

# ICT Competence among College Teachers: An Assessment

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**Abstract-** Education is a reflection of good civilization. Human civilization has progressed by innovation in education since periods. Education spreads awareness in society about how we can be a good social being and help others in our daily life. Understanding how education system work and how it evolve over time has been one of the most important research agendas in recent years. The education system of any economy performs following main tasks: first, it handles the basic and higher education; second, it provides better opportunities of income; third it enhances the living standard and helps in social development. This study attempts to assess the competency level of college teachers in the use of ICT, their level of motivation and the challenges faced by them. The study was conducted in five colleges of Ernakulam District. 50 teachers were taken in to consideration by adopting Multi stage random sampling. And the study found that majority of the teachers have access to broad band but the use of ICT enabled facilities are lacking. Inadequate training, Insufficient time due to work load, absence of ICT facilities, lack of funds are some of the factors which hinders the successful integration of ICT.

**Index Terms-** ICT, Competency Level of Teachers, Level of Motivation.

## I. INTRODUCTION

Education is the backbone of a nation. It focuses on the creation of high quality and well trained human resources to fulfill the need of ever growing Indian economy, but on other hand it face challenges at operational level. Educational governing bodies like UGC, AICTE, ICMR, ICAR, all possess difficulties to maintain proper coordination, administration, monitoring and evaluation for improving the quality of education and also imparting the education. Considering the higher education in India it has seen a massive growth in post-independence era by integrating ICT. The education system has changed from the traditional classroom of desks, notebooks, pencils, and blackboard to an online forum of computers, software, and the Internet intimidates. Because the students are expecting more than a traditional classroom can provides to them. This necessitates a study about the teacher’s competence in the use of ICT.

## II. METHODOLOGY

The universe of the study comprised the teachers of Government and Aided Colleges in Kerala state. But the sample is confined to Ernakulam district from where 50 teachers were

taken by adopting multi staged random sampling. Primary data is collected through questionnaires. Secondary data is collected from journals, business magazines and web sites. The primary data collected were classified, tabulated and analysed keeping in view the objectives of the study. Percentages are expressed to the nearest multiple of one. The mathematical tools applied are weighted averages to measure the level of motivation and percentages.

## III. RESULTS

This study attempts to assess the competence of college teachers in the usage of ICT. Data were collected from 50 respondents from both Government and Aided colleges of Ernakulam district by using a survey schedule. Result of analysis is given below:

**Table: 4.1-Profile of Respondents**

Group	Number	%
• Gender		
Male	22	44
Female	28	56
• Age		
Below 30	4	8
30 to 50	36	72
Above 50	10	20
• Subject		
Commerce	16	32
Economics	14	28
Science	12	24
Language	8	16
• Area		
Urban	15	30
Rural	35	70
	50	100

<ul style="list-style-type: none"> <li>Nature of Management</li> <li>Government</li> <li>Aided</li> <li>Grade as per NAAC accreditation</li> <li>B</li> <li>Teaching experience</li> <li>Below 10</li> <li>10-20</li> <li>More than 20 years</li> </ul>	 19 16 15	 38 32 30
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Source: Field survey

Table 4.1 shows the details about the profile of the respondents. Out of the 50 respondents 28 respondents are females (56%) and 22 respondents are males (44%). Majority of the respondents belong to the age group of 30 to 50 (72%), 10 respondents belong to the age group of above 50(20%), and only 4 teachers belong to the age group of below 30. Major portion of the respondents belong to commerce faculty (32%), followed by economics (28%) and science and language teachers are 24% and 16% respectively. Area wise classification of the teachers shows that majority of the respondents (88%) belong to the rural area. 70% of the teachers belong to the aided colleges and the remaining 30% of teachers belong to government colleges. All the respondents belong to B grade colleges accredited to. 38% of teachers having teaching experience of below 10 years, 32% of the teachers having experience of 10 to 20 years and the remaining 30 % of teachers having teaching experience of more than 20 years.

**Table 4.2: Access to Broadband and Teaching Aides**

	Sufficient	Moderate	Insufficient	Total
Broadband	40	8	2	50
Teaching Aids	29	16	5	50

Source: Field Survey

Table 4.2 shows the teacher’s access to broad band and other teaching aids like LCD and computer .It is revealed that that majority of the respondents have sufficient access to broad band and teaching aids.

**Table4.3: Mode of Teaching**

Mode of Teaching	%
Lecture method	34
Lecture and use black board	74
Lecture and LCD projector	22
E-Content	08

Source: Field Survey

From the above table it is clear that 74% of the teachers depend on lecture and black board. Only 22% use LCD projector along with lecture method and 8% of the teachers depend on E-Content. 34% of the teachers still follow the traditional method text lecturing.

**Table4.4: Use of Hardware**

Hardware Used	Mean Rank	Rank No
Computer	1.27	1
Printer	3.27	3
LCD	2.73	2
Television	3.73	4
Scanner	5.27	6
Video	4.73	5

Source: Field Survey

Table 4.4 shows the competency level of the teachers in the usage of ICT hardware’s. From the table it is clear that computer (1.27) is the most preferred hardware among the college teachers followed by LCD (2.73), printer (3.27) and television (3.73). And video and scanner are least preferred by the respondents by (4.73) and (5.27) respectively.

**Table4.5: Use of Software**

Software Used	Mean Rank	Rank No
Electronic Journals	3.14	3
Web Browser to Search Internet	2.29	1
E Mail	4.86	5
Discussion Forum	4.45	4
Video Conferencing	6.86	7

E –Library	4.92	6
Power Point Presentations	2.30	2
Educational Games	6.90	8

Source: Field Survey

Majority of the teachers use web browser as an ICT software ,followed by Power point presentation and electronic journals and the 4<sup>th</sup> ,5<sup>th</sup>,6<sup>th</sup>,7<sup>th</sup> and 8<sup>th</sup> ranks are assigned to discussion forum, E mail, E-Library, Video Conferencing and Educational Games respectively.

**Table4.6: Competency level of Hardware and software**

Competency Level of Hardware and Software	Number	%
Beginner Level	4	8
Intermediate Level	35	70
Advanced Level	11	22

Source: Field Survey

It is clear that 70% of the respondents are in the intermediate level with respect to the competency level of both hardware’s and software’s. And 22% are in the advanced level of usage and only 8% of the teachers are in the beginner level.

**Table4.7: Ownership of personal computers**

Ownership	Number	%
Yes	48	96
No	2	4

Source: Field Survey

It is evident from the above table that 96% of the teachers have their own computers

**Table 4.8: Mode of access to internet**

Mode of Access	Frequency	%
Own Computer	38	76
Computer of College	8	16
Internet Café	4	8

Source: Field Survey

Table 4.8 shows the teachers mode of access to internet. From the table it is clear that 76% of the teachers depends on own computer to access to internet, and 16% of the teachers

depend college computer and only 8% of teachers resorted to internet café.

**Table 4.9: Level of Satisfaction**

Factors contributing satisfaction	Mean	S.D
Support from Colleagues	4.16	.511
Support from Principal	4.06	.467
Officials of Directorate of Collegiate education	3.78	.618

Source: Field Survey

Table 4.9 shows the level of satisfaction of the teachers with respect to their Colleagues, Principal and Official of Directorate of Collegiate Education is high.

**Table 4.10: Rating of overall Satisfaction**

Score	%
10	20
9	4
8	22
7	20
6	16
5	8
4	10

Source: Field Survey

Table 4.10 shows the overall satisfaction of the teachers from the job. Majority of teachers (66%) assigned a score above “7” which shows that their overall satisfaction is high.

**Table 4.11 Factors Motivate the Usage of ICT**

Motivation Factors	Mean Rank	Rank No
ICT make lesson more interesting	1.71	1
ICT make lesson more diverse	2.76	2
ICT improves presentation of materials	2.79	3
ICT impairs pupils learning	3.71	4
Give me more prestige	5.15	6
Enhance my career prospects	4.88	5

Source: Field Survey

Table 4.11 shows the factors motivate the teachers to use ICT. Majority of the respondents are of the opinion that ICT

make lesson more interesting (1.71). Second rank is assigned to the factor that ICT makes lesson more diverse (2.76). Third rank is assigned to “ICT improves presentation of materials” (2.79) followed by the factors “ICT impairs pupils learning” (3.71) “ICT gives more prestige” (5.15) and “enhance career prospects” (4.88).

(4.68) and ICT illiteracy among (4.72) .Lack interest in ICT and teachers negative attitudes towards ICT are ranked by 7 and 8 respectively.

#### IV. CONCLUSION

It is clear from the analysis that inspite of sufficient access to broadband and teaching aids, the use of ICT among teachers is not effective. The reason for ineffective use of ICT is neither the lack of job satisfaction nor the incompetency level. It is an issue of attitude. Teachers should change their mindset and should accommodate with the changes that took place in education sector. To a certain extent, training will help but the introspection of teachers and a feel for updation may be more effective than any compulsion.

#### REFERENCES

- [1] Smeets, E. (2005). „Does ICT contribute to powerful learning environments?,, *Computers & Education*, 44 (2005), pp. 343–355.
- [2] Mumtaz, S. and Hammond, M. (2002), ‘The word processor re-visited: observations on the use of the word processor to develop literacy at key stage 2’, *British Journal of Educational Technology* 33(3), pp. 345-347.
- [3] Fister, K. R., & McCarthy, M. L. (2008). “Mathematics instruction and the tablet PC”. *International Journal of Mathematical Education in Science and Technology*, Vol. 39 No. (3), Pp; 285-292. Daniels J.S. (2002) “Foreword” in *Information and Communication Technology in Education–A Curriculum for Schools and Programme for Teacher Development*. Paris:UNESCO.
- [4] Karagiorgi, Y. and Charalambous, K. (2006). „In-service training and school practices: In search for the impact,, *Journal of Education for Teaching*, Vol. 32, No. 4, November 2006, pp. 395-411.

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**Table.4.12: Hindrances for the successful integration of ICT**

Hindrances	Mean Rank	Rank No
Absence of ICT facilities in college	4.32	4
Lack of funds	4.68	5
Lack of training	3.48	1
Inadequate power supply	4.28	3
ICT illiteracy	4.72	6
Insufficient time due to workload	4.24	2
Lack interest in learning ICT	4.76	7
Teachers negative attitudes towards ICT	5.52	8

Source: Field survey

Table 4.12 shows the factors hinders the successful integration of ICT. Majority of the respondents reported that lack of training (3.48) is the main factor which hinders the successful integration of ICT. Insufficient time due to work load (4.24) is the second factor followed by inadequate power supply in colleges (4.28) absence of ICT facilities (4.32) lack of funds