A STUDY ON THE PERCEPTION OF TEACHER EDUCATORS TOWARDS ICT ON THE BASIS OF GENDER

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Abstract

Technological change provides new opportunities as well as challenges in the higher education sector as well as in teacher training. It is imperative that various opportunities thrown up are quickly and optimally exploited. The growth of technology, media, and telecommunications convergence provides an excellent opportunity to deploy them in higher education. ICT can be divided into two groups: traditional or old ICT (namely, radio and TV) and the new ICT (namely, the Internet and telecommunications). Learning through new ICT is also called "e-learning". Recent studies show the enormous potential of e-learning, especially in industrialized countries. The national policy of Education (1986) included utilization of media and ICT in Teacher Education as the social change from the information society to knowledge society. Today there is a lot of pressure on formal education, in order to achieve our goals we must use ICT. Within education, ICT is seen as a way to promote educational, improve the skill of learners and prepare them for the global economy and the information society. UNESCO (2008) has already designed the ICT Competency Standard for Teachers (ICT-CST) project, aimed at the development of teacher competencies. As pointed out in this ICT-CST Policy Framework, —New technologies require new teachers 'roles, new pedagogies and new approaches to teacher training. Teacher professional development will be a crucial component of this educational improvement. There is an urgent need to develop a new generation of learning material due to development in ICT. So there is a need for the proper integration of ICT in the Indian Teacher Education System. It is a challenging task and demands more of perfection on the part of the Indian Government and also teacher educators.

Key Words: *Perception of Teacher Educators, Information & Communication Technology (ICT), Gender*

INTRODUCTION

ICT has taken a key role in the present Knowledge Society. The effective and efficient use of ICT depends on technically competent educators/teachers. They should be able to appreciate the potentiality of ICT and have a positive attitude towards ICT. Four phases are conducted to implement ICT content in Teacher Education Program so that the student teachers when they become teachers in school would be able to utilize ICT tools in classroom instruction in promoting flexible Learning Environment to meet individual learning objectives of the subject-matter content. The four phases are. a. ICT literacy b. Effective and efficient use of ICT hardware and software for teaching-learning activities. c. ICT-based pedagogy, online support, networking and management, and d. adopting best innovative practices in the use of ICT. All the above phases are very essential for the effective and efficient use of ICT in the classroom instruction. There is no doubt that ICT-integrated teaching helps a teacher to discharge his/her duty effectively. Now ICT has become a necessary part of the Indian school curriculum as well as teacher education. This new technology has opened up a new dimension to teaching-learning community. Attempts on ICT integration in the field of teacher education system, are found in, The National Curriculum Framework – 2005'(NCF-2005). NCFTE (2009) has also emphasized, ―teacher education needs to orient and sensitize the teacher to distinguish between critically useful, developmentally appropriate and the detrimental use of ICT. The National Policy On ICT in School Education (NPICTSE) - 2010, Draft, Last revision: 23 March 2012, wants ―Teacher educators will be suitably oriented and trained to use ICT in their pre-service teacher training programs. MHRD already launched ICT@schools‟ in the year 2004 and it was revised in 2010 and started as Smart Schools Project (schools highly enriched with ICT facilities) as a pilot basis in 15 states (including West Bengal) under RMSA. A notable initiative was EDUSAT (Education Satellite), built for Indian distance education. Therefore, the teacher educators are responsible to promote, utilize and implement of ICT that they can move from pedagogues to techno pedagogues.

Selwyn (1997), Carter and Leeh (2001), Gulbahar&Guven (2008), Wong and Hanafi (2007), Russell & Romeo (2007), Goktas, et al. (2008), Safdar&Jumani (2012) have done scale production on ICT in their research work whereas Rathod (2002), Goel et. al. (2003), Tennent‟s (2003), Arkin (2003), Loveless (2003), Dhodi (2004) conducted researches on Teacher's perception about ICT. But no research of the same type was conducted on Teacher educators. All these researches inspired researcher to go for the same study on teacher educators because they prepare teachers for future generations. If

pupil teachers would be familiar with the technology they would prepare students for using technology confidently in all areas.

ICT is a blessing for education and there is a staggering need to nurture this technology to enhance the effectiveness of teaching-learning process. Now globalization has paved the path for implementation and utilization of ICT. Therefore, this new technology has opened up a new dimension to the teaching-learning community. Computer Education has become a compulsory subject in Teacher Education and both teacher educators and student teachers started using computer education in all areas of teacher education. During the use of computers in teacher education, it is observed that both from the context of facilities, awareness, skill, applications, and evaluation the teacher educators always felt sensitive in integrating the computer education. It is very essential to understand the inherent nature of ICT perception. A study is therefore attempted in this respect.

STATEMENT OF THE PROBLEM

The Title of the present investigation is, **"A study on Perception of Teacher Educators towards ICT on the basis of gender."**

OBJECTIVES OF THE STUDY

The study has been designed with the specific objective to study the influence of gender on the perception of teacher educators towards ICT.

HYPOTHESES OF THE STUDY

In the light of the above objective, the following major hypothesis has been set up for the purpose that "There is a positive perception of male & female teacher educators towards ICT."

LIMITATIONS OF THE STUDY

Present study has some limitations, which are given below:

i) The study is limited to both male and female teachers working in education college only.

ii) University-wise and College character-wise (Government, Government Aided, Autonomous, and Private) comparison are absent here because online data was collected.

iii) There is a self-made criterion used for perception scale for Teacher Educators.

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POPULATION

All male and female Teacher Educators of India.

SAMPLE

Online data collection from 60 teacher educators of India.

TOOLS USED

Teacher Educators ICT Perception Scale (Self-developed).

STATISTICAL TECHNIQUES

'Percentage analysis'.

METHODOLOGY

Descriptive Survey Method

DESIGN OF THE STUDY

Teacher Educators' ICT Perception Scale (ICTPS) is a self-developed five-point Likert type scale and consisted of thirty-two (32) test items.

SCORING AND ANALYSIS

In case of positive items, responses arranged as Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD) were scored as 5, 4, 3, 2, 1 respectively; and in case of negative items the same were scored in reverse order as 1, 2, 3, 4, 5 . Here, each item's maximum possible score is 5 and the minimum possible score is 1. Therefore, the score range of the above scale is 60 to 300.

Description of Development and Standardization Process of ICT Perception Scale (ICTPS):-It was constructed in the English language and developed after an extensive review of related literature. The review was made in the following areas:

- Attitudes towards computer.
- Perceptions of the wireless laptop.
- Attitudes towards IT.
- Usage and attitude towards the Internet.
- ICT knowledge, competencies, and usage.
- Perception of ICT.

Various Studies already mentioned in the Review of selected Literature, specially

Selwyn (1997), Carter &Leeh (2001), Gay et. al. (2006), Gulbahar&Guven (2006), Wong & Hanafi (2007), Russell and Romeo (2007), Goktas et. al. (2008) helped in the development of the above scale.

Construction of ICT Perception Scale (ICTPS): a -After necessary investigation of relevant literature, the investigator set the Dimensions and Sub-Dimensions regarding 'Perception about ICT'. A brief discussion on dimensions and sub-dimensions of the scale is presented afterward. The number of total dimensions is four (4), and every dimension has four (4) sub-dimensions. Therefore the scale has four (4) dimensions and sixteen (16) sub-dimensions, which are given below:

Details of Dimensions and Sub-Dimensions of ICTPS Dimensions Sub-Dimensions

The researcher considered each Dimension and Sub-Dimension extensively and then appropriate items (both positive and negative) were constructed for each subdimension. Following table shows the whole particulars. Then the researcher constructed thirty-two (32) items (i.e. positive and negative statements of equal number) under sixteen (16) sub-dimensions.

Showing the initial format of developing a tool

S.NO.	Dimensions	Sub Dimensions	No. of Positive Items	No. of Negative Items
1.	Attitudes towards Use of ICT	a) Usefulness	**1**	**1**
		b) Confidence	**1**	**1**
		c) Aversion	**1**	**1**
		d) Belief	**1**	**1**
2.	Awareness about the Development of ICT	a) Motivation	**1**	**1**
		b) ICT Consciousness	**1**	**1**
		c) Facts and Phenomena	**1**	**1**
		d) Integration of theory Practice by ICT	**1**	**1**
3.	Scope of using ICT	a) In curriculum Transaction	**1**	**1**
		b) In Administration	**1**	**1**
		c) In Profession	**1**	**1**
		d) Among users (teacherslearners)	**1**	**1**
4.	Impact of ICT	a) On Teachers	**1**	**1**
		b) On Learners	**1**	**1**
		c) On Profession	**1**	**1**
		d) On Society	**1**	**1**
		TOTAL	**16**	**16**

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Collection of data:- Collection of data was done online through the self-developed tool (ICTPS) from the 60 teacher educators, out of which 27 were males and 33 were females.

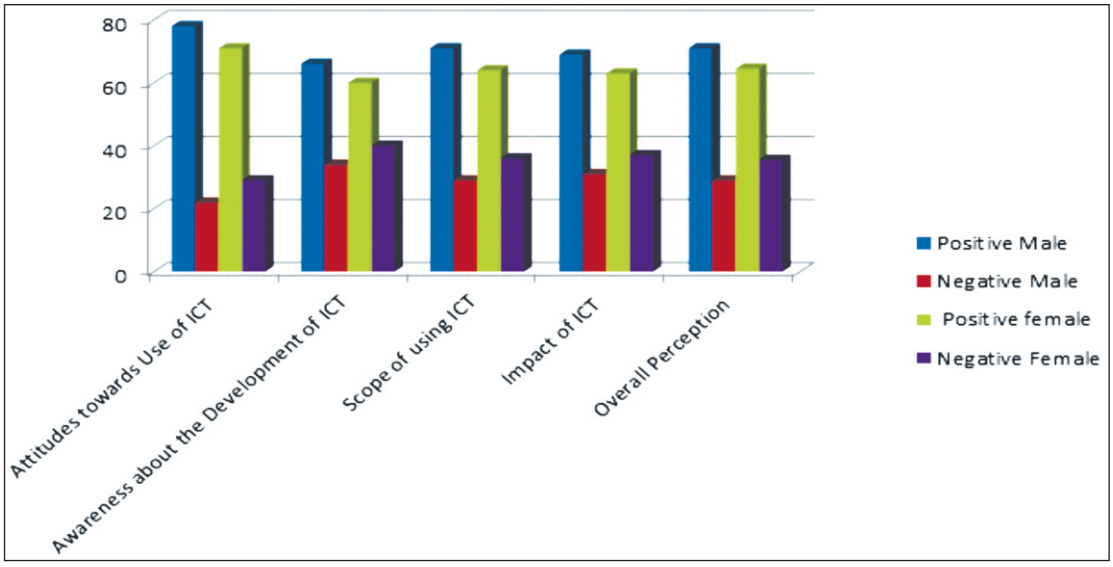
Presentation of Data:- Collected data were tabulated and organized for analysis and interpretation.

Perception of male and female Teacher Educators towards ICT:- To test research hypothesis "There is the positive perception of male & female teacher educators towards ICT," null hypothesis "There is no positive perception of male and female teacher educators towards ICT" has been formulated. On the basis of obtained scores on perception scale, male and female Teacher educators have been classified into two categories of perception towards ICT i.e. Positive and Negative for each dimension. The overall perception of male and female Teacher educators has been studied on the basis of cumulative score of positive and negative perceptions obtained by them on perception scale.

Table: Represents Overall Perception of Male and Female Teacher Educators towards ICT on the basis of different Dimensions

DIMENSIONS	POSITIVE MALE	NEGATIVE MALE	POSITIVE FEMALE	NEGATIVE FEMALE
Attitudes towards Use of ICT	78	22	71	29
Awareness about the Development of ICT	66	34	60	40
Scope of using ICT	71	29	64	36
Impact of ICT	69	31	63	37
Overall Perception	71	29	64.5	35.5

Figure: Represents Overall Perception of Male and Female Teacher Educators towards ICT on the basis of different Dimensions



On the basis of the analysis of male and female teacher educators responses on various statements related to perceptions of Teacher Educators towards ICT, it has been found that all male and female TEs admit that ICT helps in better analysis of concepts and their presentation. It gives confidence in teaching. 78% of male TE showed positive perception towards the usage of ICT in the classroom whereas 71% of female TE's were having a positive attitude for the same. 66% male and 60% of female TEs showed awareness about the development of ICT. They are highly motivated and conscious about the fact that ICT helps in integrating theory practice. 71%males and 64% females TEs believe that ICT helps in curriculum translation, administration and profession and 69% males and 63% females were convinced that ICT is having a positive impact on teachers, learners and in the teaching profession.

In the overall perception of male and female teacher educators towards ICT on the basis of above dimensions and statements, Researcher concludes that 71% male and 64.5% teacher educators are having positive perception towards ICT whereas 29% and 35.5% female are having a negative perception about it. Both male and female teacher educators were having positive perception towards ICT so that null hypothesis "There is no positive perception of male and female teacher educators towards ICT" has been rejected and research hypothesis "There is a positive perception of male & female teacher educators towards ICT," has not been rejected. Therefore, it can be concluded that both male and female teacher educators have positive perception towards ICT.

Most of male and female teacher educators accept that ICT develops a better understanding of contents and makes learning very effective. It is a helping hand for teachers to make concepts more understandable. It saves time and energy also and makes the teaching-learning process interesting and enjoyable. It motivates students to learn and develops curiosity among them to go through the concept. It shows Positive Perception of both male and female teacher educators towards ICT. It is expected that they can meet the upcoming challenges due to ICT intervention and incorporation in the teaching-learning world.

EDUCATIONAL IMPLICATIONS

Educational Implications of the study are given below:

I) The institutional fund and provision for ICT supported tools, gadgets, and TLMs should be increased. Therefore ICT supported infrastructure development is a very urgent requirement for B.Ed. colleges everywhere

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ii) Teacher educators must improve their attitudes, awareness, motivation towards ICT for the continuous development of ICT perception.

iii) All Universities of India should enrich their B.Ed. curriculum with a view to incorporating the usage of ICT- based teaching-learning system as per NCFTE (2009) and NPICTSE (2010).

iv) Teacher educators' ICT awareness, knowledge, skill, competencies, and development through the regular seminar, symposium, workshop, project, and training should be increased.

v) Moreover, educational policymakers, educational planners, and administrators should be given importance in a regular value orientation program and proper use of ICT in the field of teacher education.

vi) Educational stakeholders may get a synoptic view about ICT perception of teacher educators all over India.

vii) ICT Perception Scale can be used by future researchers.

SUGGESTIONS FOR FURTHER STUDY

The present researcher provides some recommendations, which are given below:

i) For a better study, more samples would have been selected and then the result might be more informative.

ii) Future investigator must consider a quantitative method for the comprehensiveness of the study.

iii) The researcher may consider other categorical variables, like teaching experience, the medium of instruction, social background, residential place, institutional location, nature of the institution to obtain a more specific result.

iv) Future researcher may consider the nature of College (Government, Government aided and Private) and University for comparison in their studies.

v) Before the collection of data on ICT perception, the future researcher should check their skill and usage status of ICT, and then the result could be more substantial.

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