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**ATTITUDE OF TEACHERS TOWARDS COMPUTERS AND ITS IMPLICATIONS IN  
CLASSROOM TEACHING**

**Education**

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**Abstract**

*Computers are increasingly widespread, influencing many aspects of our personal, work lives, as well as many of our leisure activities. As more tasks involve human-computer interaction, computers skills and knowledge have become more positively correlated with both occupational and personal success. It is possible to acquire information through using computers and the Internet. Therefore, as we move into a technology based society, it is important that student's classroom experiences with technology be equitable and unbiased for males and females. In most cases, the teacher is key to effective implementation of the use of computers in the educational system and given that teachers have tremendous potential to transmit beliefs and values to students, it is important to understand the biases and stereotypes that teachers may hold about the use of computers and the factors that act as facilitators to teachers' positive computers usage. Present study was conducted keeping in mind the objectives of comparing the attitude of government and private secondary school science and arts teachers belonging to urban and rural background towards use of computers in class-room teaching. The study was carried out on 500 secondary school teachers of rural and urban areas of Amritsar. The result revealed that there exists no significant difference in attitude of secondary school teachers belonging to urban and rural area towards use of computers. Further results showed that there exists no significant difference in attitude of secondary school teachers towards computers in classroom teaching.*

**Key Words:** *Computers, Attitude, Secondary school teaching.*



## **Introduction**

One of the common teaching methods that secondary school teachers prefer today is the lecture method. In this the teacher transmits knowledge to the students who sit passively in the classroom and listen. Another common method is the question-and-answer approach, which was developed in order to avoid the boredom caused by lecturers and to provide a more efficient learning environment. On the other hand, case studies allow the students to face the problems that occur in real life. They help to fill the gap between theory and practice through putting the previously learnt concepts and principles into use.

In contrast to the previously described methods, the teacher can use computer at different times and places according to the characteristics of the subject matter, the students and the available software and hardware. computer programs can be used for practice, revision, one-to-one instruction, problem solving, or simulations during the applications.

The successful and effective uses of computer in classrooms depend on several factors; of which teacher acceptance is considered a major factor. Researches indicate that teachers are resistant to use computer despite the fact that computers are sufficiently available in their school.

**Rogers** defines "the adoption process as the mental process through which an individual passes from first hearing about an innovation to final adoption". The theory emphasizes the importance to attitudes toward innovation.

Factors that can affect attitudes towards computers use in schools may include:

- Effects of gender
- Age
- Computers experience
- Computer literacy and
- Psychological factors such as locus of control and personality characteristics.

In this thesis, we emphasized on analyzing the attitude of Secondary School Teachers towards use of computers in class room teaching. Teachers often view the computers as a tool to accomplish housekeeping tasks, manage their students more efficiently, and to communicate



with parents more easily. The success of student learning with computers will depend largely on the attitudes of teachers, and their willingness to embrace the technology. Gaining an appreciation of the teachers' attitudes towards computers use may provide useful insights into technology integration and acceptance and usage of technology in teaching and learning. Positive teacher attitudes towards computing are critical if computers are to be effectively integrated into the school curriculum. Myers & Halpin (2002).

### **Objectives of the Study**

The main objective of this study was to examine the attitude towards use of computers among secondary school teachers. Since achieving excellence in schools, it is important to ensure that teachers must be able to integrate technology into the curriculum. The present study was conducted with the following objectives:

1. To study and compare the attitude of government and private secondary school teachers towards use of computers in class-room teaching.
2. To study and compare the attitude of male and female secondary school teachers towards use of computers in class-room teaching.
3. To study and compare the attitude of science and arts secondary school teachers towards use of computers in class-room teaching.
4. To study and compare the attitude of rural and urban secondary school teachers towards use of computers in class-room teaching.

### **Design**

In the present investigation descriptive survey method was followed by the investigator. Data was collected on variables such as attitude towards computers by male and female secondary school teachers of government and private schools.

### **Sample**

For collection of relevant data, the sample will comprise 500 Secondary School Teachers (Male/Female) teaching in schools of Amritsar District.



## Method and Procedure

In order to achieve the stipulated objectives data was collected from the sample of 500 secondary school teachers (Male/Female) teaching in schools of Amritsar district. In the present study Descriptive Survey Method of research was used. Self Framed Questionnaire has been selected as a tool of study. Relevant statistical techniques were employed in order to arrive at generalizations about the study.

## Discussion of Results

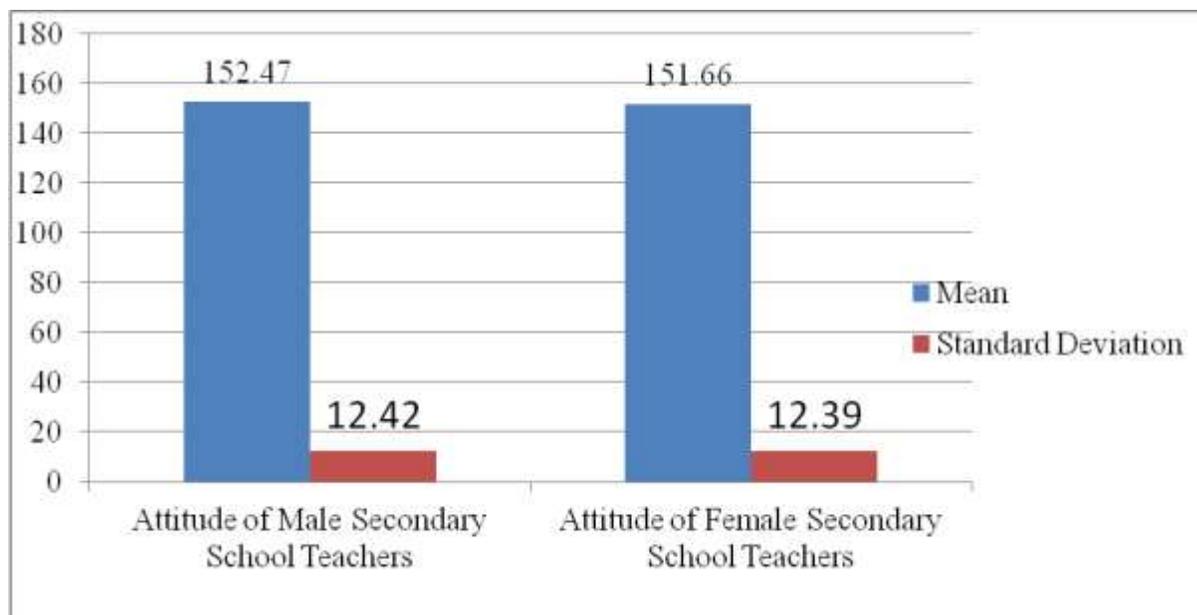
For the achievement of objectives suitable statistical techniques such as Mean, Standard Deviation, Difference between Means and Standard Error of Difference between Means were calculated for the variables under study. Thereafter, to test whether the difference between Means was significant or not, 't-test' was applied. The results have been embodied in Table 4.1 and the Bar Diagram Fig: 4.1 also depict these values.

**TABLE 4.1**

**Showing mean, standard deviation, difference between means, standard error of difference between means and t-value of government and private secondary school teachers' attitude towards use of COMPUTERS in class-room teaching.**

| Group  | Sample (N) | Mean (M) | Standard Deviation ( $\sigma$ ) | Difference between Means (D) | Standard Error of Difference Between Means ( $\sigma_D$ ) | t-value | Level Of Significance |
|--|------------|----------|---------------------------------|------------------------------|---|---------|-----------------------|
| Attitude of Government Secondary School Teachers | 100        | 157.25   | 5.86                            | 0.12                         | 0.80  | 0.15    | Insignificant         |
| Attitude of Private Secondary School Teachers    | 100        | 157.13   | 5.49                            |                              |   |         |                       |

The results obtained after analysis in table can be graphically presented as in the figure below:



**Figure 4.1 : Bar Diagram showing the Mean and Standard Deviation of Attitude Government and Private Secondary School Teachers Towards Use of Computers in Classroom Teaching.**

This implies that there is no significant difference in the attitude of government and private secondary school teachers towards use of computers in class-room teaching. The insignificant result may be attributed to the teachers of both the categories viz Government and Private Schools being equally aware of use of the computers in class room teaching.

**II.** It was further analysed that whether gender differences affect the attitude of teachers towards use of computers in classroom teaching. The results obtained after analysis has been given below.

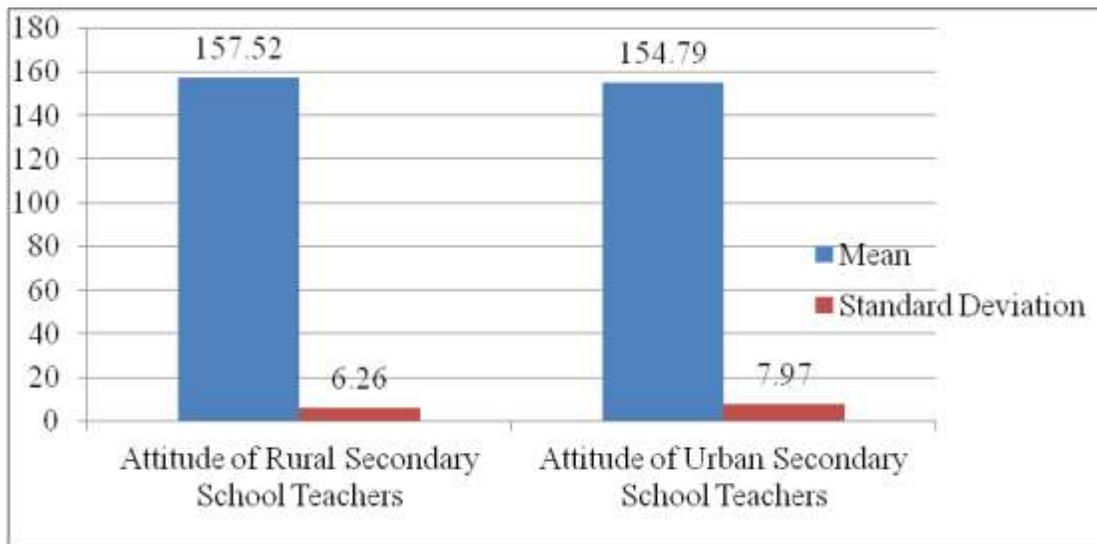
**TABLE 4.2**

**Showing mean S.D, , SED means and t-value of male and female secondary school teachers' attitude towards computers in class-room teaching.**

| Group                             | Sample (N) | Mean (M) | Standard Deviation ( $\sigma$ ) | Difference between Means (D) | Std. Error of Diff b/w Means ( $\sigma_D$ ) | t-value | Level of Significance |
|-----------------------------------|------------|----------|---------------------------------|------------------------------|---|---------|-----------------------|
| Attitude of Male Secondary school | 90         | 152.47   | 12.22                           | 0.04                         | 1.74  | 0.46    | Insignificant         |

|  |     |        |       |  |  |  |  |
|--|-----|--------|-------|--|--|--|--|
| Teachers                                     |     |        |       |  |  |  |  |
| Attitude of Female Secondary School Teachers | 110 | 151.66 | 12.39 |  |  |  |  |

The above results can be graphically presented as in the figure below:



**Figure 4.2 : Bar Diagram showing the Mean and Standard Deviation of Attitude of Male and Female Secondary School Teachers Towards Use of Computers in Class-Room Teaching**

### Discussion of Results

In the light of the analysis and interpretation of data following results were drawn:

1. There is no significant difference in the Attitude of Government and Private Secondary School Teachers Towards Use of computers in Class-Room Teaching as 't' value between means of the two groups – Private and Government Secondary School Teachers came out to be 0.15 which is insignificant at 0.05 and 0.01 levels of significance.
2. There is no significant difference in the Attitude of Male and Female Secondary School Teachers Towards Use of computers in Class-Room Teaching as 't' value between means of the two groups – Male and Female Secondary School Teachers came out to be 0.46 which is insignificant at 0.05 and 0.01 levels of significance.



3. There is no significant difference in the Attitude of Science and Arts Secondary School Teachers Towards Use of computers in Class-Room Teaching as 't' value between Means of the two groups – Rural and Urban Secondary School Teachers came out to be 2.70 which is insignificant at 0.05 and 0.01 levels of significance.

## **References**

- Akkoyunlu, B. (1998). Prospective Elementary Teachers' Attitudes towards COMPUTERS and Internet Use : A Sample from Turkey, world Applied Science Journal, 6(10) : 1433-1440.
- Akpinar, Y. (2005). Prospective Elementary Teachers' Attitudes towards COMPUTERS and Internet Use : A Sample from Turkey, world Applied Science Journal 6(10) : 1433-1440.
- Albirini, A.A. (2004). An exploration of the factors associated with the attitudes of high school EFL teachers in Syria toward information and communication technology. Unpublished thesis The Ohio State University.
- Allport G.W. (1935). Attitudes in C. Murchison (ed.), Handbook of Social Psychology. (Worcester, Mass, Clark University Press, p.810.
- Al-Zaidiyeen, N.; Mei, L. & Fook, F. (2008). In-service teachers' attitudes towards the use of information and communication technology in teaching practice: the case of Jordan. Conference IMETC2008 Kuantan Malasia.
- Angers, J. & Machtmes, K. (2005). An ethnographic-case study of beliefs, context factors, and practices of teachers integrating technology. The Qualitative Report, 10 (4), 771-794.
- Arici, N. & Dalkilic, E. (2006). Baki, A. (2002). Prospective Elementary Teachers' Attitudes towards COMPUTERS and Internet Use: A Sample from Turkey, world Applied Science Journal 6(10): 1433-1440.
- Adebowala, O.F. Adedwala, A.A. Bada T.A. (2009). Correlates of COMPUTERS attitude among secondary school students in Lagos state, Nigeria Internation Journal of



- Computing and COMPUTERS Research 3(2), 20-30.  
<http://www.ijcir.org/volume3-number2article3.pdf>. Retrieved on 6-5-11.
- Birisci, S.; Couskun, K; Yilmaz, G.K.; Metlin, M (2012), Developing an attitude scale towards using instructional technologies for preservice teachers. [www.asclite.org/an/ajct/ajet24/tea.pdf](http://www.asclite.org/an/ajct/ajet24/tea.pdf). Retrieved on 6/5/14.
- Bannon, S.H.; Marshall, J.C. & Fluegal, S. (1985) "Cognitive and affective COMPUTERS attitude scale," Educational and Psychological Measurement, no. 45, pp. 679-681.
- Bartsch, R.A. & Cobern, K.M. (2003). Effective of Power Point presentations in lecturers. Computers and Education 41, 77-86.
- Becker, H.J. (1998). Internet Use by Teachers. ([www.crito.uci.edu](http://www.crito.uci.edu)).
- Bogardus, (1931). DefinitionsofAttitude, <http://www.Psych.umn.edu/course/spring06/borgide/Psy5202/image/attitude%20definitions.pdf>.
- Carlson, S. & Gadio, C.T. (2003). Teacher professional development in the use of technology. [Online]. Technologies for Education. Available: [www.TechKnowLogia.org](http://www.TechKnowLogia.org).
- Chanda, (2002). A study of Attitude of B.Ed Pupil – Teachers towards Teaching Unpublished M.Ed Thesis, G.N.D.U. Amritsar.
- Demirci, A. (2008). Evaluating the implementation and effectiveness of GIS-based application in secondary school geography lessons. American Journal of Applied Sciences, 5(3), 169-178.
- Demirli, C. & Dikici, A. (2003). Ogretimde Web Etkisi, Third International Education Technologies Symposium, Turkish Republic of Northern Cyprus.
- Deniz, L. (1994). "Bilgisayar tutum olcegi (BTO-M)' nin gecerlik, guvenirlik, norm calismasi ve ornek bir uygulama," [The Validity, Reliability and Norm Studies of COMPUTERS Attitude Scale-Marmara (CAS-M) and A Case Study]. Unpublished Ph.D. dissertation, Marmara University, Istanbul, Turkey.
- Deniz, L. (2001); Gonen & Kocakaya. (2005); Erkan, S. (2004). Prospective Elementary Teachers' Attitudes towards COMPUTERS and Internet Use: A Sample from Turkey, world Applied Science Journal 6(10): 1433-1440.