European Journal of Innovation in Nonformal Education (EJINE)
Volume 5 | Issue 6 | Jun - 2025 ISSN: 2795-8612

Computer Education Programme in the Schools of Bilaspur District: A Status Study

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A B S T R A C T
The present study was aimed to investigation the effect of computer education pogramme in the schools of Bilaspur district. In this study the research in hand was a descriptive type of research under which, the researcher has adopted the survey method to study current status of computer education programme in the government schools of Bilaspur. In general, the descriptive type of research answers the question "what is?. In the present study, the current status of computer education programme was analyzed in two ways – 1) in terms of infrastructural facilities and 2) in terms of students' achievement. Sample of the study only government schools in Bilha block of Bilaspur district and the students studying in class XI of these schools constitute the population of the present study. Data were collected by administrating students through an Interview Schedule (developed by the researcher) and Computer Achievement Test (developed by the researcher. Findings of the study there is no significant difference between the trained students and untrained students of achievement in computer education.

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A R T I C L E I N F O
Article history:
Received 15 Apr 2025
Received in revised form
15 May 2025
Accepted 30 Jun 2025

Keywords: Computer Education, Administrating, trained students and untrained students.

INTRODUCTION

During the prehistoric age, man wavered helpless like a puppet in the hands of nature. Today, he has almost everything that he needs at his fingertips. Thousands of years have passed in the history of human civilization since then. But along with other subordinate aspects, science and technology have always remained the bedrock of this continual transition. To move every footstep in today's world, we are to hold the hands of science and technology. Apart from a few negative effects caused by men own misuse, they have played a tremendous role in making life easier and enriched, prosperous and worth living.

One of the latest and most wonderful inventions in the field of science and technology is computer. Etymologically, computer is a machine used for doing calculations. But if we consider the multifarious applications of computer in modern life, it becomes almost useless as well as impossible to enumerate the ways in which computer has helped in the development of our civilization. It is precisely for these reasons that computer education has become almost inevitable today. On the one hand, it will help human civilization to grow faster and larger; on the other, we will be benefited on both personal and professional level.

At present computers are widely used for various purposes, educational commercial, industrial, administration, transport, medical, social and financial etc. Now computer is certainly one of the most versatile & ingenious development of the modern technological age. Today people use computers in almost every sphere of life.

A sincere consideration about the welfare of our nation as well as nations around the world from a larger point of view, has led our government to take up computer literacy programme for all the government and government-aided schools of India. Similarly, Chhattisgarh state government had also starts some of the program to create computer awareness among the students. Some of them are given below:-

- ICT project.
- Class project.
- Chhattisgarh Soochna Shakti yojna.
- Head-set programme
- CLAP project. (Chhattisgarh Information Technology Promotion Society).
- Dot – education project.
- EDUSAT- Elementary Education Project. (A pilot project began on 19th November 2005 to connect big number of primary schools through the information technology)
- CHIP Project. (Chhattisgarh information Technology promotion society-knowledge Management programme)

CHHATISHGARH SOOCHNA SHAKTI YOJNA

Information technology education session to all the girls' students of rural area & SC, ST and BPL girls in urban area in high school is and higher secondary school under department of school education & department of tribal useful in Chhattisgarh C.S.S.Y.

Computer education which was provided for the girls has now been ceased due to the uncharged of this project. Govt. had started this project for girls' 1189 school provided education since 2005 for 9 to 12 classes. NIIT has been constructed for this but till 2009 expect Bilaspur, Durg, Kawardha, all district has closed last year. 2.14 lack girl students were provided free Computer education. Every member of its project uses provided Rs. 54 per student.

ICT PROJECT

ICT project in the state of Chhattisgarh (2008) is running in 26 schools of Bilaspur district in Chhattisgarh, where this programme is in two stages. At first there were only six schools during 2008-2009. Gauging the benefits and advantages these schools received, another 20 schools got involved by ICT in the computer education program in 2009 -2010, under the guidance of Pandit Makhan lal Chaturvedi University. Though the ICT project did not produce trained teachers through this programme, nevertheless, they trained the teachers already existed in the schools itself.

CLASS PROJECT

The class project programme was started by Pundit Sunderlal Sharma University Bilaspur in 2008-2009. It had 18 schools in Bilaspur district. There were about 1027 students with enrolments. This programme provided all the essential printed materials for the students and 10 computers each to every institution where this programme was implemented. This programme was organized for both girls and the boys of urban and rural secondary schools of Bilaspur district.

In this dissertation work, we tried to make a minute review of the present state and status of computer education in the schools of Bilaspur district of Chhattisgarh, India. We have strived also to make an acute analysis of the extent to which the computer literacy programme has reached the students of the schools of Bilaspur, the extent to which the objectives of launching this program has been achieved, the ways in which the students of the said schools have been benefited by this program, its shortcomings and probable way-outs for further improvements.

STATEMENT OF THE PROBLEM:-

Computer Education Programme in the schools of Bilaspur district: A Status Study.

Objectives of the Study

O_1: To explore the provision for computer education in the government Schools of Bilaspur.

O_2: To explore the infrastructural status of computer education in the schools, viz.

(a) Availability of computer and computer teachers with respect to the number of students.

(b)Availability of peripheral.

(c)Availability of computer lab.

(d)Availability of power backup

O_3: To assess students' knowledge of computer (based on their prescribed curriculum) in terms of comparative achievement of:

(a) Trained and untrained students

(b) Trained and untrained Boys

(c) Trained and untrained Girls

(d) Trained Boys and Trained Girls

(e) Untrained Boys and untrained Girls

Research Design

The research in hand was a descriptive type of research under which, the researcher has adopted the survey method to study current status of computer education programme in the government schools of Bilaspur. In general, the descriptive type of research answers the question "what is?. In the present study, the current status of computer education programme was analyzed in two ways – 1) in terms of infrastructural facilities and 2) in terms of students' achievement.

HYPOTHESES OF THE STUDY

Following hypotheses have been framed in null form to realize the objective No.3 of the present study:

H_{01}: Trained and untrained students will not differ significantly in terms of achievement in computer education.

H_{02}: Trained and untrained Boys will not differ significantly in terms of achievement in computer education.

H_{03}: Trained and untrained Girls will not differ significantly in terms of achievement in computer education.

H_{04}: Trained Boys and Trained Girls will not differ significantly in terms of achievement in computer education.

H_{05}: Untrained Boys and untrained Girls will not differ significantly in terms of achievement in computer education.

Population and Sample

A population is a group of individuals that is of interest to the researcher. All the government schools in Bilha block of Bilaspur district and the students studying in class XI of these schools constitute the population of the present study.

Sampling is the process by which relatively small number of individuals, objects or events is selected and analyzed in order to find out something about the entire population. The sample of the present study consisted of 19 schools and their 212 students from class XI, which were selected through simple random sampling technique. Out of these 212 students, 129 students (70 girls & 59 boys) were the beneficiaries of the government's various computer education schemes in the schools, whereas, 83 students (39 girls & 44 boys) were those who were never provided computer education under any of these schemes.

Tools and Techniques used

With these considerations in view, the following two tools have used for the present study:

a. An Interview Schedule (developed by the researcher)

b. Computer Achievement Test (developed by the researcher)

Relevant details about the tools used in the study are given in the following sections:

(a) An Interview Schedule

To fulfill the objectives of the present study related to infrastructural facilities etc, an interview schedule was developed by the researcher. For this schedule, initially 20 questions were written. These questions were based on various aspects of resources required to provide computer education to the students. After preparing the first draft of the schedule, it was submitted to the teachers and peers in the department and to the experts in the field, for their criticism and suggestions. On the basis of feedback received, some questions were modified and two questions were dropped out. Thus, in its final form, the interview schedule contains 18 items.

(b) Computer Achievement Test

The Computer achievement Test (CAT) was developed by the researcher based on the content of books prescribed as text books under Chhattisgarh Soochna Shakti Yojna and Class Project.

While developing the CAT, process of item writing was carried out after the planning of the test. After consulting with many books and experts of measurement and evaluation, it was decided that the test would consist of only objective type items. Initially, a total of 70 items were written from the proposed content. Each and every item of the test was analyzed by the experts of the measurement and evaluation and the subject teachers. According to their suggestions, 30 items were rejected and a few were modified. Thus, a total of 40 items were selected for the final form of the CAT. Out of these 40 questions, two questions are 'match the pairs' type and the rest 38 questions are 'multiple choice' type in nature.

The time allotted for completing the CAT is 60 minutes only and each question (except Q. No. 27 & 28) of the test carries one mark. Being 'match the pairs' type in nature, these two questions carry four marks for each (one mark for each right pairing). There is no negative marking for wrong and unattempted responses. Thus, the maximum possible marks on the test are 46.

The content validity was decided for the present test and for this the researcher rechecked the test through her supervisor, subject experts and measurement and evaluation experts. They observed the items in the light of the objectives and subject matter and approved the CAT as valid tools to fulfill the objectives of the present study.

The reliability of the present test was estimated by 'split – half' method. The two halves were made by putting odd numbered items in one half and even numbered items in another half. The correlation coefficient between the two halves was found to be 0.62 and, therefore, the reliability coefficient for the whole test was calculated to be 0.77. On the basis of these values it may be concluded that the present test (CAT) is a reliable.

MAJOR FINDING OF THE STUDY

(1) The null hypothesis is accepted therefore; there is no significant difference between the knowledge of computers of trained student and untrained students, and it can be concluded that the trained student and untrained students do not have statistically significant difference in terms knowledge of computers.

(2) The null hypothesis is accepted therefore; there is no significant difference between the knowledge of computers of trained Boys and untrained Boys is accepted and it can be concluded that the trained Boys and untrained Boys do not have statistically significant difference in terms knowledge of computers

(3) The null hypothesis is rejected, the assumed hypothesis is accepted hence, it can be said that there will be significant difference between the knowledge of computers of trained Girls and untrained Girls.

(4) The null hypothesis is accepted therefore; there is no significant difference between the knowledge of

computers of trained Boys and trained Girls and it can be concluded that the trained Boys and trained Girls trained do not have statistically significant difference in terms knowledge of computer

(5) The null hypothesis is rejected therefore; the assumed hypothesis is accepted hence; it can be said that there is significant difference between the knowledge of computers of untrained Boys and untrained Girls and it can be concluded that the untrained Boys and untrained Girls have statistically significant difference in terms knowledge of computers.

CONCLUSION

Computer is a useful tool that makes the teaching learning process easier. The central government initiative of modernizing education by distributing computers to government- and municipal schools in the state has failed in its objective. According to the research conducted by researcher, there is no significant difference between the trained students and untrained students of achievement in computer education. This indicates that the computer training programme run by the government in various government schools. Higher secondary schools do not have any positive effect in knowledge of students.

After the analysis of null hypotheses that there will be no significant difference between trained girls and trained boys of higher secondary school. It is clear that the computer education programme conducted in government higher secondary schools have equal effect in both computer trained boys and girls, Hence the above null hypotheses was accepted.

Similarly, the test carried out to a significant difference between the trained girls and untrained girls indicates that there is no significant difference is found in their computer knowledge of both trained girls and untrained girls of higher secondary schools.

The computer education organized in the government higher secondary schools are equally effective for trained and untrained boys of higher secondary schools.

The null hypothesis formulated to test the knowledge of untrained boys and girls do not show any significant similarities. Hence, the null hypotheses is rejected, thus the significant difference do exists in computer knowledge between untrained girls and boys of higher secondary schools

REFERENCES

1. Anastasi,A.(1968).*Psychological testing*. London: MacMillan Company.
2. Ansari, I. K. (1998). *A status of the computer education imparted in the secondary Schools of Navsari Block.* Unpublished M.Ed Dissertation, South Gujarat University, Surat.
3. Ansari, I. K. (2002). *A status of Computer education in the South Gujarat Region.* Unpublished Ph. D. Thesis south Gujarat University, Surat.
4. Brummelhuis t. and Pelgrum, J. and Plomp (1991).Status of introductory computer education in the Netherlands: results of a survey. *Computer & Education*, 16(1).pp. 7-12.
5. Bishwal, A & Das, A. (2001). Computer education curriculum for schools; An Integrated approach. *Journal of Indian education* Vol, XXVII,No1, pp.3-15.
6. Chandrakar, M. (2000). *an analytical study of computer education teaching learning process at secondary school level in Gujarat*. Unpublished M.Ed, dissertation, CASE, the M.S. University of Baroda, Baroda.
7. Chandrakar.M (2010). *Computer education in India*: an Evaluation Published by the New Delhi.
8. Felipe.Band Leigh.L(2009).*The use and misuse of computers in education*. Retrieved April 24, 2011, from http://WWW.siteresources.world blank.org/education/resources/278200.
9. Fox, D. J. (1969). *The research process in education*. New York: Holt, Rinehart and Winston.
10. Guilford, J. P., & Fruchter, B. (1981). *Fundamental statistics in psychology and education* (6th ed.). Singapore: McGraw-Hill.

11. Gujarari, R. V. (2009). A *study of difficulties in teaching and learning computer education in schools of Gandevi Block*. Unpublished M.Ed Dissertation, South Gujarat University Surat in Gupta, S.(2010). A study of the computer education in Baroda districof Gujarat Unpublished ph. D. thesis, CASE. The M.S. University of Baroda, Baroda.

12. Gupta, S. (1999). *A study of the status of computer education in higher secondary schools of Baroda city*. Unpublished M.Ed dissertation CASE, the M.S. University of Baroda, Baroda.

13. Gupte,D.(2000). *A survey of computer education schools of Baroda city with respect of Infrastructure, teacher qualification and syllabus*. Unpublished M.Ed. Dissertation, CASE, The M.S. University of Baroda, Baroda.

14. ISRO(1990). *The Evaluation of the CLASS project. Indian space Research Organization Ahmadabad*. In Guypta, S.(2005). A study of the computer education in Baroda district of Gujarat. Unpublished PH.D. theses, CASE, The M.S. University of Baroda, Baroda.

15. Jaber, W.E.(1997). A survey of factors which influence teachers; Use of computer Based technology. Ph.D. thesis(Ed) in dissertation *abstract international*,60(7). P.34-22.

16. Jeffery,T.F.(2000).*Reseach in computer and education past present and Future* Available from: WWW.melindagatesfoundation.org.

17. Jegede.o and Owolabi(1988). Computer education in Nigerian secondary schools Gap between policy and practice. Retrieved March 3, 2011, from http://WWW.siteresources.worldblank.org/EXTRAFRREGTOPDISEDU/resources/Comp Ed_nigeria.pdf.

18. Kalam.A (1997). Technology for National Development, UNIVERSITY NEWS,35(8), Published by the *Association of Indian Universities*.

19. Kalam.A (2003). *Science and Technology Policy 2003*. Retrieved February 24, 2011, from http://dst.govt.in/stsysindia/stp.

20. Kalam.A (2009).Technology is the foundation for the sustained development of nation. UNIVERSITY NEWS, 48(8), Published by the Association of Indian Universities.

21. Kaushik.N (2010). Computer and internet Awareness in school-going students.*Edutracks*,sultan,Bazaar,Hedrabad Vol.9,No.10, pp25.

22. Kibbi, I.M. (1995). Analysis of education computer use in Lebanese Urban private schools. ED.D. Boston University, in dissertation *abstract internation*,56(4), p.23-76 .

23. Mahajan, S.L. Arun & Rajiv,(2010). Importance of computer education at Secondary school level. In *education review* Vol .111, No.9.

24. McCraw, P.A. (2009). Rural Elementary school teacher; what they believe about computers; A Case study. Ph.D. theses, The University of Oklahoma, in Dissertation *Abstract International*, Vol.54 No.3.p. 2311A.

25. NCERT (1990). *Training Manual for class*. New Delhi; National council of educational Research and Training.

26. NCERT (2000). National curriculum Framework for school Education. New Delhi; National council of Educational Research and Training.

27. NCERT (2005). National Curriculum Framework. New Delhi; National Council of Educational Research and Training.

28. Nizam.M (2010). "Computer Education has been Shut Down in the State". *Dainik Bhaskar*,September 19,2010.p.-1

29. Patadia, H.J. (1993). *A Critical Study of Computer Education Imparted the Schools of Vadodara City; An independent study, CASE*. The M.S. University of Baroda, Baroda.

30. Patil .P (2010). Education is the process of man, 48(47) UNIVERSITY NEWS, 48(47) Published by the Association of Indian Universities 22-28.

31. Pusuiri, T. (2002). An Examination of Microcenters in Education in Thailand. Ph.D. theses (Ed) in *Dissertation abstract International*, Vol.53 No 3, p 1289A.

32. Rafeedali.E (2009). Computer based technology and its pedagogical utility. *Edutracks*, sultan, Bazaar,Hedrabad Vol.9,No.2, pp37.

33. Sackman.H (1987). *Computer and international socio economic problem*, Holland, Amsterdam, Newyork.

34. Sahasradudhe, S.S.(1994). *A study of computer Education in the Secondary Schools of Vadodara City*. Unpublished M.Ed Dissertation, The M.S. University of Baroda, Baroda.

35. Shah, R. (2002). *The Survey of Computer Education in Secondary Schools Affiliated to G.S.E.B. in Baroda City.* Unpublished M.Ed Dissertation. The MS.University of Baroda,

36. Sibal.K(2010). Computer education now in 108,000 government schools. Retrieved March 24, 2011, from http//WWW.thaindian.com/new sportal/sci-tecl computer-education-now-in-108000-govt.schools_100301256.htm/.

37. Veghela, R (2000). *A study of the computer education in Shreyas Vidalia of Baroda City*. Unpublished M.Ed . Dissertation. The M.S. University of Baroda, Vadodara.

38. Wilson J.M. (2000). An assessment of Computer usage within the Bahamian public School system and Recommended Guidelines towards the Development of Strategic National Computer Plan Ed.D. Florida International University in Dissertation *abstracts International* Vol6 (5) p 23-16 .