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STUDY ON WORK AND WORKSTATION DESIGN OF COMPUTER LAB: A REVIEW

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ABSTRACT

In this study I investigated the perception of students on the services provided by the computer lab at Chaudhary Charan Singh Haryana Agriculture University's college of Home science. The main objective of the study was- to study the work, worker and workplace. To study the existing condition of workplace and to find out whether students were comfortable with existing furniture or not.. Furthermore, the research uncovers the reasons why students use the computer lab. Data for this study was collected through direct observation method and questionnaires distributed to students who use the computer labs at college campus. Employee satisfaction can be boosted by smart workplace design. During my research, I discovered a scarcity of computers and chairs. Students taken out chairs from different –different corners of department. There are Twenty nine computers in the lab, three PCs and two air conditioners are not operating properly. Students faced the problems of frequent cut of electricity and Internet also. On the basis of questionnaire recommendations was given.

1. INTRODUCTION

Computers are used in almost every aspect of life. Actually we live in a period where everything is largely dependent on the use of the computers. Computer education in schools/colleges helps the students to get access to the extensive world of information. Students can find any information that they desire with the   help of a computer. Almost every school /college   has its own computer lab. These labs are essentials for teaching students how to use computers wisely and efficiently. I studied in a computer lab so I observe the present condition of computer lab. The computer lab has a great many utilities which help us in understanding   the various aspects of the subject.

There are Twenty nine computers in the lab, all of which are up to date with software. Three PCs and two air conditioners are not operating properly. The computer lab also includes a convenient air circulation system. In a computer lab, a proper air circulation system is essential for two reasons: first, to protect the components from overheating, and second, to ensure the comfort of the users. Students can learn to use the computer to conduct various subject-related researches and to complete various tasks. Effective computer lab administration is a common goal to guarantee that clients, i.e. students, have access to appropriate infrastructure to support their learning activities. As a result, a variety of ways have been used to ensure that these objectives are met. A suitable teaching and learning environment, as well as adequate infrastructure, were shown to be beneficial to the teaching and learning process. According to **Selamat et al. (2004)**, respondents believed that a favorable learning environment would boost their motivation on average. According to **Newby and Fisher (1998)**, the computer lab environment has a substantial impact on students' views regarding computers and courses of study. **Selamat et al.** also proposed that when organizing training or coursework in computer labs, the state of computer software and hardware should be considered. **Swanson and Phillips (1998),**also studied the concept and philosophy of Total Quality Management in the management of computer laboratories in order to suit customer needs, i.e. students. **Salleh et al. (2010)** explore the impact of the computer lab's setting and layout on social interaction and students' inventiveness during practical sessions in the classroom.

2. OBJECTIVE

1. To study the work, worker and workplace.
2. To study the existing condition of workplace.
3. To find out whether students were comfortable with existing furniture or not.

3. METHODOLOGY

The study was conducted in Computer Lab, College of Home Science, Chaudhary Charan Singh Haryana Agriculture University, Hisar. Fifteen respondents were selected on random basis that use computer lab. The study was carried out to study the work, worker and workplace, to study the

existing condition of workplace and to find out whether students were comfortable with existing furniture or not.

Data for this study was collected through direct observation and questionnaires distributed to students who use the computer labs at College campus. A total of fifteen questionnaires were distributed among students. The collected data were tabulated and further improvements were recommended.

4. RESULTS AND FINDINGS

Study of work:

Table - 1

Questions	Response (Yes/No)	Items in number
How many Computer's available?		29
Internet provided in all computers?	No	7
All Computers work properly?	No	3
Printer available?	Yes	1
Ups/ inverter	No	
Storage space provided	No	

Study of work: In table 1 work and work station was studied. There were twenty nine computers in the lab, all computers were not internet accessed, and only 7 computers had internet facility. Students faced a lot of problems due to frequent cut of electricity and internet. Three computers are not operating properly.

Study of worker:

Table - 2

Questions	Response (yes/no/items in no.)
Daily user	25-35
Are you come to the lab every day?	Yes
Existing furniture setup comfortable.	YES
Chairs are adjustable.	NO

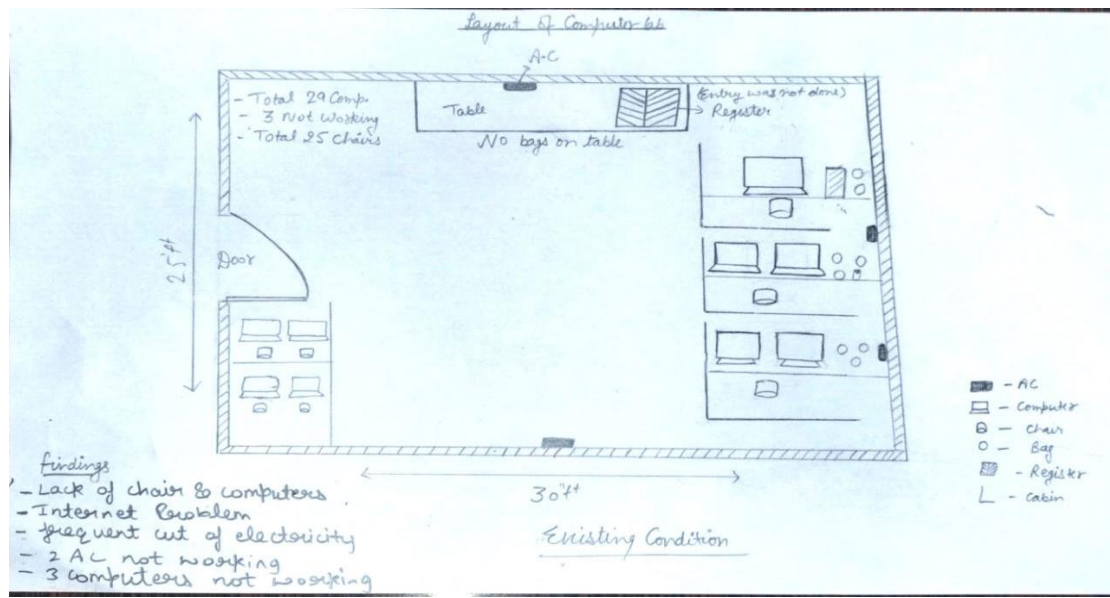|	
Are frequently used items within easy reach?	YES
Mouse comfortable to use?	YES
Monitor positioned directly in front of you.	YES
Monitor and work surface free from glare?	YES
How many chairs are available?	25

Study of worker: In table 2 workers was studied. There were thirty to thirty five users who use computer lab daily. According to the users chairs are comfortable and the work surface was free from glare. Monitors are placed in front of user and easy to use. There was lack of chairs; students have to taken out chairs from different corners of department.

Study of work place:

Table - 3

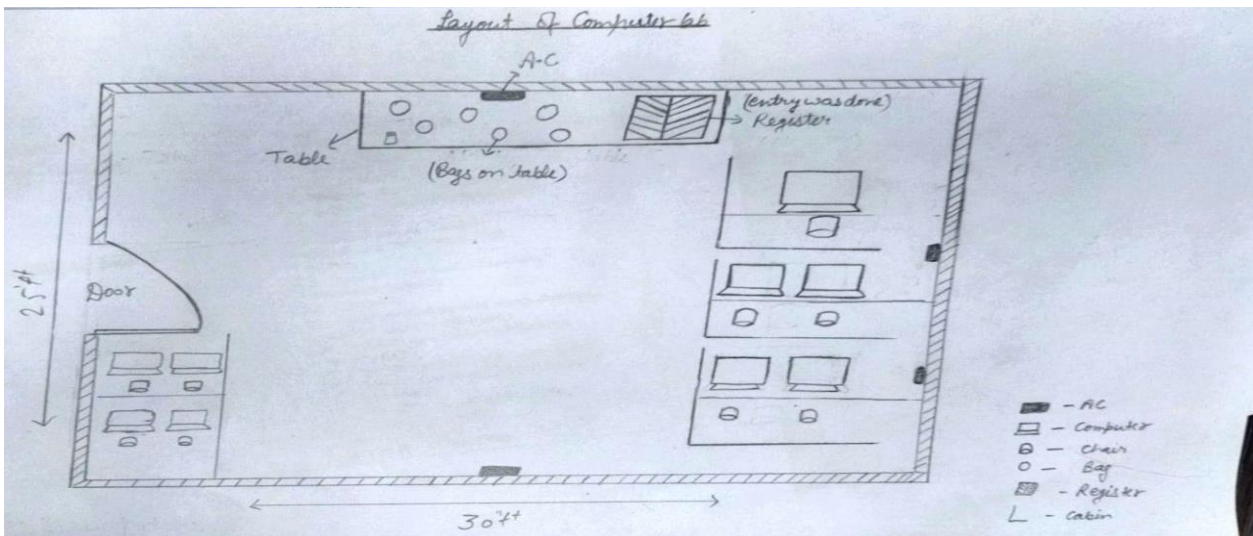| Questions	Response (yes/no/items in no.)
Area of lab	Good
Proper Lighting	Yes
Proper cleaning	Yes
Proper ventilation	Yes
Sitting arrangement comfortable?	No
Proper space	Yes

Study of workplace: Employee satisfaction can be boosted by smart workplace design. Workplace should be fit for worker ,the better the fit ,the higher level of safety and worker's efficiency .So it is important to design the workplace accordingly to the work and worker .During my research I found that there were proper lighting and proper ventilation in lab. Improper lighting causes eyesight problems and poor cleaning affect our health.

EXISTING CONDITION OF COMPUTER LAB:

I studied about present existing conditions of computer lab .After inspecting I realized that there's no clear arrangement about any work. There are Twenty nine computers in the lab, all of which are up to date with software. Three PCs and two air conditioners are not operating properly. The computer lab also includes a convenient air circulation system. In a computer lab, a proper air circulation system is essential for two reasons: first, to protect the components from overheating, and second, to ensure the comfort of the users. The numbers of computers and chairs were less in number. Entry registration is not properly maintained. Students faced the problems of frequent cut of electricity and Internet also.

5. FINDINGS

- Lack of chairs and computers
- Internet problem
- Frequent cut of electricity
- Improper lighting
- 2AC are not working
- 3 computers are not in working condition

Work done- After the analysis of existing condition of computer lab, I managed things at proper place and in proper condition. Such as I arranged tables and chair in proper manner, Proper maintenance of entry register. Some things are not in our hand so am writing the application to the 'Dean' for solving the problem related to the computer lab. On the basis of questionnaire recommendations was given.

Before   **After**

6.   RECOMMENDATIONS

- Provide Racks
- Chairs
- Update version of computers
- All computers should have internet /Wi-Fi access
- All computers should be work properly Proper lighting
- Ups /inverter
- Proper wiring
- Repair Ac
- Storage

COMPUTER LAB SAFETY RULES FOR PROTECTING EQUIPMENT:

- Do not bring any food or drinks near the machine.

- Turn off the machine once you are done using it.

- Do not plug in external devices without scanning them for computer viruses.

- Ensure that the temperature in the room stays cool, since there are a lot of machines inside a lab as these can overheat easily. This is one of the many ways of ensuring computer safety.

- Try not to touch any of the circuit boards and power sockets when a device is connected to them and switched on.

- Always maintain an extra copy of all your important data files.

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