring teaching activities can also be done through the learning management system with a number of activities such as: participating in discussions, asking questions, and doing multiple-choice exercises, etc.

(iv) Strengthen supervision of management activities and evaluation of lecturers' learning outcomes and student learning outcomes. Inspection and evaluation activities of the teaching process need to be carried out for each subject and each study (Van, 2022a; Han, 2023). It is necessary to specify evaluation criteria for the class that has been conducted in terms of lecturers, teaching activities, learning, interaction, etc. as a basis for evaluation and conclusion. Evaluation results should be used as a basis to adjust course design, training programs, and related activities.

(v) Develop a plan to use supporting means such as Electronic board, drawing software, graphs, software for creating questions, online testing, etc. at vocational colleges. Reality shows that online teaching can never replace face-to-face teaching, because each form of education has different characteristics, strengths, and weaknesses (Do, 2018; Van, 2022b). Therefore, these two forms cannot replace or negate each other. When education does not have a national strategy for online teaching, we need to organize online teaching flexibly and always combine it closely with face-to-face teaching, without being too strict or directive. Teaching online simultaneously with schools and localities across the country.

Planning: Instructions on how to organize lessons and study hours to avoid being too stressful too formal or superficial. In addition, innovative testing,

evaluation, and exam methods to suit teaching and learning conditions in the epidemic situation, all to ensure fairness and students' rights. Thoroughly grasp measures to manage lecturers during the teaching process. Require lecturers to increase interaction with students through channels to grasp students' learning awareness, lesson learning quality, and difficulties through lectures. Regularly remind students, send online lecture schedules to central and local television stations for students to participate in learning, then have questions and exercises to evaluate learning results via television and images.

Conclusion

The direct and profound impact of the 4.0 industrial revolution has rapidly changed the learning needs of learners, especially the need for online learning. Therefore, online teaching management is the integration of core management capacity, technical expertise, teaching capacity, technology application capacity, and innovative teaching methods. Based on analyzing the impact of the 4.0 industrial revolution on the online teaching system, and analyzing the current situation of online teaching management in vocational colleges, the article has proposed solutions for development. Online teaching management meets the requirements of innovation and improving teaching quality in the context of current educational innovation.

Online teaching activities are not just a temporary solution but have gradually demonstrated the advantages of a flexible teaching method with many advantages in the modern social context and with students as learners, student. However, to ensure stability and promote the effectiveness of this teaching method, it is necessary to have close coordination between the school, educational management levels, lecturers, and students, to develop and encourage the positivity, initiative, and responsibility of all parties to build an effective online teaching mechanism, ensuring good quality. To achieve this, the role of management is extremely important.

REFERENCES

Chung, M. V. (2018). Education quality accreditation and requirements for educational institutions, Education Accreditation Center - Vinh University. Vinh province.

Communist Party of Vietnam. (2016). Documents of the XIIth Party Congress. Hanoi: National Politics Truth.

Communist Party of Vietnam. (2021). Documents of the XIIIth Party Congress. Hanoi: National Politics Truth.

Duchiep, H., et al. (2022). The changes in education policy in the context of educational innovation in Vietnam. *Revista on Line De Política E Gestão Educacional*, 26(esp.1), e022043. <https://doi.org/10.22633/rpge.v26iesp.1.16772>

Do, D. V. (2018). Solutions for developing a team of vocational education teachers. Documents on scientific seminars on planning the network of vocational education institutions and developing a team of vocational education teachers [Solutions to develop the circumstances of vocational education teachers, Documents on scientific seminars on network planning of vocational education institutions and development of vocational propaganda]. Paper presented at the National Council for Education and Human Resource Development, Subcommittee on Vocational Education. Hai Phong, Vietnam.

Government. (2016). Resolution No. 76/NQ-CP dated September 3, 2016, at the August regular meeting. Hanoi.

Government. (2018). Decree No. 49/2018/ND-CP dated March 30, 2018, Regulations on accreditation of vocational education quality. Hanoi.

Han, G. (2023). Teaching online in vocational schools faces many difficulties. Youth Online. Retrieved from <https://tuoitre.vn/day-hoc-truc-tuyen-trong-truong-nghe-gap-nhieu-kho-khan-2023101015320674.htm>

Hong, V.V. (2022). Management of educational activities in schools towards the approach of learners' competency: a case study of a high school. *Nuances: Estudos Sobre Educação*, 32(00), e021005. <https://doi.org/10.32930/nuances.v32i00.9118>.

Institute for Educational Cooperation and Development Research. (2022). Online teaching, some theoretical and practical issues. Hanoi: Labor.

Khanh, D. N. (2019). Accreditation of Vocational Education - Current situation and some policy implications - General Department of Vocational Education. Hanoi.

Matei, I. & Iwinska, J. (2016). Quality Assurance in Higher Education: a Practical Handbook. Budapest, Hungary: Yehuda Elkana Center for Higher Education

MEXT. (2009). Higher Education Bureau. Quality Assurance Framework of Higher Education in Japan.

<https://www.mext.go.jp/en/policy/education/highered/title02/detail02/1373877.h>

Ministry of Labor, War Invalids and Social Affairs. (2017). Circular No. 15/2017/TT-BLDTBXH dated June 8, 2017, stipulating criteria and standards for vocational education quality accreditation (Corrected by Decision No. 1229/QD-BLDTBXH dated August 4, 2017). Hanoi.

Ministry of Labor, War Invalids and Social Affairs. (2017). Circular No. 28/2017/TT-BLDTBXH dated December 15, 2017, stipulates the quality assurance system of TVET institutions. Hanoi.

Ministry of Labor, War Invalids and Social Affairs. (2018). Circular No. 27/2018/TT-BLDTBXH dated December 25, 2018, stipulates the regulation on the assessment and issuance of VET quality inspector card; process, and the cycle of vocational education quality accreditation. Hanoi.

Thang, L. V. (2019). Some difficulties in self-assessment and education quality accreditation at the College of Pedagogy, Nam Dinh College of Pedagogy. Nam Dinh province.

Thuan, P. V. & AnLong, D. N. (2021a), Management of educational accreditation of lower secondary colleges in the context of educational innovation. Hanoi: Education.

Thuan, P. V. & AnLong, D. N. (2021b). Handbook of Quality Accreditation of Early Childhood and General Education. Hanoi: Education.

Vu, V. H. (2022b). Necessity and solutions for ethical education among teachers in the framework of Industrial Revolution 4.0. Revista on line de Política e Gestão Educacional, Araraquara, v. 26, n. 00, p. e022166, 2022. DOI:

10.22633/rpge.v26i00.17731. Disponível em:

<https://periodicos.fclar.unesp.br/rpge/article/view/17731>