REVIEW OF RESEARCH

IMPACT OF USE OF COMPUTER'S ON STYLE OF LEARNING AND THINKING OF SECONDARY SCHOOL STUDENTS IN AGRA DISTRICT

Anjana Verma [1] And Babita Rawat [2]

[1]Junior Research Fellow, Faculty Of Education,
Dayalbagh University, Dayalbagh, Agra
[2] Research Scholar, Faculty Of Education,
Dayalbagh University, Dayalbagh, Agra

Abstract :

The present study is an attempt to explore the impact of use of computer's on style of learning and thinking of secondary school students. The main objective of the study was to compare the styles of learning and thinking of students who are users with those who are non users of computers. The researcher has been used Ex-post-facto method of survey research. The sample of students included 180 students of secondary school of U.P., C.B.S.E, I.C.S.E boards. For present investigation the investigator has selected the tool of Style of Learning and Thinking, constructed by Dr. D. Venkataraman (1994). Calculated C.R. value was found significant at level .01 level of significance so it affirms the fact the Styles of learning and thinking are higher among those students who are using computer than to those who are not using computer.

Keywords: Learning And Thinking , Secondary School Students , Computer's On Style

Impact Of Use Of Computer's On Style........

INTRODUCTION

Technological innovation has become a common phenomenon and is frequently taken for granted by contemporary society. In today's world everyday life, technology plays an ever-increasing role, innovations, such as cellular telephones, hand held computers like laptops, automatic teller machines, mobiles, and digital videodisks, quickly become incorporated into daily use and are added to society's vocabulary. Information is available in far greater quantities than ever before, and the means to access and share it with others is unprecedented. Because the pace of sophisticated technological change is so rapid, however, little is known about its effect on the society that it pervades.

In few decades the computers are one of the technological resources, many homes and schools are equipped with. In the family home, the availability of the computers can respond to different purposes, in function with the different types of uses. Particularly for students the computer represents a tool for work and plays an important role in entertainment. Via the internet, the computer constitutes a means of looking for and obtaining information, and is a means of communicating and participating in forms on a diverse number of topics.

Computers constitute a common resource at school and college. The use of computers at school and in the classroom responds to two uses as a source of information and as a system of support for teaching as well. Also, computers science is a subject studied at secondary school. Now everything revolves around computer, the way we work we think and we do incorporates with it. Learning and teaching in our schools are supported by the new innovation, even our learning and thinking didn't spare with it.

A style of learning and thinking is the other variable under consideration. What happens to us in life depends on not just 'how we' think, but 'how well' we think and learn. Of all the factors that influence on individual, his styles of learning and thinking play a major role. Parents and teachers are able to perceive children and their natural tendencies of how they think, act and learn in different ways and in different situations. For example, one child may welcome new ways of doing things. One child may perform tasks in an orderly and systematic pattern and another may perform tasks in on unsystematic pattern. This is due to individual difference in their style of learning and thinking. In academic institutions, learning and teaching processes are mismatched. Teaching and thinking styles of the teachers and learning and thinking styles of students differs because learning differences are not tied up to the understanding and thinking abilities of students. Many educators are still perplexed about the styles of students in learning and thinking process; what effect these styles have on children's performance in schools and why attention should be given to children's performance to assess their levels of ability. **(Venkataraman, 1994).**

Yakasai (1991) opinioned that, a casual observation of a group of people confronted with common problem will show how diverse people differ in their approaches toward solving it. While some people will approach the task systematically, others are bound to approach it in a haphazard manner. **Yakasai (1991)** further stated that while some take longer period of time before deciding on the best cues to employ in solving the problems they get, others will be hasty in their quest and attempt to solve it. All these, according to **Yakasai** illustrate the individual's style at problem solving. As young children who are not natured their initial approaches to problem solving gradually transform in to kind of pattern of behavior and this is termed their style of learning and thinking.

1.1 EMERGENCE OF THE PROBLEM

Most Indian children now have access to computers and are using them for everything from playing games to doing school work to chatting with friends' via-email to surfing the web.

Surveys on parents suggest that they buy computers and subscribe to internet access to provide educational and occupational opportunities for their children and to prepare them for the "Information age". **(Welch 1995)** Computer programs certainly provide explicit, step-by-step information that anyone with a sequential mind should be able to follow it. Actually computer illiteracy may be attributable to exactly that fact: everyone does not process information sequentially, the style in which most software is presented. Indeed, whether or not specific software responds to how an individual learns and thinks depends on the style of learning and thinking of the student.

JUSTIFICATION OF THE PROBLEM

(i)Since computers constitute a significant and growing proportion of adolescents lives, so it is important to know about their style of learning and thinking.
(ii)In computers, web resources provide vast and easily accessible information and human resources that promotes exploration of and interaction with additional information resources. So, it is important to know about their interaction with computer.
(iii)In India, because of the impact of modernization the lives of students have also been changed. The traditional way of learning and thinking has been changing day by day, students instead of spending their time in libraries and reading books spent their time in cyber cafes. So, it is important to know the effect of computers on style of learning and thinking.

2.0 OBJECTIVES OF THE STUDY

The objectives of the study will be as follows.
*To study the styles of learning and thinking of students who are users and non users of computer.
*To compare the styles of learning and thinking of students who are users with those who are non users of computers.

3.0 DELIMITATION OF THE STUDY

The study has been delimited to 180 students of class X of both the sexes. Secondary school students of Agra city which are affiliated with the U.P. board, C.B.S.E. and ICSE board. In users of computer only those students will be selected as users who are using computers at least from last 2 years.

4.0 DESIGN OF THE STUDY

The present study was design as follows:

METHOD

The researcher has been used Ex-post-facto method of survey research. Ex-post-facto research is that in which the independent variables have already occurred. The effect of the independent variables is then studied for possible effects and relations to dependent variable.

SAMPLE

Population of the present study consisted of male and female students of X standard studying in the institutes affiliated to U.P. Board, CBSE, and ICSE board of Agra city. The target sample included 180 students of intermediate school of 10th Class studying in intermediate college affiliated to U.P. Board, CBSE Board and ICSE Board. To study the style of learning and thinking of the students 30 boys and 30 girls were selected from each board of Agra city by using purposive sampling.

5.0 INSTRUMENT

For present investigation the investigator has selected the Style of Learning and Thinking, constructed by Dr. D. Venkataraman (1994).

6.0 DATA ANALYSIS AND DISCUSSION OF RESULT

6.1 To study the styles of learning and thinking of students who are users and nonuser of computer.

Before the actual analysis of data and discussion of result, it was considered appropriate to know the nature of distribution of scores obtained on Venkataraman's style of learning and thinking scale. For this purpose, the frequency distribution measures of central tendency standard deviation, skewness , were computed and frequency polygon was drawn.

Table: 6.1.1 the frequency distribution of style of learning and thinking scores has been shown in the following table.

Class Intervals	F	Smf
54-56	0	2.33
52-54	0	6.33
50-52	7	13
48-50	12	22.66
46-48	20	28.66
44-46	36	28
42-44	30	21.33
40-42	18	16
38-40	16	14
36-38	14	11.33
34-36	12	8
32-34	8	5
30-34	8	5
30-32	4	2.33
28-30	3	1
N	180	

On the basis of obtained scores following statistical value were calculated for further analysis.

Table 6.1.2: Exhibiting descriptive statistics for the distribution of scores of Style of Learning and Thinking.

variable	N	Mean	S.D	Skewness	Kurtosis
SOLAT	180	42.05	5.13	0.864	0.373

ent is found 42.05. The standard deviation of score in students is found to be 5.13 which indicate slight homogeneity among the scores of high school students. The score of style of learning and thinking in group is found to be negatively skewed and leptokurtic in nature can be shown in fig. 6.1:

Smoothed frequncy curve
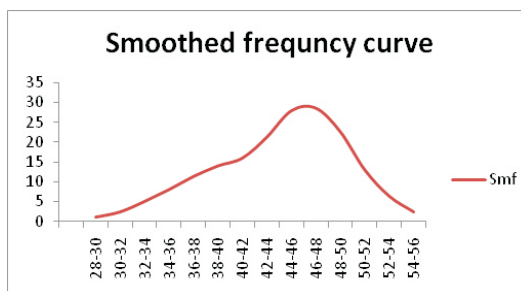
❖   **Graph.6.1.1: Exhibiting smoothed frequency curve of Style of learning and thinking scores**

❖   The style of learning and thinking scores are almost normally distributed as skewness and kurtosis were found .864 and .373 respectively. The mean   value of style of learning and thinking scores of students were found 42.05 showing average level of style of learning and thinking.

❖   The analysis of data of style of learning and thinking scores of users and non users of   computer showed a significant difference between the users and non users of computer Because the mean value for computer users was 42.2 and for non users it was 40.15

Impact Of Use Of Computer's On Style........

**Table 6.1.3 Distribution of Style of learning and thinking scores of Users and Non   users.**

Class Intervals	C.U (f)	Smf.	C.N.U (f)	Smf.
54-56	0	1.66	0	0.66
52-54	0	3.66	0	2.66
50-52	5	7.66	2	5.33
48-50	6	12	6	10.66
46-48	12	16	8	12.66
44-46	18	14	18	14
42-44	18	10.33	12	11
40-42	6	6.33	12	9.66
38-40	7	6.33	9	7.66
36-38	6	5.33	8	6
34-36	6	3.66	6	4.33
32-34	4	2	4	3
30-32	1	0.66	3	1.66
28-30	1	0.33	2	0.66
N	90		90	

Statistical values of SOLAT scores of computer user and computer nonuser have been shown in the following table.
Table 6.1.4: Exhibiting descriptive statistics of SOLAT scores of computer user and computer nonuser

Group	Mean	S.D	Skewness	Kurtosis	N
CU	42.2	4.96	.556	.355	90
CNU	40.15	5.25	.476	.354	90

The table 6.1.4 reveals that the mean value of CU (42.2) is higher than the mean value of CNU (40.15) it is showing negative skewness which we can see in further graph no 6.2.1:
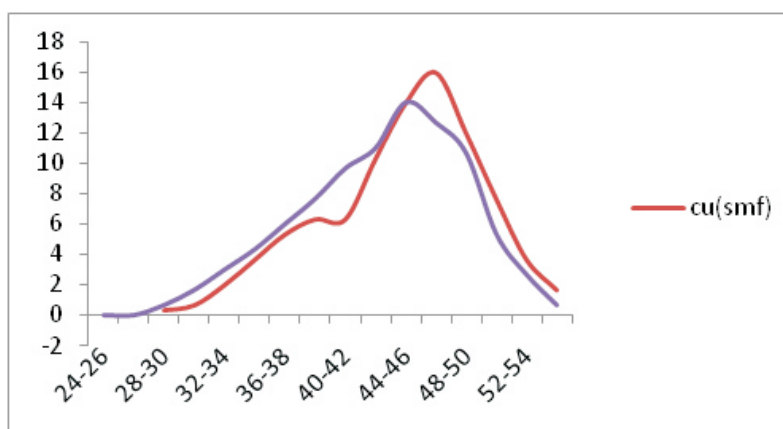
Graph.6.1.2: Exhibiting smoothed frequency curve of SOLAT scores of computer users and non users.

As in the curve 6.1.2 the distribution of SOLAT scores for computer users and non users is found negatively skewed and indicating that frequencies are concentrated towards higher side of distribution. The S.D. value among the

two table values is high for computer non users and it is indicating about more heterogeneity among the two groups.

The mean values shown in the table 6.2.2 affirms the fact that the Style of learning and thinking levels are higher among those students who are using computer than to those who are not using computer. This may be because of computer improves student's performance in thinking logically, formation of concepts, formulation problem solving procedures and understanding relationships.

6.2 Comparison of style of learning and thinking scores of computer users and non users.

To achieve this objective researcher has used the following statistical measures:

Table 6.2.1 showing statistical measures of style of learning and thinking scores of computer users and non users.

Group	N	Mean	S.D	C.R	Level of significance
C.U	90	42.20	4.96	2.73	.01
CNU	90	40.15	5.22		S

The above table shows that the mean value of there is a significant difference between means of computer users and non users. The calculated C.R. value is 2.73 which is significant at level .01 level of significance. Hence the null hypothesis "There is no significant difference between the style of learning scores of computer users and non users" has been rejected, so we can say computer users have shown better performance in style of learning and thinking. Because, there is a significant difference between users and nonusers of computer. This may be attributed to the fact that computers provide ample opportunity to update oneself with newer field of study.

7.0 CONCLUSION

The results of the study reveal that the use of computer improves student's learning and thinking styles. Thus the students should be provided more and more opportunities for using computer frequently in their studies.

This study will be a motivational guideline to specialists, teachers and policy makers in framing schools programmers and curriculum and policies in relation to the computer.

The result of this study will direct the policy makers to make such an education policy, which would favor the decisions of compulsory computer education up to XII standard. As in Hindi Medium schools, affiliated with U.P. Board the computer education is given as in optional subject, there also computer education must be made compulsory and for that required facilities should be provided for its proper implication.

To get maximum results the teachers should create such an environment in the class room, which motivates the students to use computer frequently. The teacher should give such projects in which for collecting new information students must use computer; and to use it for classroom works.

In this way the proper scientific climate will be helpful in increasing their style of learning and thinking level.

REFERENCES

1.Venkataraman, D. (1994).Style of learning and thinking administrator's manual. New Delhi:Psycom Services. Vol 33, No, 111-118.
2.Welch, Alicia. (1995, May). The role of book, television, computers and video games in children's day to day lives. Paper presented at the Annual Meeting of the International Communication Association, Albuquerque, NM.
3.Yakasai, M.I. (1991). Relationship of Cognitive Style to child learning Practices among Urbun and Rural house Students.Unpublished M.Ed. Thesis, Bayao University, Kano.