



# Discussion on the Maintenance of Computer Room in Vocational Colleges from the Appropriate Rate of Equipment

Jie Wang, Wenjing Wu

HUBEI ECOLOGY POLYTECHNIC COLLEGE, Wuhan 430200, Hubei, China. E-mail:wuwnejing@163.com

Fund Project: Scientific Research Project of Hubei Vocational and Technical Education Association (ZJGB2021030).

Abstract: Because of resources, funds, personnel, policies, etc., vocational colleges have caused a shortage of hardware resources such as computer rooms. Faced with daily computer room problems, they should improve the computer's proper rate and improve the experience of teachers in the classroom.

Keywords: Vocational Colleges; Computer Room; Proper Rate

### 1. Introduction

Computer rooms are divided into general-purpose computer rooms and specialized computer rooms in vocational colleges. These two types of computer rooms are distinguished by their use. However, no matter which kind of computer room, things are scarce in the specific environment of vocational colleges. Exist as an expensive resource. In recent years, with the rapid development of information technology, the market and enterprises are constantly changing the demand for employment. Vocational schools have also increased curriculum reforms. Therefore, courses involving the use of computer rooms will increase the utilization rate of computer rooms. It has become a lot of pressure, so how to relieve this pressure, increase the utilization rate of the computer room, and improve the quality of teaching are the problems encountered by computer management in vocational schools. This article only discusses the problems from the aspect of equipment guarantee.

# 2. Problems encountered in the use of computer rooms in vocational colleges

### 2.1 The utilization rate of the computer room is almost non-neutral

The computer room of the secondary college where the author works is from Monday to Friday, from 1-2 in the morning to 7-8 in the afternoon. The scheduling rate is 100%, and even some courses have to be scheduled to 9-10 in the evening.

This puts a lot of pressure on the perfect operation of the equipment in the computer room. It is well known that computers are electronic products, and their problems will appear in proportion to the time of use, especially in such concentrated and high-frequency use. Under the circumstances, the damage rate is also a problem to be faced. Of course, the high utilization rate also puts forward more stringent inspection, operation and maintenance requirements for maintenance personnel.

### 2.2 Being able to boot is not equivalent to being able to meet the requirements for teaching

The fact that the computer can be turned on does not mean that it can be used. The power-on mentioned here means

Copyright © 2021 Jie Wang et al.

doi:10.18686/ahe.v5i8.3869

This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons. org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

that the computer can enter the system after pressing the power button. But now vocational colleges involve a lot of majors, and different majors and different courses use a lot of professional software. If there is no software for the corresponding courses in the system, the teachers of the courses cannot complete the teaching tasks. The installation, deployment, and conflicts between the software and the software are all problems that need to be resolved layer by layer.

### 2.3 Being able to use is not the same as user experience

When professional teachers use the computer room, whether the software can be used is the most basic, but our professional teachers pay more attention to the experience of using the computer room. If the software version installed in the computer room is inconsistent with the version required by the course, the teacher needs to adjust and optimize the content of the course from time to time during class. The experience of using the computer room at this time is very bad. The original use of the computer room is convenient for students and teachers. In the end, the teaching effect will be greatly reduced because of the bad teaching experience.

### 2.4 The problem of students' usage habits

The habits of students using computers are uneven. For example, if the machine is not easy to use, use a cold shutdown process, or the current computer cannot enter the system for various reasons (crash during the use of the software). Switching on and off the power supply repeatedly, these bad usage habits often cause irreversible damage to the computer, but a computer room will face students with this usage habit every day, quantitative changes will bring qualitative changes, and finally the hardware problems in the computer room will be proportional. The emergence of.

### 2.5 Problems caused by viruses

Where does the computer virus in the computer room come from? It is nothing more than the non-genuine authorization system used when the system was originally installed, the student downloads it from the Internet under unknown circumstances, and the student U disk brings it from outside, and a large number of computer viruses will If the machine restarts for no reason, the blue screen, the slower the machine runs, the software cannot be used normally, etc., this will of course also bring another problem. Infection, the last resort is to reinstall the system.

### 2.6 Information security issues

Once the computer room is connected to the Internet, this is a problem that we have to consider in the current large environment-information security. As a low-value target of ordinary teaching computer room, the possibility of being attacked is not high. This is not too high often makes us neglect protection. For example, the ransomware and mining Trojans that became popular in 2017 cannot automatically identify the value of the target, but once they enter the internal LAN, they can break through the weakest system and self-initiated attacks (propagation) within the local area network are hard to prevent.

# 3. Suggestions

The above mentioned are the problems we have to face in the daily use of computer rooms, which will affect the point of view mentioned in this article-equipment adequacy rate. Probability rate is the percentage of the number of equipment in good condition to the existing figure. This concept first appeared in wars. The proper rate of fighters or equipment is one of the factors that determine whether the war can be won. During the Fourth Middle East War, aircraft on both sides of the war continued to be lost, but in the latter part of the war, the number of aircraft available for the Israeli Air Force rose miraculously, and the Israelis eventually won the war. If we take the semester as a time period, then the use and maintenance of the computer room is like a war. If the computer becomes less and less effective in the later part of the semester, it will inevitably bring troubles to teachers. In order to ensure the daily operation of the computer room and improve the computer proper rate in the computer room, we propose the following suggestions.

#### 3.1 Complete computer room management system and implementation efforts

Clarify the scope of responsibility of the computer room management personnel, make the responsibility to the individual, clarify the responsibilities of the teacher in class, and the computer room management personnel, and achieve the responsibility of the specific affairs to the individual. However, if the system is on the wall, the enforcement must keep up. Don't let the system become a dead letter, and make the system a real weapon for restraining people's behavior. Both students and teachers come to quasi-obedience to the law, so that the management of the computer room can be covered with a "protective umbrella" of the system.

#### 3.2 Increase the renewal and construction of the cloud computer room

Nowadays, there are many types of computer room cloud technologies provided by various manufacturers. Based on Internet information service technology, information resources are integrated and shared through networked services. Different solutions can be selected according to the courses undertaken, but whether it is which kind of solution, the convenience brought by the cloud computer room is unmatched by the ordinary computer room. Common computer room maintenance such as reinstalling the system and installing software. If the traditional computer room needs to replace the system, the engineering volume is said to be huge. If the cloud computer room is supported by the gigabit

network, one person can perform the entire maintenance in a short time. The computer room system is upgraded or replaced, which greatly improves the efficiency of maintenance.

### 3.3 Standardize students' daily use of computers

A good computer training room environment can stimulate students'enthusiasm for learning and also help the normal operation of computer equipment. The computer room is a public resource of the school, and it is not necessary to cherish it when you are in class. The teacher can add some ideological and political elements to the normal class to cultivate the habit of cherishing public resources. You can also embed some computer use. Only the cooperation of teachers and students can create a good classroom environment in the computer room and extend the life of each hardware system.

# 3.4 Installing restore software or shadow system can effectively prevent viruses, Trojan horses and their spread

For the convenience of class resources and students'saving homework, many class teachers of the restoration software are resistant to use, which actually brings many security risks. For example, the mobile storage devices brought by students cannot guarantee their security, and will bring viruses and Trojan horses to the computer system. The most direct and effective measure is this kind of restoration software, and better restoration software can also set up an open sandbox. Such virtual disks are used by teachers and students to save your resources, so that the security of the computer system will be greatly improved, and the difficulty of daily maintenance by maintenance personnel will be reduced.

## 3.5 Use information technology to strengthen the daily maintenance of the computer room

Daily maintenance is like going to the hospital, early detection, early treatment and early recovery. Daily maintenance is the most important. How can ordinary computer room problems be detected early? It is essential to strengthen daily inspections, but this requires a lot of manpower and material resources, which is time-consuming and not efficient. So if there is a computer room (training room) management system, it may be more effective. Cooperate with the teacher to collect the feedback data of the teacher in the first time, so that you can accurately determine which computer room has what faults in the first time, which is convenient the maintenance personnel respond immediately and arrange a plan to deal with the fault.

### 3.6 Build a professional and responsible maintenance management team

Maintaining a computer room is a daily and tedious task. Professionals must be checked and maintained every day in order to find the existing problems in time. But after all, professional matters need professional people to do it. How to build a professional maintenance team is different in each school. You can combine your own situation and find a construction plan that suits your own situation to implement it.

### 4. Conclusion

To sum up, a semester is like a protracted "war" The equipment in the computer room must be kept in good condition during a long teaching cycle. It is inseparable from the establishment of a learning system, the cooperation of teachers and students, and high-quality maintenance. The daily hard work of the team so that we can provide high-quality guarantee services for the entire teaching and lay a good foundation for improving the overall education and teaching level.

### References

- 1. Yan L. Problems and countermeasures in the management and maintenance of computer rooms in colleges and universities. Computer and Network 2021; (47).
- 2. He D. A brief analysis of the application of cloud computing in computer room management in higher vocational colleges. Digital Computing Application 2021; (39).