

EFFICIENCY MANAGEMENT CURRENT SITUATION OF TEACHING TECHNICAL FACILITIES AT THE CENTRAL KINDERGARTEN PEDAGOGICAL COLLEGES IN THE TREND OF TECHNOLOGY REVOLUTION 4.0

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Currently, the management of teaching technical facilities at the Central Kindergarten Teachers' Colleges has been done on a regular basis and achieved certain results, but in reality there are still many shortcomings.

The topic has focused on surveying, assessing in detail the situation of managing teaching technical facilities at the Central Kindergarten Pedagogical Colleges, thereby finding the advantages and limitations and pointing out the causes, subjective and objective of that situation to propose a system of effective management of technical teaching facilities at Central Kindergarten Pedagogical Colleges in the current trend of Technology Revolution 4.0.

Keywords: Management; Effective management; Teaching technology; Central Kindergarten Pedagogy College; Trends of Technology Revolution 4.0

1. Introduction

Teaching technical facilities playing a great role in the teaching and learning process, it contributes to innovating teaching methods, improving teaching quality and innovating methods of assessing student learning results in the Central Kindergarten Pedagogy Colleges. In the process of teaching, teaching technical facilities, it is both a content and a facility of conveying information while helping teachers organize and control students' cognitive activities, in addition, it also helps students to have theology will learn and practice practical skills, thereby forming a proactive and creative learning method.

Facilities of teaching techniques are one of the necessary conditions to help teachers perform tasks related to education, education and intellectual development, arouse the inherent intelligence qualities of students. Currently, the management of teaching technical facilities at the Central Kindergarten Pedagogy College has been carried out on a regular basis and achieved certain achievements, but in reality there are still many shortcomings. such as: asynchronous teaching techniques, management of teaching technical facilities has not been given adequate attention, has not fully covered the management content and has

not brought high efficiency in renovating teaching methods. learn to improve the quality of training.

Finding a number of limitations in the management of teaching technical facilities, thereby proposing solutions to overcome those limitations, improve the efficiency of investment, preservation and use of teaching technical facilities. teaching techniques, improving the teaching quality of the Central Kindergarten Pedagogy College in the current period is an urgent and important task.

For the reasons mentioned above, the article author chose to study the topic: "The situation of effective management of teaching technical facilities at the Central Kindergarten Pedagogical Colleges in the trend of Technology Revolution 4.0".

2. Research method

2.1. Theoretical research

2.2. Practical research

2.3. Math statistics and modeling

3. Research overview

3.1. Studies in the world

In the world since the sixteenth century, there have been research works on teaching techniques such as Komenski, educator of Czechoslovakia.

The Soviet school of educators with prominent educators such as Usinski, A.N.Leontiev and the Swedish school of eminent educator J.H.Pestalossi, developed the view of intuitive teaching with high efficiency. (Excerpt from Master Thesis of Nguyen Dang Chin, 2013)

During the renaissance, many pioneering educators had taken a position on positive teaching methods. They have helped students master academic issues through the use of visual media.

J.A.Komenxki (1592-1670), a prominent Czech educator who highly appreciated the role of teaching technology, he also said that "Visualization is the golden rule". Since then, he asked teachers to regularly use visual facilities so that students can develop all their senses into material perception, so that students can improve their cognitive ability.

The theory of visual teaching has developed along with other fields, thereby helping us to identify the role of teaching techniques in the teaching process, helping learners to grasp the nature of things, easier phenomenon.

A.N.Leotiev (1903-1979), an outstanding representative psychologist of the modern Soviet Psychology Conception, said: "Technical facilities of teaching are an external support for the inner actions of students under the leadership of the instructor during student awareness". He emphasized the need to use visual aids appropriate for the age of students and with the content of the subjects, which will bring good educational results. In the presentation: "Management of teaching technology facilities: promoting resources" at the Moscow International Education Exhibition (2001), Ms.Yulia Olegovna Krasilnikova of the Russian National University of Technology Research received "Managing teaching technical facilities is a part of managing the educational and training process, playing an important role in improving the training quality of educational institutions. The management processes to ensure the operation of teaching technical facilities need to be fully automated. The management of teaching technical facilities needs to be conducted according to the governance model: it is necessary to clearly define the purpose of the management, build performance evaluation criteria, and assign responsibilities in completing the or not achieving the set goal". At the same time A.V.Zafievsky (2010) published in the journal "Achievements of modern natural sciences" stated: "Managing teaching technology is one of the important tasks of every institution operating in the field of education...To improve management efficiency, it is necessary to automate the process and develop evaluation criteria.

3.2. *Studies in Vietnam*

Inheriting and promoting the theories of world education, Vietnam also has many researchers on teaching technical facilities and management of teaching technical facilities. These studies can include typical scientists who have developed and spread theories about visual teaching principles such as To Xuan Giap, Vu Trong Ry, Tran Duc Vuong, Ngo Quang Son, etc. Along with the country's renovation process, the research, improvement, application and development of teaching technology means have become the topic that attracts the attention of scientists and teachers to improve the quality. Training associates theory with practice. Typically, the following scientific research projects and topics: Nguyen Luong's technical means and teaching aids (1995); "The role of teaching facilities in the present teaching" of Hua Xuan Truong (1997); "Current situation and investment solutions for developing and exploiting technical teaching facilities in military schools" by Nguyen Luong Son (1997); "The operation of school development in the current period" by Le Hoang Hao (1998) reported at the National Conference on Education Development Economics.

Author Nguyen Duc Thang with the topic "Management of training equipment of technical universities in the Army under the approach of quality assurance" has focused on researching and managing training equipment of universities. training military technical disciplines in the Army, including: Military Technical Academy, Naval Academy, Air-Air Defense Academy, Military Technical Officer School. Since then, the author has proposed solutions for training equipment management of technical universities in the Army according to the quality assurance approach, in accordance with the requirements of the Army's higher education reform in the context of current scene.

In the study of the topic: "Current situation and some solutions to improve the effectiveness of the management of teaching technical facilities at Hanoi National University of Education" author Pham Viet Hung evaluated the status of shopping, using, preserving and proposing a number of solutions to improve the effectiveness of the management of teaching technical facilities in Universities.

Research of the author Nguyen Thi Lieu with the topic: "Measures to improve the effectiveness of using teaching aids at Hung Yen Pedagogical University", the author has also codified the theory related to teaching technical facilities, assessing the actual situation of using teaching aids, thereby proposing measures to improve the effectiveness of using teaching aids at Hung Yen University.

Ministry-level project: “A number of management solutions to improve the efficiency of using teaching technology at Continuing Education Centers and Community Learning Centers”. The author Ngo Quang Son, haclarified the theoretical and practical basis of equipping, using and preserving teaching technical facilities at continuing education centers and community education centers. Based on the analysis of that situation, the author has proposed a system of solutions to improve the efficiency of using teaching technology facilities in continuing education centers and community learning centers. According to the author’s study, in recent years, there have been many research topics on the management of technical facilities for teaching schools, including the author Nguyen Thi Ut Ba (2015): “Effective management of teaching technology facilities at Tan My Primary School in Bac Giang City, Bac Giang Province in the current period”, by the author Vu Van Dat (2013): “Management of teaching technology facilities in high schools in An Lao district, Hai Phong city”... These topics all have in common is a study of the current situation of management of teaching learning technical facilities at the Central Kindergarten Pedagogy Colleges from which to provide effective management solutions for the management of teaching technical facilities. So far there have been a number of research projects on the management of technical teaching facilities at colleges and universities, but the analysis has not been profound. Especially, there has not been any research project on management of teaching technical facilities at Central Kindergarten Pedagogy College in the trend of Technology Revolution 4.0. This research topic is important and urgent, meeting the needs of theory and practice of teaching technology management in colleges and universities in the trend of Technology Revolution 4.0, meeting the need for renewing higher education in the current period.

4. The reality of investment, preservation and use of technical facilities for teaching at the Central Kindergarten Pedagogy College

4.1. Actual situation of quantity, quality and structure of teaching technical facilities at the Central Kindergarten Pedagogy College

Teaching technology facilities play an important role directly affecting the quality of the teaching process, so when assessing, it is necessary to consider both the quality and the number of teaching techniques facilities of the Central Kindergarten Pedagogy Colleges. Regarding the quantity: The results of the referendum of the management staff, lecturers and students in Table 1 are as follows:

Table 1. The situation of equipping teaching technology at the Central Kindergarten Pedagogy College

| TT | Hệ thống phương tiện kỹ thuật dạy học | Cán bộ quản lý | | Giảng viên | |
|----|--------------------------------------------------------------|----------------|-------|------------|-------|
| | | SL | % | SL | % |
| 1 | Thiếu phương tiện kỹ thuật dạy học cho một số bộ môn | 14 | 16,67 | 84 | 22,95 |
| 2 | Đảm bảo phương tiện kỹ thuật dạy học tối thiểu theo qui định | 53 | 63,09 | 224 | 61,20 |
| 3 | Trang bị tốt, đáp ứng tốt về số lượng và chất lượng | 21 | 20,23 | 58 | 15,85 |

Through the results of the above survey, there are still many opinions that some subjects lack teaching technical facilities and commented that: “The provision of teaching technical equipment is only at a minimum as prescribed”. the number is over 60% (managers: 63.09%; lecturers: 61.20%); So it can be seen that, the situation of equipping teaching technology facilities at the Central Kindergarten Pedagogy College is at a relatively good level, the shortage of teaching technical facilities still exists. Although the equipment facilities in general and teaching technology facilities in particular have been improved, the quality and quantity of teaching equipment have not been synchronized.

Every year, through practical assessment, the Central Kindergarten Pedagogy Colleges has enough classrooms, large lecture halls, practical rooms, basic experiments to meet the requirements of teaching, learning and scientific research at the request of each training major, not organized learning 3 shifts. All classrooms are ensured of light, area, tables and chairs for learners and are basically equipped with teaching techniques such as speakers, microphones, multifunction projectors, computers for teaching purposes. and study. Sectors and training majors have enough laboratories, equipment rooms and practice facilities. Practical workshops have all necessary conditions for teaching techniques, lighting and area to ensure good response for teaching and learning of lecturers and students.

Regarding the quality of teaching technical facilities, the survey results are summarized in the following statistics

Table 2. Table of evaluation of quality of teaching technical device

| TT | Nội dung | Mức độ đánh giá (MĐ), số người (N), tỷ lệ (%) | | | | | |
|----|--------------------------------------------------------------------------|-----------------------------------------------|---------|-------|-------|------------|------|
| | | MĐ | Rất tốt | Tốt | Khá | Trung bình | Yếu |
| 1 | Máy vi tính, máy in, scan | N | 0 | 45 | 92 | 298 | 15 |
| | | % | 0 | 10,00 | 20,44 | 66,22 | 3,33 |
| 2 | Hệ thống âm thanh như loa, đài... | N | 0 | 125 | 128 | 197 | |
| | | % | 0 | 27,78 | 28,44 | 43,77 | |
| 3 | Các phương tiện kỹ thuật dạy học nghe nhìn như: đầu vi deo, máy chiếu... | N | 0 | 92 | 254 | 104 | |
| | | % | 0 | 20,44 | 56,44 | 23,11 | |
| 4 | Tài liệu cập nhật thông tư mới | N | 0 | 347 | 103 | 0 | 0 |
| | | % | 0 | 77,11 | 22,89 | 0 | 0 |
| 5 | Các dụng cụ thí nghiệm | N | 0 | 158 | 201 | 91 | 0 |
| | | % | 0 | 35,11 | 44,67 | 20,22 | 0 |
| 6 | Các phương tiện kỹ thuật dạy học thực hành, mô phỏng | N | 0 | 211 | 131 | 108 | 0 |
| | | % | 0 | 46,89 | 29,11 | 24,00 | |
| 7 | Các loại phương tiện kỹ thuật dạy học khác | N | 0 | 125 | 218 | 107 | |
| | | % | 0 | 27,77 | 48,45 | 23,78 | |

The results show that the quality of technical teaching facilities is getting better and more convenient. But basically not meet the need to develop innovative teaching methods to improve the quality of current training. Many types of teaching techniques are outdated, have been invested in procurement for a long time, and have limited synchronization so it is difficult for exploitation and use.

+ About computer systems, printers, scanners... quality is limited due to long-term procurement, with 66.22% rated at an average level, even with 3.33 reviews at a weak level.

+ About the quality of the sound system to ensure the teaching process is also, 43.77% rated

at an average level, the rest is quite good and good.

+ Regarding the technical facilities for teaching audiovisual teaching, it is also necessary to improve more, nearly 80% of assessments are average and fair.

+ The teaching facilities are updated with new information such as tapes and discs, good quality teaching software, but the quality is still at a certain level, with 22.89% rated at a good level.

+ About the testing instruments, the basic chemicals are quite good or more, but 20.22% rated at an average.

+ The technical means of teaching practice simulation are assessed at quite good level, good level accounting for 46.89%.

+ Other types of teaching techniques are generally good quality, but the uniformity and quality are also limited, while 23.78% rated it as average.

From the results, there are still many types of high quality facilities. Therefore, the school needs to have a policy regime as well as an investment plan to upgrade the quality of technical facilities for teaching in a scientific and reasonable manner. At the same time enhance maintenance activities, regular maintenance.

4.2. The status of using teaching technology facilities at the Central Kindergarten Pedagogical College

Assessment of the efficiency of using teaching techniques at schools: The purpose is to evaluate the efficiency of using the types of teaching techniques available, expressed in the number of times using the media. teaching techniques in a period of time (semester, school year) considered by each type compared with the teaching requirements of the subjects specified in the curriculum and teaching plans. The results of the referendum in Table 3 show that: Basically most managers, lecturers and students evaluate the use efficiency at a good and fair level; 16.67% of managerial staff, 16.39% of lecturers and 14.50% of students rated at average level; a few rated it weak (below 3%). The results show that the efficiency of using technical teaching facilities is still limited, there should be a specific plan for increasing the frequency and effectiveness of using technical teaching facilities in the process. teaching.

Assessment of the use of teaching technical facilities by teaching staff: Firstly, the evaluation of the teacher's proficiency in using teaching technical facilities is based on the teachers' use skills. and students during use. Has the ability to use teaching technology facilities been improved? Are students' practical ability and logical thinking

developed? What is the success rate of solving technical and safety incidents in the process of using teaching techniques?

Table 3. Assessment of the efficiency of using teaching technical facilities

| Đối tượng | Mức độ | | | | | | | |
|----------------|--------|-------|-----|-------|------------|-------|-----|------|
| | Tốt | | Khá | | Trung bình | | Yếu | |
| | SL | % | SL | % | SL | % | SL | % |
| Cán bộ quản lý | 33 | 39,28 | 35 | 41,67 | 14 | 16,67 | 2 | 2,38 |
| Giảng viên | 116 | 32,24 | 179 | 48,90 | 60 | 16,39 | 11 | 3,00 |
| Học viên | 151 | 37,75 | 185 | 46,25 | 58 | 14,50 | 6 | 1,50 |

The results in (Table 3) show that 80.96% of managerial staff, 81.96% of lecturers, and 81.5% of students rated the proficiency level of lecturers as good and good; only a few assesses at the average level (19.04% of managers, 18.04% of lecturers, 18.50% of students). The results showed that the university’s lecturers basically mastered the technical teaching facilities, knew the close combination between means and methods in imparting knowledge and ability to deal with cases. It is high. But there are some lecturers that the effective use and exploitation of the facilities is limited, sometimes embarrassing in using, so it has a significant impact on the quality of lectures.

Table 4. Teachers’ proficiency in using teaching techniques

| Đối tượng | Mức độ | | | | | | | |
|----------------|--------|-------|-----|-------|------------|-------|-----|-----|
| | Tốt | | Khá | | Trung bình | | Yếu | |
| | SL | % | SL | % | SL | % | SL | % |
| Cán bộ quản lý | 20 | 23.82 | 48 | 57,14 | 16 | 19,04 | 0 | 0,0 |
| Giảng viên | 111 | 30,32 | 189 | 51,64 | 66 | 18,04 | 0 | 0,0 |
| Học viên | 123 | 30,75 | 203 | 50,75 | 74 | 18,5 | 0 | 0,0 |

Regarding the level of using teaching technical facilities of lecturers: This is the actual exploitation ability of lecturers and students compared with pedagogical technical features of teaching technical devices. The results in Table 4 show that the use of teaching techniques by lecturers in the teaching process is uneven, used at the occasional level (28.57% of managers, 25.68% of the lecturers, 23.35% of the trainees rated it, few use (4.76% of managers, 8.74% of the lecturers, 11.25% of the trainees). This is explained by the limited

understanding of the function, structure, usage and maintenance of teaching facilities of some lecturers, so it has a significant impact on the use. them in teaching. General assessment of the reason why lecturers do not use teaching facilities so much, through the summary of survey results in (Figure 2), shows that there are many reasons for teachers to use technology teaching equipment less. learning, but most of the ideas that means, technical means of teaching are still lacking; due to the difficulty of the mechanism of managing technical teaching facilities; some people said that due to hesitation in use and due to no mandatory requirements; a few say that due to lack of use skills.

Table 5. Frequency of using teaching technology facilities of lecturers

| Đối tượng | Mức độ | | | | | |
|----------------|--------------|-------|--------------|-------|---------------|-------|
| | Thường xuyên | | Thỉnh thoảng | | Không sử dụng | |
| | SL | % | SL | % | SL | % |
| Cán bộ quản lý | 56 | 66,67 | 24 | 28,57 | 4 | 4,76 |
| Giảng viên | 240 | 65,57 | 94 | 25,68 | 32 | 8,74 |
| Học viên | 262 | 65,50 | 93 | 23,35 | 45 | 11,25 |

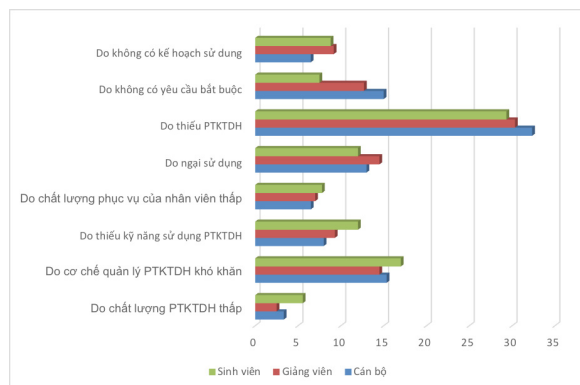


Chart 1: Reasons why lecturers rarely use teaching technology

4.3. Storage status of teaching technical facilities

The means of teaching technology that have been procured and invested have been difficult and very valuable, but in order to use it in a good and durable manner, it is necessary to step up the maintenance, maintenance and maintenance as a

job. do regularly and necessary.

The process of preserving and maintaining teaching technical equipment includes the following steps:

Step 1: Making orders;

Step 2: Receive requests and checks;

Step 3: Organize preservation and maintenance;

Step 4: Acceptance, record of maintenance monitoring and recall of broken teaching technical equipment;

Step 5: Payment

Table 6. Evaluation of the implementation of the repair process of teaching technical facilities

| TT | Nội dung đánh giá | Rất tốt | | Tốt | | Bình thường | | Kém | |
|----|-----------------------|---------|------|-----|------|-------------|------|-----|------|
| | | SL | % | SL | % | SL | % | SL | % |
| 1 | Lập yêu cầu | 210 | 46,7 | 92 | 20,4 | 83 | 18,4 | 65 | 14,5 |
| 2 | Tiếp nhận và kiểm tra | 205 | 45,5 | 89 | 19,8 | 85 | 18,9 | 71 | 15,8 |
| 3 | Bảo quản | 207 | 46,0 | 90 | 20,0 | 88 | 19,5 | 65 | 14,5 |
| 4 | Nghiệm thu, ghi sổ | 80 | 17,8 | 162 | 36,0 | 159 | 35,3 | 49 | 10,9 |
| 5 | Thanh toán | 39 | 8,7 | 165 | 36,7 | 185 | 41,1 | 61 | 13,6 |

- Step 1: Make a request: Units with teaching technical facilities needing maintenance shall submit a Request for maintenance of teaching technical equipment specified in the available form to the Specialized Department. The survey results of the surveyed subjects show that the task of making maintenance requests is currently relatively good, with 46.67% of the respondents rated at a very good level, 20.04 % rated at good level. Because this step is made according to an existing template, the implementation is very simple, without causing great difficulty for the unit to make maintenance requests. However, there are also many cases of submitting maintenance requests to the Department specialized late or improperly. Therefore, some managers assessed that this stage was still poor (14.5%).

- Step 2: Receive maintenance and inspection requests: The specialized department receives the Request for maintenance of teaching technical equipment page and checks the status of teaching technical equipment when the request form is filled in. enough content. The reception of broken teaching and maintenance technical facilities is a complex activity. Through the assessment of the management

officials, there are 45.5% of respondents think that this is a very good performance; 19.8% rated at a good level and 18.9% rated at a normal level.

- Step 3: Organization of maintenance: Specialized department conducts maintenance of technical equipment for teaching immediately. Maintenance period is quite time-consuming and depends on the failure of teaching technology, especially modern teaching techniques. According to the assessment, up to 19.5% of managers thought that this was a normal task and 16.5% of the reviews were poor.

According to the survey results on the maintenance time of teaching technical devices, most of the teaching technical facilities are maintained in time. In particular, the proportion of teaching technical equipment maintained in 1-3 days accounts for 68.25%; 25.32% of technical facilities have been repaired and taught in 1 week. There are many reasons for the long maintenance time of teaching technical facilities, one of the main reasons that managers give the most is due to spare parts for teaching technology in Vietnam. not yet. Therefore, many teaching facilities fail, after being reported and they must be planned to be imported by construction units. The waiting time for importing spare parts accounts for 2/3 to 3/4 of the maintenance time for teaching technical devices. According to survey data, only a small percentage of teaching technical equipment is maintained within 1 month, with 4.38%. Most of these teaching techniques are difficult to find within the country. There are also 1.15% of technical teaching facilities in storage waiting for liquidation, caused by too old or seriously damaged, irreplaceable.

- Step 4: Acceptance, record of maintenance and recall of damaged technical teaching facilities: Components and spare parts (if any) must be tested and accepted before being replaced. The survey results show that the acceptance, recording of maintenance and recall of damaged teaching technical facilities were assessed as good and very good with 53.8%, 35.3% rated.

- Step 5: Payment: Within 01 week at the latest, the Specialized Department shall send to the Finance and Accounting Department a payment dossier, the time of implementation shall not exceed 2 weeks from the date of receipt of the complete payment dossier. The survey results showed that the payment was 41.1% rated at normal level with 41.1% and 13.6% rated at a low level.

5. The reality of managing teaching technology facilities at Central Kindergarten Pedagogy Colleges in the trend of Technology Revolution 4.0

5.1. Actual situation of managing the equipment of teaching techniques facilities

The reality of the management of investment and equipment of teaching techniques at Central Kindergarten Pedagogy College has initially achieved some positive signals such as: The school has a mechanism to reserve 1 item. significant financial resources to serve the needs of procurement of teaching technical equipment, the procurement is carried out in a transparent and transparent manner, the work of estimating and balancing the funding for the investment in teaching technical equipment Good at studying. However, there are still some shortcomings as follows: The additional procurement of teaching technology facilities, especially modern teaching techniques, which are mainly spontaneous, only meet the immediate needs, No plan for equipping long-term teaching facilities has been set up yet, which is inherited because there has been no close guidance in the organization of investigation, inventory and evaluation of the current situation of teaching technical devices.

5.2. Actual situation of managing the preservation of teaching techniques facilities

The management of the preservation of teaching technical facilities has been paid attention by the units (Faculty, Institute, Center...). The school has paid attention to building specialized classrooms, prioritizing specialized classrooms for subjects with many teaching techniques such as:

The school has a room containing teaching technical facilities, a system of cabinets, shelves, tables and chairs...to meet the minimum needs for the arrangement and preservation of teaching technical facilities.

However, in this work, there are still some shortcomings and limitations such as:

- + Specialized classrooms are inadequate, exploitation and use are not regular, effectiveness is not high, not planned into a separate area.
- + Laboratory, practice does not meet standards
- + Room containing technical teaching facilities does not guarantee the area. System of price cabinets is missing, existing numbers have been degraded.
- + The work of hygiene and fire and explosion prevention has not been given adequate attention.
- + The maintenance and maintenance of modern teaching technical facilities has not yet ensured the technical process.
- + Staff in charge of technical teaching facilities is limited but not regularly trained
- + The inspection and maintenance of teaching

technical facilities of the management staff is not specific and still heavy on reporting

5.3. Actual situation of managing the use of teaching techniques facilities

The management of the use of teaching technology facilities in many faculties has not been given adequate attention such as:

- + The lack of specialized classrooms, cramped technical facilities and teaching facilities,
- + The teaching facilities are not scientific;
- + Teaching technology is not well preserved, leading to damage and reduced use efficiency

In addition, the fact shows that lecturers are not fully equipped to use teaching techniques, so they are reluctant to access new, modern and parallel teaching techniques. the training of using teaching technical facilities for lecturers is not good, leading to limited skills in using teaching technical facilities of lecturers, not really exploiting teaching and teaching technical facilities. Experiences in innovating teaching methods.

6. Evaluation of advantages and disadvantages in teaching technology facilities management at Central Kindergarten Pedagogy College

*** Advantage**

100% of managers and lecturers are equipped with minimum teaching facilities such as computers, even handheld microphones, this is a very favorable condition for the management of technical facilities taught study at the Central Kindergarten Pedagogy College because it reduces the burden of investment on the school

School leaders pay attention to the quality of teaching technical facilities

Users of teaching techniques (managers, lecturers) are aware and comply with regulations on using teaching technical devices

The school has done well in coordination with businesses to share resources for training such as seeking, calling for funding of teaching techniques, materials, curriculum, scholarships.

The majority of lecturers and managers are highly creative, able to implement modern training methods based on Information and Communication Technology.

*** Hard**

Technical facilities for practical training and practice are not yet comprehensive and have not been effectively exploited. Some modern experimental equipment and devices lack sufficient people to use them and lack operating cost. The regular and periodic refresher course in management of teaching

technical facilities has not been well implemented, so sometimes it leads to the situation that the staff of teaching technical facilities cannot keep up with the development and require of training needs.

The inspection and supervision work of the management level has not been regular and timely, in the evaluation, it has not really considered the issue of exploitation, use and preservation.

The procurement of investment in teaching technical facilities and funding for the maintenance and maintenance of teaching technical equipment are also passive depending on administrative procedures and financial resources of the school.

7. Analysis of the causes of the situation of management of the equipment, preservation and use of teaching technical facilities of the Central Kindergarten Pedagogical Colleges

The management of technical facilities for teaching at the Central Kindergarten Pedagogy Colleges is still limited due to the impact of the following main causes:

-The system of investment and development mechanisms and policies of the

higher levels is not comprehensive and comprehensive, the quality policy of the Ministry of Education and Training in general and the Central College of Pedagogy in particular has not yet been completed.

-Promote in practice training activities, lack of uniformity, also patchwork, fragmented.

-The ideology and principles of quality assurance have not been included in the activities at the school in general and in the management of teaching technical facilities, so the effectiveness is not high and the timeliness is limited.

-The assessment is still heavy, according to the report, has not attached much importance to the evidence and has followed the evaluation process of quality management in the development of teaching technical facilities to contribute to improving the quality of teaching and training.

-The work of educating awareness about quality culture for management subjects has not really been paid adequate attention, and has not been conducted regularly.

-The apparatus in charge of management of teaching technical facilities has not promoted the active role as a focal point to coordinate the development of annual teaching technical facilities under the motto of modernizing the Central Kindergarten Pedagogy Colleges in the trend of Technology Revolution 4.0.

- The organization of training and fostering

in exploitation and use skills has not been given adequate attention.

- The slow management and direction of subjects is still one of the causes affecting the efficiency of investment and development of teaching and learning techniques.

In summary, the main reasons can include:

- The plan of teaching technical facilities is not really consistent with the planning of the system of teaching techniques in the development strategy of the Colleges;

- Have not yet developed standards, criteria and completed the process of managing teaching technical facilities in management of teaching technical facilities following the trend of Technology Revolution 4.0;

- Implementing the internal evaluation process and evaluation of related parties in the management of teaching technical equipment is not very good;

- Organization of the management apparatus of teaching techniques has not been completed according to the trend of Technology Revolution 4.0.

8. Conclusion

Teaching technology has a very important role to improve the quality of teaching in the Central Kindergarten Pedagogical Colleges in the trend of Technology Revolution 4.0.

Therefore, in recent years, the school has always paid attention to the investment, planning, development, management, exploitation and use of teaching technology and has achieved positive results such as: The Central Kindergarten Pedagogy Colleges' leaders were well aware of the important role of teaching technical equipment and the management of teaching technology facilities to ensure the best teaching process; The planning of investment in teaching technical devices is relatively close to the content of the training program, organizing training methods towards modernization.

Quality criteria have been mentioned in the plan's content; The organization of procurement of teaching technical facilities for the majority of departments, faculties and units has completed on schedule and the provisions of law; The lecturers of the school have computer and foreign language knowledge access to modern teaching methods and exposure to modern teaching techniques, so they have many advantages in using and managing teaching technology facilities during their lectures; Quality objectives for training activities are interested by many lecturers.

However, the teaching technical facilities in general and the management of teaching

technical devices in particular have revealed some limitations in terms of: Management mechanism of teaching technical equipment; management capacity of teaching technical equipment; fostering of professional management and skills in using teaching technical means; system of regulations and regulations on teaching technical devices; Management of use and preservation of teaching

technical facilities. Factors affecting the management of teaching technology facilities at Central Kindergarten Pedagogy Colleges were initially recognized but there was no way to take advantage of positive effects, limiting the adversely affecting the management of teaching technical facilities at Central Kindergarten Pedagogical Colleges in the trend of the Technology Revolution 4.0.

References

- Cuc, N. (2017). *Impact of the 4.0 industrial revolution on higher education institutions in Vietnam and policy implications for Vietnam*. Regional Political Academy I.
- Dung, N. T., & Tu, N. Van. (2002). *Some ideas about the technical facilities of teaching schools. Situation - Causes - Solutions*. Educational Development.
- Giap, T. X. (1997). *Teaching Facilities*. Hanoi: Education Publishing House.
- Hoa, P. D., & Son, N. Q. (2008). *Application of Information Technology in Active Teaching*. Hanoi: Education Publishing House.
- Hoa, P. D., & Son, N. Q. (2011). *Methods and teaching technologies in interactive pedagogical environment*. University of Education Publishing House.
- Hoa, P. D., & Son, N. Q. (2016). *Methods and teaching technologies in an interactive pedagogical environment* (First edit). University of Pedagogy Publishing House.
- Son, N. Q. (2006). *A number of management solutions to improve the efficiency of using technical means of teaching and learning, applying information and communication technology at Continuing Education Centers and Learning Centers community practice*. Ministry level scientific research project.

THỰC TRẠNG QUẢN LÝ HIỆU QUẢ PHƯƠNG TIỆN KỸ THUẬT DẠY HỌC TẠI CÁC TRƯỜNG CAO ĐẲNG SƯ PHẠM MẪU GIÁO TRUNG ƯƠNG TRONG XU THẾ CÁCH MẠNG CÔNG NGHỆ 4.0 HIỆN NAY

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Tóm tắt

Hiện nay việc quản lý phương tiện kỹ thuật dạy học ở các trường Cao đẳng Sư phạm Mẫu giáo Trung ương đã và đang được thực hiện một cách thường xuyên và đạt được một số thành quả nhất định, nhưng trên thực tế vẫn còn nhiều bất cập.

Đề tài đã tập trung khảo sát, đánh giá chi tiết thực trạng quản lý phương tiện kỹ thuật dạy học tại các trường Cao đẳng Sư phạm Mẫu giáo Trung ương, từ đó tìm ra những ưu điểm và hạn chế và chỉ ra những nguyên nhân chủ quan và khách quan của thực trạng đó để đề xuất hệ thống giải pháp quản lý hiệu quả phương tiện kỹ thuật dạy học tại các trường Cao đẳng Sư phạm Mẫu giáo Trung ương trong xu thế Cách mạng Công nghệ 4.0 hiện nay.

Từ khóa

Quản lý; Quản lý hiệu quả; Phương tiện kỹ thuật dạy học; Trường Cao đẳng Sư phạm Mẫu giáo Trung ương; Xu thế Cách mạng Công nghệ 4.0