Computer Awareness among Secondary School Students – A Study

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ABSTRACT

Computer is one of the greatest inventions ever made by man. Today there is no field of activity where computers are not being used. Computers can be used to educate the students in many ways. Computers have become a part of day to day life and it has become inevitable to escape contact from computers. The impact of computers on the society is so huge that they have changed the face of everything from educational system to entertainment. The researcher has studied on 120 secondary level students to find out the awareness of the computers in relation to their gender, medium, management of the school by stratified random sampling technique. The researcher used normative survey method and the results indicated that there is a significant difference between boys and girls; Telugu medium and English medium; private and government Secondary school students on computer awareness

Key words: *Computer awareness, secondary students.*

Introduction:

"A computer is a high-speed electronic device which follows instructions and is capable of performing arithmetic and logical operations." Computer is one of the greatest inventions ever made by man. Today there is no field of activity where computers are not being used. Computers have almost become Omni present and a part of our daily lives. They have completely changed our working style and way of understanding things. Computers have come to play a very important role in the field of education. They are being used both by teachers as a teaching aid and by students as tools of learning. The internet has virtually brought the whole world into the classroom. Both teachers and students are now more exposed to the outer world than ever before. On the administrative side, computers are used to monitor student progress and better management of schools' resources. Computers can be mainly used in education for the following purpose: 1. Educational planning and development of curriculum. 2. Management and administration of educational institutions. 3. As aids in teaching and instruction. 4. Conducting tests, scoring answer sheets, processing examination results and evaluation. 5. Research.

Computers can be used to educate the students in many ways. Some main purposes for which computers can be used are: a) to provide students with different capabilities with appropriate information and study material. b) To motivate students in setting realistic goals. c) To assist students in attaining their goals and objective by providing meaningful experience. d) To simulate a feeling of success in students. Computers can repeat an instruction any number of times without fatigue. They can stress the procedure of drill where lot of practice is required. By using computers, each student can learn at his own pace. The computer can adjust according to the students needs. Computers can be used to assist students in solving complex problems. Computers can be used to teach spelling, structure, phonetics etc through various ways like clues and puzzles. They can provide context and picture clues to help students learn quickly. Computers can be of great help in maintaining staff records and accounts. They can be used to schedule daily activities. Computers can be programmed to function according to the requirements of students. They can enable students to simulate real life situations through models. They can help students to overcome learning difficulties. Computer are now affecting every step of human activity and bringing about many changes in industries, government, education, medicine, scientific research, law, social science and even in the world of art and music. Any task that can be carried out systematically, using a precise step by step method, can be performed by a computer.

Therefore it is essential for every person today to know about a computer. Man invented machines, then came the calculators and today it is the computer age. Computers have become a part of day to day life and it has become inevitable to escape contact from computers. The impact of computers on the society is so huge that they have changed the face of everything from educational system to entertainment. We have reached a stage where a person without some basic computer knowledge is considered an illiterate and a school without computers is not worth admitting our children. Computers as a subject, is being taught to students even from lower kindergarten levels. Computer education improves the student's achievement, attitude, and self-esteem (**Ryser, 1990**)

Objectives of the study:

1. To find out the awareness of the computers by secondary school students in relation to their gender, medium, management of the school.
2. To construct a tool to measure the awareness of computers by secondary school students.

Hypotheses of the study:

1. There will be no significant difference on awareness of computers by secondary school students with regard to their gender.
2. There will be no significant difference on awareness of computers by secondary school students with regard to their medium
3. There will be no significant difference on awareness of computers by secondary school students with regard to their management.

Method and Sample used in the study

The investigator has selected a suitable research method called 'Normative Survey Method' for the present study. The sample 120 of the present study was divided into two major strata i.e. Telugu medium students 60 and English medium students 60. Again these strata were divided into Boys and Girls. By adopting the 'Stratified Random Sampling technique', a total of 120 students were selected for final study from 10 schools (Private-5, Government-5) of Hanmakonda Town in Warangal district of Telangana State, India.

Development of the tool

The researcher has developed a tool to find out the computer awareness among secondary school students. The tool consists of six dimensions with 32 items such as Fundamental of computers (07), Word Processing (05), Spread Sheet Applications (05), Data Base Applications (05), Presentation Applications (05) and Internet applications (05). Each item is with multiple choices and each right answer carries one mark. A Pilot study was undertaken to verify the applicability of the items. Reliability and Validity were tested.

Data collection procedure:

The researcher has personally visited the schools with prior permission, to collect the required data from the secondary school students. The researcher has explained the objectives and purpose of the study to all the respondents. All the students were given booklet of Computer awareness among secondary school Students. Special instructions were given orally to them before the start of making the test and filling up the questionnaire. The doubts are clarified when they had aroused at the time of administrating the tools. A special care has been taken by the researcher to elicit the data from the respondents.

Data analysis and interpretations

1. **Gender Vs Computer awareness among secondary school students**

Computer awareness among secondary school students with gender wise is presented as shown in the Table-1.

Table- 1

S. No.	Gender	No. of students	Mean	S.D	t - value
1.	Boys	60	21.93	5.0	4.34*
2.	Girls	60	18.96	4.2	

*significant at 0.01 level

Table- 1 reveals the mean scores of boys is 21.93and girls is 18.96; whereas SD values are 5.0 and 4.2 respectively. The t-value indicates 4.34, which is significant at 0.01 levels. Hence, the formulated null hypothesis has been rejected. It can be concluded that there is a significant difference between boys and girls of secondary school students on computer awareness. Boys have high computer awareness than the secondary school girls.

2.   Medium Vs Computer awareness among secondary school students

Computer awareness among secondary school students with Medium wise is presented as shown in the Table-2.   **Table- 2**

S. No.	Medium	No. of students	Mean	S.D	t - value
1.	Telugu	60	18.16	4.1	4.61*
2.	English	60	22.03	5.0	

*significant at 0.01 level

Table- 2 reveals the mean scores of Telugu Medium students is 18.16 and English medium students is 22.03; whereas SD values are 4.1 and 5.0 respectively. The t-value indicates 4.61, which is significant at 0.01 levels. Hence, the formulated null hypothesis has been rejected. It can be concluded that there is a significant difference between Telugu medium and English medium students of secondary school students on computer awareness. English medium background students have high computer awareness than the Telugu medium secondary school.

3.   Management of the School Vs Computer awareness among secondary school students

Computer awareness among secondary school students with **Management of the School** wise is presented as shown in the Table-3

Table- 3

S. No.	Management of the School	No. of students	Mean	S.D	t - value
1	Private	60	21.7	4.16	3.86*
2	Govt.	60	18.4	5.22	

*significant at 0.01 level

Table- 3 reveals the mean scores of Private management school students is 21.7and Government management school students is 18.4; whereas SD values are 4.16 and 5.22 respectively. The t-value indicates 3.86, which is significant at 0.01 levels. Hence, the formulated null hypothesis has been rejected. It can be concluded that

there is a significant difference between Private and government management school students of secondary school on computer awareness. Private schools students of secondary school have high awareness than government school secondary school

Conclusions and Discussion:

There is a significant difference between boys and girls, Telugu medium and English medium, private and government school students of secondary school on computer awareness. Boys have high computer awareness than the secondary school girls. Girls have to be aware of computers. The school has to initiate the programmes for the girls, Telugu medium back ground secondary school students of have to be trained on computers by school and Government has to take the steps to empower the computer awareness in their schools for the benefits of the students.

References:

1. Arulswamy, P., & Siva Kumar,P. (2009). Applications of ICT in Education. Hyderabad: Neel Kamal Publications Pvt Ltd.
2. Agarwal, V.B. (2003). Learning Computer, New Delhi: Pitambar Publishing Pvt. Ltd.
3. Bingimilas,K.A.(2009). 'Barriers to the successful integration of ICT in teaching and learning environments: A review of the literature'. *Eurasia journal of mathematics, Science &technology*, 5(3), 235-245. Retrieved from http://ejmste.com/articles
4. Clements,D.H.(1985). Computers in early and Primary Education. New Jersey: Prentice Hall, inc., Englewood Cliffs.
5. Cohen,L. & Manion, L. (1999). 'Research Methods in Education'. London and New York: Rutledge.
6. Garret, H.E.(1969). 'Statistics in Psychology and Education'. Bombay: Vakil feffors and Simons, Pvt Ltd.
7. Koul,L.(1984).'Methods of educational Research', New Delhi: Vikas publishing house
8. Kumar, K.L. (2005). 'Educational Technology', New Delhi: New Age International (p) Ltd, 241-250.
9. Lohithakshan, P.M. (2009).'Dictionary of Education', New Delhi: Kaniska Publishers Distributors, 82-84.
10. Raghu, A (2015). 'computers in edcation', New Delhi: APH publishing corporation.
11. Singh, Y.K and Ruchika, N. (2005). 'Research Methodology'. New Delhi: APH Publishing Corporation, 81-114. Taylor, R. (1980). 'The computer in the school: tutor, tool, tutee'. New York: Teachers college Press, 1-10. Retrieved from http://www.citejournal.org/vol3/iss2/seminal/article1.cfm).
12. Yogendra, K.S & Madhulik, S. (2006). 'Educational Technology and Management'. New Delhi: Kaniska Publications 146-188.