College Public Computer Room Construction Management and Maintenance Measures

Shengli Wang

line 1 (of *Affiliation*): dept. name of organizationShanghai Technical Insitute of Electronics and Information
Shanghai, China

Abstract: Public computer room is an essential part of each college. In the construction and management process always exist a lot of problems. Based on the author's experience, study the public computer room management techniques and means around these problems.

Keywords: Colleges and Universities; Computer room; Construction; Management

1. Introduction

With the rapid development of computer and network, people have become more and more urgent demand for computer education. The number of computers more and more in higher university, every year increase many computers, but the model configuration numerous, student misuse, artificial damage to the system and virus attack, which bring a lot of inconvenience to the management work.

2. The Public Computer Room Service Content and Object

Higher university public computer services mainly include: Internet information queries, experiments with computer, e-mail, communication software and so on. College Public room service targets: All students and faculty.

3. Content of the Public Computer Room Management

3.1. Computer Room Environmental Management

Computer room environment management should consider the following aspects: temperature, humidity, dust, static electricity, electromagnetic interference, etc., specific as follows: 1) Strictly in accordance with the safety regulations of the state, based on the amount of room space set up computer and lights; 2) Install the suitable transformer, using air switch and lightning protection device; 3)Install air-conditioning to assure indoor air quality; 4)Clean the room to maintain the room clean and tidy; 5)To prevent students damage the computer, computer desk should layout reasonable and packaging interface part as far as possible, of course also more convenient maintenance; 6) To easily manage, it is best to fixe computer desk on the floor; 7) Computer room curtains as close as possible, to prevent the display speed monitor aging due to direct sunlight.

3.2. Hardware Management

Hardware is the core of the computer room, is the material base of the computer room, it should be unified configuration as far as possible on the premise of conditions permit, so that unified management maintenance. Specific for the following these aspects: 1) The student computer should use name-brand computer as much as possible, although name-brand computer price a little higher, but work stability, long service life and easy to maintain; 2) Teachers computer configuration are higher than students; 3) In order to facilitate maintenance, configure a reduction of card for each computer; 4) In order to make the system stable, the student machine use integrated motherboard to reduce the interface problems caused by poor contact; 5) The teacher computer equipped with sound and microphone and other equipment; 6) Choose suitable and durable computer desk; 7) To prevent parts theft, should fixed host, and install anti-theft alarm and other security equipment.

3.3. Software Management

Hardware services for software, computer without software can't do anything like a lifeless body. As a computer room, mainly provides students a practice environment to use the software, so the software management are equally important. Detailed specification is as follows: 1) To adapt to The times development, according to the requirements of teaching, the operating system configuration is stable, such as operating system-- configured for Win2000pro; 2) Computer room server configure stable server operating systems, considering the floppy disks and U drives reliability and security, can use a manage-

ment software on the server for each student to open a space, and set up the account and password, for students to provide convenient, safe and reliable storage space; 3) According to the use of the computer room of course need, install the required software, and should be fully installed, so that the students complete the study; 4) Optimize the system, make computer startup and shutdown time as short as possible, system operation is stable and reliable; 5) Install genuine network antivirus software, timely upgrades and eliminate viruses harassment.

3.4. Student Management

Student is the main group using the computer, and their behavior directly affects the life of the computer. Therefore, it is necessary to establish perfect management system and strict implementation; 1) Develop management system, and strictly abide by the implementation, the violator shall be given a heavier punishment; 2) According to prescribed shutdown the computer; 3) Computer room as much as possible to make student with computer; 4) Regulate behavior, the computer break down when students in the proper use, you should explain to the teacher in a timely manner, is strictly prohibited without permission, and may not move disassemble computer parts; 6) Keep computer room quiet, and clean practice teaching environment.

4. Public Computer Room Management Techniques and Means

Now many schools computer room use the following methods: insert the hard disk protection card to eliminate system modify or use hard disk cloning technology to quickly restore the damaged system. Practice has proved that the above two kinds of approach has obvious shortcomings, inserted protection card occupy expansion slot, but at the same time also easily lead to interruption conflict and software failure. Use cloning belongs to remedy the situation, is a helpless measure, remedy cloning technology adapt to quick installation for bulk of the new computer system. Feasible solution is using super bodyguard 2000 software. Each computer hardware divide into the system area and user area, let super bodyguard 2000 protected areas are super bodyguard protection system within the scope of the file system. No matter how serious pruning, just press F10 when startup and enter the correct password, you can fully restored to super bodyguard initial installation to its original state. Super bodyguard is actually save the original state of the system through each hardware T! A and T! B directory. However, when computer starts press F8 and select the Previous Version Of MS-DOS, or use DOS floppy to start, you can access two directories and delete it , in order to estab-

lish a defense to break super bodyguard. To this, use the method that set the desirable protect hard disk to FAT-32 (FAT-32 partition is inaccessible MS-DOS), set the FAT-32 partitions can also speed up the hard disk read and write speeds.

In addition, if the hard disk can not be started, the hard disk partition table is destroyed due to a virus or other reasons, resulting in many valuable information difficult to restore. We use DiskMan hard disk partition table maintain tool, through that can guarantee the security of the system, it is a multi-disk partitioning software, supports most of the common partition as FAT16, FAT32, UNIX, NOVELL, and one hard disk can create up not more than four primary partitions. In addition, DiskMan has a whole Chinese graphical interface, without Chinese support system, use the form chart showing the detailed structure of the hard disk partition table, and offers many advanced features. The software includes the following four documents: diskman.exe, diskman.dat, help.text, license.text. This software can be installed on a DOS boot disk, start the computer with the floppy, and then enter diskman and enter the Enter to enter the program's main menu: hardware, partition, tools, view, help, select a sub-menu commands, press Enter to complete the corresponding function. Specific usage of this software is available from 12 side note: backup and restore partition table, create the partition, active partition, delete partition, hidden partitions, directly modify the parameters, parameter checking, updating the hard disk partition table, view any sector, select the hard disk and rebuild partition table, backtracking.

Conclusion

In a university, public computer room administration can not be overlooked, a standard computer room management system can provide students with a good practice environment, to provide a complete education teaching and learning environment for schools, and bring a new propaganda highlights. Therefore, it has important significance to well construct and manage public computer rooms. Only keep learning, summing up experience and learn from others's strong points to offset weakness can continually progress, and better serve students, make contribution to school's development and construction.

References

[1]   Lei Yanrui. Introduct the school computer room management[J]. Science and technology information development and economy, 2006 (18).

[2]   Huang Zhaozeng. Talk about university computer room management countermeasures[J]. Learn to monthly, 2005 (2).