

INCREASING THE EFFICIENCY FOR MAINTENANCE AND TAKING CARE OF COMPUTER SUPPLIES AT ENGLISH PROGRAM OF DEMONSTRATION SCHOOL OF SUAN SUNANDHA RAJABHAT UNIVERSITY.

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ABSTRACT

The purposes of this research were to 1) Reduce steps of maintenance and repairing of computer supplies in classrooms and computer lab 2) study satisfaction of teachers and students towards computers and teaching materials in classrooms and the computer lab. The samples, obtained by random sampling, were 40 of Grade 7-12 students and 10 teachers during the first semester of the academic year 2018. The research instruments were survey checklist form and satisfaction questionnaires. The statistics used to analyze the data were means, standard deviation, percentage and t-test. The findings were as: 1) Process of after maintenance and repairing of computer supplies in classrooms and computer lab was more efficiency than before study. 2) The satisfaction of teachers and students towards computers and teaching materials in classrooms and the computer lab was 4.2. The highest aspect was fast service at 4.64 and the lowest aspect was virus protection ability for computer program at 3.56.

INTRODUCTION

It's hard to deny that computers have taken a prominent role in modern society. From the smartphones in our pockets to the smart devices controlling our appliances at home and everything in between, computer technology is everywhere. [1] It should come as no surprise that the use of computers in education has been steadily increasing and in many ways has revolutionized traditional education. Computers in the classroom have multiple benefits for both students and their teachers. Computers are one of the most valuable resources in a classroom because they serve so many useful functions. With computers and the internet, students today have a wealth of information at their fingertips that can help them develop their research and communication skills while preparing them for a future career in a workforce that is increasingly reliant on computer technology. Computers have revolutionized the teaching profession in multiple ways. Teachers use computers to record grades, calculate averages, and manage attendance and access data on student performance in online programs and assessments. Computers have also made it easier for teachers to vary their instructional delivery. Instead of lecturing at the front of the room for an entire class period, teachers can incorporate technology into their lessons to keep students engaged while appealing to a variety of learning styles. From using computers to create presentations on a topic to showing video clips that complement the lesson at hand, technology helps teachers make the content easier for students to understand.[1]

English program of the Demonstration School of Suan Sunandha Rajabhat University was organized for the students who study in basic education. Teachers teach in English by lectures through various technologies. Technology is very important for teaching and learning. English program provides computers for teachers to use in teaching. There are 12

classrooms with computers and 1 computer lab. Every teacher uses the same computer lab and every classroom so computer supplies caused a lot of problems.[2] There are many factors of computer supplies problems, for example, students themselves used computers after teaching, process of turning on and shutting down of computer was wrong by teachers and students, using the different equipment, projectors were out of services, etc. So researchers would like to develop computers system for English program of the school.

OBJECTIVES

This research aims:

- 1) to reduce steps of maintenance and repairing of computer supplies in classrooms and computer lab,
- 2) to study satisfaction of teachers and students towards computers and teaching materials in classrooms and the computer lab.

MATERIALS AND METHODS

Materials

The main purpose of this study was to increase the efficiency for maintenance and taking care of computer supplies at English program of the Demonstration School of Suan Sunandha Rajabhat University. The research instruments were survey checklist form and satisfaction close and open ended questionnaires.

First Section: sex, age, educational level, job position, years of working or studying periods at the Demonstration School of Suan Sunandha Rajabhat University. It is the Check list form.

Second Section: Level of satisfaction towards using computers and periods of repairing computer supplies.

- 1) Satisfaction towards using computers and teaching media and materials
- 2) Process and period of repairing

This questionnaire was used Likert's 5 Rating Scale levels: 5 is the most, 4 is very much, 3 is average, 2 is little, and 1 is the least.

Third Section: It is the open ended questionnaire. Responders can answer and give comment or suggest some information. The researchers could bring to improve and fix it for better efficiency.

Data Analysis

After researchers studied the process of performance and the process of controlling computers in the classrooms, and checked and clarified all of material and media from requesting of using form and daily teaching schedules, the researchers improved process of the research, then surveyed satisfaction of management and using and repairing of computers. The statistics for data analysis were used as follows:

1.First Section: sex, age, educational level, job position, years of working or studying periods at the Demonstration School of Suan Sunandha Rajabhat University was analyzed by percentage, means and standard deviation.

2.Second Section: Level of satisfaction towards using computers and periods of repairing computer supplies was analyzed by means and standard deviation

RESULTS AND DISCUSSION

From the research, it found that 4 factors: sex, age, educational level, and basic knowledge of computers can be discussed by each component:

1. General information of examples

Examples of this research are 10 teachers and 40 students. The result from the questionnaires found that:

Sex: It found that male was 50% and female was 50%.

Age: 12-20 years old was 80%, 21-40 years old was 16%, and 41-60 years old was 4%.

Educational level: high school was 80%, master degree was 12%, and doctoral degree was 8%.

Periods of working or studying: 1-6 years was 90%, 7-12 years was 10%.

2. Satisfaction of teachers and students

Level of satisfaction towards using computers and teaching materials including to repairing computers and supplies found that service from staff was the most of all components at \bar{x} = 4.2, the quickness of service and contact was \bar{x} = 4.64, and the lowest satisfaction was ability of virus protection of computer program was \bar{x} = 3.56

3. Using the result of the research to apply in teaching and working

Researchers applied to use the result of the research at English program of the Demonstration School of Suan Sunandha Rajabhat University. To increase the efficiency for maintenance and taking care of computer supplies, the staff of English program can efficiently apply to use the result and fix the problems caused by computer supplies. [3] The chart below showed the process of maintenance and solving the problems of computers in the classrooms.

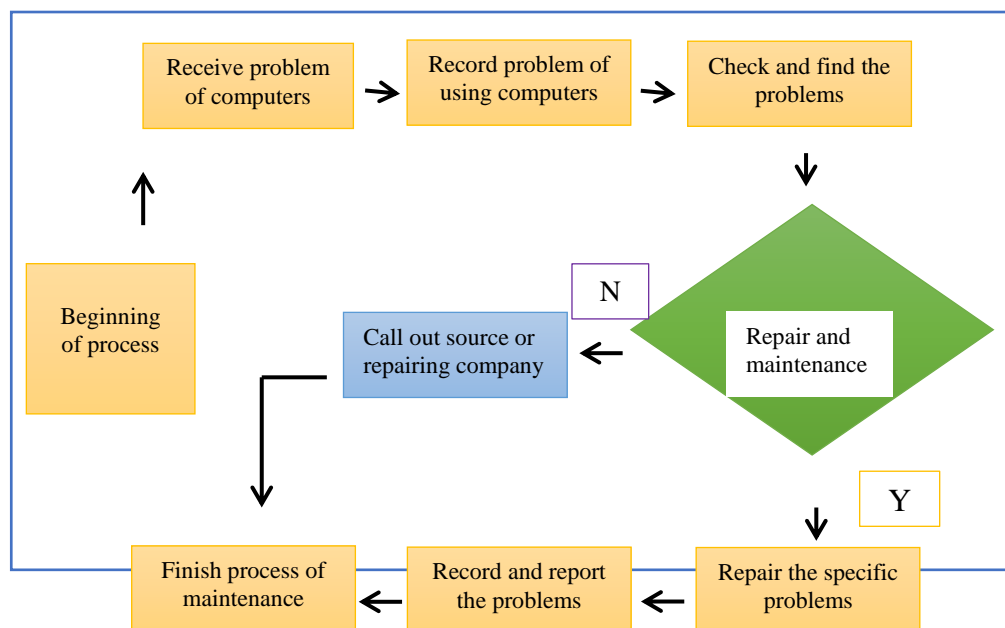


Figure 1: Chart of process of maintenance and repairing

4. The effect from changing how to work

It can reduce the risk towards computer supplies caused by users. [4] It can protect computers for longer using, and can reduce steps and periods of maintenance.

5. Experiences from the research

The researchers have known behaviors of using computers of teachers and students at English program. The researchers have developed the system of problem solving including

the procedures of computers maintenance. [5] The developed system from the research can help to increase efficiency for maintenance. The result of satisfaction analyzed from users. [6]

6. Factors of success

Determination of self-development and needs of user's responsibility of computers and teaching materials, benefit for students and users, and supports from school directors, vice directors of English program, and colleagues at the Demonstration School of Sunandha Rajabhat University are very important for this research. .

7. Comparing before and after process improvement or created innovation

Before improvement:

1. There were too many breakdowns, for example, VGA cable, mouse, keyboard, and sound cable.

2. Students used the wrong cable with the computers in the classrooms, for example, leaving computers turn on, installing computer program for games, downloading files from the risk websites.

3. Infection virus caused by flash drive, and expanded to other computers when next person used afterwards.

4. It took long time of repairing process, and it was unsystematic process.

After improvement:

1. Process of maintenance was systematic, clear, and verifiable.

2. Performance of repairing and checking was faster.

3. The breakdowns of materials or computers have reduced.

4. It can protect inappropriate computers using, and can control using computers.

5. There is better virus protection.

CONCLUSION

The purposes of this research were to 1) Reduce steps of maintenance and repairing of computer supplies in classrooms and computer lab 2) study satisfaction of teachers and students towards computers and teaching materials in classrooms and the computer lab. The samples, obtained by random sampling, were 40 of Grade 7-12 students and 10 teachers during the first semester of the academic year 2018. The research instruments were survey checklist form and satisfaction questionnaires. The statistics used to analyze the data were means, standard deviation, percentage and t-test. The findings were as: 1) Process of after maintenance and repairing of computer supplies in classrooms and computer lab was more efficiency than before study. 2) The satisfaction of teachers and students towards computers and teaching materials in classrooms and the computer lab was 4.2. The highest aspect was fast service at 4.64 and the lowest aspect was virus protection ability for computer program at 3.56. General information of examples showed that male and female were 50% of examples. 80 percentages of their ages were in between 12-20 years old. The highest education was 80% high school. 90 percentages of their periods of working or studying were from 1-6 years. The researchers have known behaviors of using computers of teachers and students at English program. The researchers have developed the system of problem solving including the procedures of computers maintenance. [7] The developed system from the research can help to increase efficiency for maintenance. [8] The result of satisfaction analyzed from users. Before and after of this research can be summarized that Process of maintenance was systematic, clear, and verifiable. Performance of repairing and checking was faster. The breakdowns of materials or computers have reduced.[9] It can protect inappropriate computers using, and can control using computers. There is better virus protection.

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