

Teachers' Attitude towards Computers & School Climate – A Study of Kendriya Vidyalaya Schools of Andhra Pradesh

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ABSTRACT

The achievement of any creativity to implement technology in an educational programme depends strongly upon the support and attitudes of teachers involved. The present study aims to find out the teachers attitude towards computers and school climate. 1138 K.V. school teachers (primary teachers, TGTs and PGTs) from three regions of erstwhile Andhra Pradesh were used as sample for the study. The data were collected administering a questionnaire using random sampling technique. The results shows that the teachers have high attitude towards computer and said that it is a valuable tool for teachers ($\mu=4.36$) and the felt that they are very comfortable with the idea of the computer as a tool in teaching and learning ($\mu=4.31$). They also accepted that the Principal and other teachers encourage to integrate computers in teaching and learning ($\mu=4.29$). It is concluded that efficient utilization of benefits of computer and ICT in creating an effective learning environments as well as role of good administration, thus impacting the overall quality of education in KV schools by teachers' services.

Keywords: Attitude, Computers, School climate, Teachers, KV School.

1. INTRODUCTION

In contemporary era the use of modern technology in our lives is very common feature. Everyone makes use of it for plenty reasons at one-of-a-kind locations both at home, at office, at enterprise location or elsewhere. Other than the academic qualification an important qualification within side the shape of computer literacy, now no longer handiest literacy as an alternative performance and skill, is normally required at nearly all levels. Due to the great use of technology in each walk of life, the academic institutes also are alleged to put together their students to be generation literate (Kalanada, 2005).¹ It is because of this purpose using generation in faculties in well-known and in classrooms, in particular, has been growing day by day. To obtain complete advantages from using technology in training the policy planners should consider due attention to all of the essential situations and environments, immediately or indirectly, associated with the generation use. Therefore, the researchers in the field of education make an attempt to discover the different factors that have an impact on the technology use in education in a single manner or the other.

It can be stated that computer and ICT is one of the greatest appliances to strengthen the teaching-learning process increasingly, to raise quality of education by making learning and teaching as an active process connected to real life.

Traditionally, the teacher used to be the source of knowledge for the students. But in modern time teachers – with a changed and extended role – are central to the way technology is adopted and used at the classroom and student level. The teacher must play a central and crucial management role regarding ICT in schools. The teacher becomes manager of the learning environment – a creative, interesting, demanding and professionally rewarding role. This expanded role for the teacher in a changed learning environment has considerable resource implications, in terms of staffing levels and professional development needs. Teachers need to modify their pedagogy dramatically and on a continuing basis, whereby they will become for their students role models for lifelong learning.

But the use of technology by teacher in education, in general and in teaching, in particular, depends strongly upon their support and attitudes. It has been suggested that if teachers believed or perceived proposed computer programs as fulfilling neither their own or their students' needs, they are not likely to attempt to introduce technology into their teaching and learning. Among the factors that affect the successful use of computers in the classroom are teachers' attitudes towards computers.

Therefore, keeping the above point in mind, the present study the investigator aimed to study the attitude of K.V. school teachers towards the use of technology in teaching.

Objectives: The present study mainly aims to know the attitude of K.V. school teachers on the use of computers. The secondary objectives are:

- (i) to find out the teachers attitudes towards computers and its implications and
- (ii) to know the teachers attitudes towards school climate & environment and teachers and administrative support

Hypotheses: The hypotheses frame for this study are as follows:

- (i) The KV school teachers have high attitude towards computers
- (ii) The school climate and environment supports the KV school teachers

2. REVIEW OF LITERATURE

Regarding attitude of computers Hüseyin SERİN and Faruk BOZDAĞ (2020)² examined the teacher attitudes concerning technology use in teaching do not change according to gender and school type, but according to their education level. While the autonomy behaviors of teachers do not vary in relation to their gender and education level, it differs according to the type of school they work. Newton Buliva (2018)³ suggested that there were no substantial differences in attitudes towards the utility of computers between the genders. A study of Hamdzun Haron, Jaffri Hanafi, Zandariah Ahmad, Khalim Zainal, Maharam Mamat, and Abdul Salam Yusof. (2018)⁴ showed the teacher not shown any anxiety in using computers at Sekolah Kebangsaan Balok Baru, Kuantan, Pahang. Ligang Suniya, Lhungdim T. (2017)⁵ revealed that secondary school teachers have a favorable attitude towards computer and ICT in school. Similarly, a significant gender difference was observed in their attitudes towards ICT. However, the results further showed no significant difference in the secondary school teachers' attitudes towards ICT in relation to race and type of school management. Chandini (2016)⁶ showed that there is significant difference in secondary school teacher's attitude towards the use of computers in education with respect to their age. Rekna Rani and Deswal (2015)⁷ revealed that that no significant differences were found with respect to gender, educational stream or type of institution. The study conducted at Maharshi Dayanand University, Rohtak, Haryana. However, significant difference was found in attitude of Prospective Teachers towards use of computers in Education with respect to their residential background. Arumugam Raman, Biblob Malik, Mohd Sofian O.F. (2015)⁸ stated that there is a significant effect in computer integration into curriculum instruction as well as useful of attaining the goal of national policy of education which aimed at the Malaysian vision 2020. Modi J.K.P. (2012)⁹ showed that there is no significant difference in the attitude of primary teachers towards computer literacy with reference to their gender, educational qualification. But there is significant difference in attitude of primary teachers towards computer literacy with reference to their experience. In a study, Yildirim (2000)¹⁰ found that there is a lack of computer knowledge and ability of teacher constitute obstacles in the integration and use of computers in the classroom.

3. METHODOLOGY

The method of the study is descriptive and the research is aimed for determining attitudes of the teachers toward computer. The sample consisted of total 1138 candidate teachers who are selected in a random way from Kendriya Vidyalaya Schools of Telangana State. A questionnaire was used as a tool to collect the data. The survey of faculty attitudes toward computers and support school environment has 27 multiple-choice items with item options ranging from 1 to 5. Cronbach Alpha coefficient of the Scale is found as 0.82. ANOVA, t-test, Scheffe

and LSD tests are used to analyze the data according to objectives of the research. The findings of the study are coded to SPSS statistical package program and significance level was taken as 0.05.

4. RESULTS AND DISCUSSION

In this section, the investigator presented the teachers attitudes of Kendriya Vidyalaya schools which will help the students in bringing out the internal knowledge of the students on use of hardware and software skills. The attitudes of the teachers towards computers and how far the ICT support the school climate and environment. The findings on the above aspects are presented in the following tables.

Table-1: Ranking on Attitudes towards Computers

Sl. No.	Item	Mean	SD	Rank
1.	I feel comfortable with the idea of the computer as a tool in teaching and learning	4.31	0.762	II
2.	The use of computers in teaching and learning stresses me out	3.15	1.298	IX
3.	If something goes wrong I will not know how to fix it	3.00	1.091	X
4.	The idea of using a computer in teaching and learning makes me skeptical	2.80	1.137	XI
5.	The use of the computer as a learning tool excites me	3.98	0.886	VIII
6.	The use of computers in teaching and learning scares me	2.05	0.992	XV
7.	The computer is a valuable tool for teachers	4.36	0.762	I
8.	The computer will change the way I teach	4.10	0.883	V
9.	The computer will change the way students learn in my classes	4.09	0.866	VI
10.	I can do what the computer can do equally as well	2.79	1.105	XII
11.	The computer is not conducive to student learning because it is not easy to use	2.27	1.001	XIV
12.	The computer helps students understand concepts in more effective ways	4.26	0.791	III
13.	The computer helps students learn because it allows them to express their thinking in better and different ways	4.05	0.893	VII
14.	The computer helps teachers to teach in more effective ways	4.24	0.809	IV
15.	The computer is not conducive to good teaching because it creates technical problems	2.59	1.119	XIII
	Total	52.04	6.590	
	Grand Mean and Standard deviation	3.47	0.44	

Source: Data analysis

From the above table it can be drawn that the mean scores (4.36) and standard deviation (0.762) of the respondents of K.V. School teachers shows that they completely agreed with the statement ‘the computer is a valuable tool for teachers’. It is also found that the teachers completely agreed with the idea of the computer as a tool in teaching and learning as it scored a mean score of 4.31 and SD (0.762) and placed it in second rank. With the mean score (4.26) and SD (0.791) strongly agreed with the statement ‘The computer helps students understand

concepts in more effective ways' and placed it in third rank. Also completely agreed that the computer helps the teachers to teach in more effective ways and placed this in fourth with a mean score of 4.24 and standard deviation as 0.809. The teachers also completely accepted that the computer change the way of teaching as this statement scored 4.10 mean and SD (0.883) with fifth rank. The teachers have better contentment on students' opinions regarding their learning on computers and the computers allow the students to express their thinking in better and different ways. These statements ranked with sixth and seventh with 4.09 and 4.05 as mean and 0.866 and 0.893 as standard deviation. Hence, it can be concluded that the K.V. school teachers completely agreed the above statements on their attitudes toward usage of computers.

The K.V. school teachers agreed with the two statements like 'The use of the computer as a learning tool excites me' and 'The use of computers in teaching and learning stresses me out' with 3.98 and 3.15 as mean and SD scores 0.886 and 1.298, respectively and ranked at eighth and ninth. Whereas the teachers not agreed with the statement 'If something goes wrong I will not know how to fix it' and placed it tenth rank with 3.00 as mean and 1.091 SD.

The K.V. school teachers disagreed with the following statements. According to their opinion idea of using a computer in teaching and learning makes them unconvinced as the mean score of their opinion is 2.80 and SD is 1.137 and placed at eleventh ranks. Similarly, the other statements such as 'I can do what the computer can do equally as well', 'The computer is not conducive to good teaching because it creates technical problems', 'The computer is not conducive to student learning because it is not easy to use' and 'The use of computers in teaching and learning scares me' as their means are: 2.79, 2.59, 2.27 and 2.05 and placed in twelve, thirteen, fourteen and fifteen ranks.

Table 2: Ranking on School Climate and Support

Sl. No.	Item	Mean	SD	Rank
1.	Other teachers encourage me to integrate computers in teaching and learning	3.94	0.816	X
2.	The PGT Computer Science encourages me to integrate computers in teaching and learning	3.85	0.995	XII
3.	The Principal encourages me to integrate computers in teaching and learning	4.29	0.727	I
4.	The Inspecting Team encourages me to integrate computers in teaching and learning	4.19	0.754	III
5.	I often exchange ideas about technology integration with other teachers	4.07	0.796	V
6.	There are other teachers in my school who use computers in teaching and learning	4.29	0.664	I
7.	In faculty meetings, we frequently discuss the subject of integrating computers in the school curriculum	4.00	0.778	VII
8.	Teachers in my school are well informed about the value of computers in teaching and learning	4.16	0.731	IV
9.	A variety of computer software is available for use in my school	3.86	0.916	XI
10.	The technical support in my school is adequate	3.97	0.876	IX
11.	The instructional support in my school is adequate	3.99	0.844	VIII
12.	The computer and technical infrastructure in my school is adequate	4.01	0.851	VI
	Total	48.61	7.100	

	Grand Mean and Standard deviation	4.05	0.59	
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Source: Data analysis

The above table describes the Mean, SD and Rank on the opinions of the K.V. school teachers on school climate and teachers support in using computers and ICT. From the above table it is clear that the teachers completely agreed the principals' encouraged the teachers to integrate computers in teaching and learning and they also expressed that the other teachers who use computers in teaching and learning also supports placed in I Rank. For this the mean values and SDs are 4.29 & 0.727 and 4.29 & 0.664, respectively. Further, the teachers also strongly agreed that Inspecting Team encourages integrating computers in teaching and learning and the mean value is 4.19 and 0.754 and they placed it in III Rank. With a mean score of 4.16 and 0.731 SD the teachers strongly agreed the other teachers well informed about the value of computers in teaching and learning and placed it in IV Rank. They completely agreed with the statement "I often exchange ideas about technology integration with other teachers" and placed in V Rank. The teachers strongly opined that the computer and technical infrastructure in my school is adequate (Mean=4.01; SD=0.851) and also stated that the teachers frequently discusses the subject of integrating computers in the school curriculum (Mean=4.00; SD=0.778) and ranked in VI and VII, respectively. On the basis of the opinions of the teachers, it is observed they accepted that the instructional support and technical support in K.V. schools is adequate and placed them in VIII and IX ranks with 3.99 and 3.97 as mean scores and 0.844 and 0.876 as SDs, respectively. The teachers also stated that the other teachers encourage integrating computers in teaching and learning and this statement ranked with X and with a mean score of 3.94 and 0.816. The teachers agreed other statements like 'A variety of computer software is available for use in my school', 'The PGT Computer Science encourages me to integrate computers in teaching and learning' with a mean score of 3.87 and SD 0.916 and 3.85 and 0.995, respectively.

5. FINDINGS

It is found from the research analysis that the K.V. school teachers have strong opinion (mean score ranged between 4.05 and 4.36) and agreed the following statements completely as (i) the computer is a valuable tool for teachers, (ii) computer as a tool in teaching and learning, (iii) computer helps students understand concepts in more effective way, (iv) computer helps the teachers to teach in more effective ways, (v) computer change the way of teaching, (vi) computers change the way of students to learn in classes and (vii) computer allows students to express their thinking in better and different ways. The findings show that the teachers disagreed with the following statements: (i) I can do what the computer can do equally as well, (ii) The computer is not conducive to good teaching because it creates technical problems, (iii) The computer is not conducive to student learning because it is not easy to use and (iv) The use of computers in teaching and learning scares me.

The findings of the study, in this regard, declared how the school environment supports the teachers in using computers and ICT for the development in academics. Out of twelve statements in this category almost all the statement scored more than 3.85 as mean score. It is strongly opined by the teachers that the Principal encourages teachers to integrate computers in teaching and learning and it is also rated that other teachers in the school who use computers in teaching and learning.

6. CONCLUSIONS

Teacher plays a crucial role in the development, adoption and implementation of any educational curriculum and system. This role becomes more important when it comes to integration of information communication technology in the school programme/curriculum of any developing country. It is concluded that the knowledge of ICT usage improve human capacity, including business transactions, industrial use, education programme and activity. ICT is an important resource not only because of its unique control capabilities, but because these attributes are also isomorphic with the representations and processes involved in human learning.

It is apparent from the study that ICT applications using computers are charming an essential part of education system in all types of schools. The easy access, smart deployment and proper usage of ICT can enhance the quality of teaching learning in K.V. schools. These schools should efficiently utilize the benefits of ICT in

creating an effective learning environments as well as role of good administration, thus impacting the overall quality of school education.

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