



TO STUDY THE EFFECT OF COMPUTER USE ON ACADEMIC ACHIEVEMENT OF MIDDLE SCHOOLS STUDENTS IN RELATION TO THEIR GENDER

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ABSTRACT

One of the most challenging goals in Modern Education is the appropriate use of information and communication technologies (ICT). That is, how to use ICTs for improving economic development and reducing poverty levels and inequalities. However, the speed of diffusion of ICT varies according to the level of development in each country. Most of the diffusion of these technologies depends on the young people due to they are more prone to technological changes. Then, it is important to assess their actual level of use as a way of predicting future adoptions and use levels. This is also a situation of growing importance because of the amount of time that teens spent on the computer in home as well as in the school. This paper studies the effect of computer use on academic achievement of middle schools students in relation to their gender. The Sample includes student belongings to standard VI, VII, VIII of CBSE Board. Descriptive survey is used. The researcher collected the sample by random sampling method. The tool used is a computer awareness test among the selected students.

Key words:-Computer Use, Academic achievement, Middle Schools Students, Gender

INTRODUCTION

One of the most challenging goals in Modern Education is the appropriate use of information and communication technologies (ICT). That is, how to use ICTs for improving economic development and reducing poverty levels and inequalities. However, the speed of diffusion of ICT varies according to the level of development in each country. Most of the diffusion of these technologies depends on the young people due to they are more prone to technological changes. Then, it is important to assess their actual level of use as a way of predicting future adoptions and use levels. This is also a situation of growing importance because of the amount of time that teens spent on the computer in home as well as in the school.

STATEMENT OF PROBLEM

To study the effect of computer use on academic achievement of middle school students in relation to their gender.



RESEARCH QUESTIONS

- What is the effect of computer use on the academic achievement of middle school girls students' in science and mathematics.
- What is the effect of computer use on the academic achievement of middle school boys students' in science and mathematics.
- Comparative study of the effect of computer use on middle school (boys and girls) students' academic achievement in science and mathematics.

OBJECTIVES OF THE STUDY

- To study the level of computer use of middle school students' in term – (rare and regular).
- To study the effect of computer use (rare and regular) on middle school girls students' academic achievement in science and mathematics.
- To study the effect of computer use (rare and regular) on middle school boys students' academic achievement in science and mathematics.
- To make a comparative study of the effect of (rare and regular) computer use on the middle school boys and girls students' academic achievement in science and mathematics.

HYPOTHESES

- There is no significant effect of rare computer use on the middle school girls academic achievements in science and mathematics.
- There is no significant effect of rare computer use on the middle school boys academic achievement in science and mathematics.
- There is no significant effect of regular computer use on the middle school girls academic achievements in science and mathematics.
- There is no significant effect of regular computer use on the middle school boys academic achievement in science and mathematics.
- There is no significant different seen in the effect of (rare and regular) computer use on the academic achievement in science and mathematics of middle school girls and boys students.

OPERATIONAL DEFINITION OF THE TERM

- Middle School students means students of class VI, VII and VIII standards.
- Computer use refers to students using computer as a help in their studies.



- Academic achievement signifies achievement in only two subject’s science and mathematics.
- The term rare denotes the students who have access to computer only in schools.
- Term regular means the use of computer is done by students in school as well as at home for their studies only.

DELIMITATIONS OF THE STUDY

- The study is being conducted on the schools of Dehradun.
- Schools with CBSE Board are selected for the study.
- Academic achievement is observed in two subject’s science and mathematics.
- The standards chosen for the study are standards VI, VII and VIII.

RESEARCH METHOD

- Descriptive survey method will be adopted for the present study.

POPULATION

- All students of VI, VII and VIII standards of CBSE Schools of Dehradun district during the academic session 2017-2018 will constitute population of study.

SAMPLE

- The researcher collected the sample by random sampling method by conducting a computer awareness test among the selected students.

Selection of sample

- The researchers had taken 265 students.
- Two of the CBSE private schools of Dehradun of standards, 6, 7 and 8 were taken.
- Out of them 126 were girls and 139 were boys.

STRUCTURE OF SAMPLE

Type of School	Board of School	Class	BOYS			GIRLS		
			R.U.	Avg. U	Req. U	R.U.	Avg. U	Req. U
Private I	CBSE	VI	12	5	9	8	15	5
		VII	5	10	7	7	13	5



		VII	7	14	6	10	8	4
Private II	CBSE	VI	12	6	7	8	9	5
		VII	4	10	7	8	13	4
		VII	6	13	6	10	8	4

MAJOR FINDINGS OF THE STUDY

- The first hypothesis that there is no significant effect of rare computer use on the middle school girls academic achievement in Science & Math’s was accepted as the graph showed a low result.
- The second hypothesis that there is no significant effect of rare computer use on the middle school boys academic achievement in Science & Math’s was accepted as the graph showed a low result.
- Through the study we have found that there is a significant change in the academic achievement of regular computer users. The result showed that girls achieved meritoriously (80-90%) in both subjects. Hence, the third hypothesis that there is no significant effect of regular computer use on the middle school girl’s academic achievement in Science and Mathematics was rejected.
- Through the study we have found that there is a significant change in the academic achievement of regular computer users. The result showed that girls performance raised to 100% in Science and Math’s. Hence, the third hypothesis that there is no significant effect of regular computer use on the middle school girl’s academic achievement in Science and Mathematics was rejected.
- Through the study we have found that there is a significant change in the academic achievement of regular computer users. The result showed that boys performed above average (80-90) in both subjects. Hence, the third hypothesis that there is no significant effect of regular computer use on the middle school boy’s academic achievement in Science & Mathematics was rejected.
- The study also makes it clear that the use of computer regularly has benefited the students in academics this can be clearly seen when we compared (RCU) and (Reg CU) in Table 4.5 and 4.6. Hence, the fifth hypothesis that there is no significant difference seen in effect of (rare and regular) computer use on the academic achievement of Science & Math’s of middle school Girls and Boys is rejected.

SIGNIFICANCE OF STUDY

The study was made to find out as to how much and how frequently children are using computers for their education. This study helps to find that frequent use of computer helps to



fulfill the curiosity of children which in time satisfy them with answers to their questions. It also tells us that increased use of computer is beneficial for child's academic growth. It also gives us an idea to change the routine method of education to an interesting one and motivate the children towards studies. The study also shows clear results of achievements of children which guides us that the changes can also be brought in other subjects also. This study also promotes us to emphasize a technical education in school so that the students are benefitted from it.

Now a days lot of schools are taking help of smart classes to make the learning process easier which is the best and smart use of computers for study. It helps to clear the concept easily through audio's and videos. More and more use of computers will facilitate education.

DISCUSSION OF RESULT

Following are the attempts to describe and discuss the findings in the present study. From the above study we have found that the use of computer effects the academic result of the students. The students using computer regularly show a better result as compared to the students using the same rarely.

The regular computer uses show a better result to rare users. But out of the rare users girls are being benefitted more in both Science and Math's as compared to boys. They show a better result in both the subjects. When we talk about regular Computer use we find that all students (Boys/Girls) are benefitted with it in both Math's and Science. In spite of both being benefitted by the use of Computers still girls have shown a better result in both the subjects (Math's and Science) as compared to boys.

EDUCATION IMPLICATION

Computer is becoming an essential part in day to day life. Every where around us Computer is making the work faster and accurate. So there is a requirement for students to be upgraded.

Hence this study shows and proves that use of computers effects the academic achievements of both boys and girls. This study may be helpful in the following ways.

The study helps us to find out that the use of the computer for education can improve the academic results of children.

The students who are hesitant can gain confidence. The study also shows that use of technology can help in improving the academics of students. It creates interest in students help them giving up with boring teaching learning process. They get exposed to practical work which increase their level of confidence and motivates them by giving better results. It also encourages students to be self dependent as they start working on their own find answer for themselves and become a solve worker.



LIMITATIONS

The limitation of the present study is as follows:-

- 1- The study was conducted only on two subjects.
- 2- It was done only on middle schools students the higher standards were left.
- 3- The study was conducted only on private CBSE schools.
- 4- Only the rate and regular users were compared.

SUGGESTION FOR FUTURE STUDY

- Keeping in mind the present investigation and its limitations future studies can be conducted in the following area.
- A similar study can be conducted over Government Schools.
- Same kind of a study can be conducted by taking samples from other boards.
- A study like this can also be conducted on other subjects such as English.
- The same type of study can also be done on other standards.
- The same study can also be conducted on the teacher as to find their level of Computer usage.

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