

A STUDY TO EXPLORE THE PERCEPTION OF TEACHER EDUCATORS TOWARDS THE PEDAGOGIC USE OF ICT

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ABSTRACT

This study is concerned with the perception of teacher educators towards the pedagogic use of ICT during COVID-19. It investigates perception of teacher educators of different type of colleges belonging to different regions. A total of 40 teacher educators of different private and government institutions belonging to different area were surveyed using a self-made questionnaire. The questionnaire was composed of 30 items related to ICT. The result showed that teacher educators are finding ICT useful during this COVID period to prepare and transact their material to the pupil teachers. Teacher educators are using live interactive classes to motivate students so that they can actively participate in the online classes. Teacher educators believed that ICT is lacking in providing opportunities for practicum and evaluation of behavioural changes. The survey results will help various stakeholder's of education realize the perception of teacher educators towards the ICT which may results in initiation of teacher education programmes distantly even after COVID-19.

Keywords: *ICT, Teacher Educators, Self-finance Teacher Educators, Government aided Teacher Educators, Perception, Pedagogy of ICT, COVID-19*

Introduction to ICT and Education

ICT- “Information and communication technology”; refers to technologies that provide access to information through telecommunication. It is used for handling information in scientific, technological, engineering and management disciplines. It uses a diverse set of technological tools and resources to transmit, store, create, share and exchange information. The use of ICT in education helps in productive engagement of students and thereby improving their knowledge retention. This is because technology provides various interactive opportunities to teach the same thing in various different ways; making the teaching learning process more enjoyable and

interesting. ICT is also considered as an instrument for quality enhancement as it enhances learner's motivation and their engagement towards the achievement of objective by enriching the basic skills and teacher training skills. ICT also acts as a transformational tool; which has played a major role in transforming the classroom from teacher centred teaching learning environment to the learner-centred environment.

The present study focuses on comparatively analysing the perception of rural/urban; male/female; self-finance and government institutions teacher educators towards the smart technological techniques used by them in delivering the lectures during the shutdown period.

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Review Related to Pedagogy of ICT and Teacher Education

ICT is the need of the hour. ICT played a dominant role in continuing teaching and learning process in shutdown period during COVID-19. Facilitating e-learning and mobile learning with the help of ICT paved a new way for inclusive education. Peeraer and Van Petegem (2011), investigated the situation of ICT integration in teacher education in Vietnam; they analysed various dimensions of ICT experienced by the teacher educators which included access towards ICT, frequency to use ICT, various other skills related to ICT, the confidence of teacher educators while using ICT. They were found in favour of ICT and they suggested doing more than what they are able to see and use as they found that integration of ICT in education could act as a transitional strategy which could end in reshaping the educational process. Rastogi and Malhotra (2013), they examined the behaviour, attitude and competence of teachers towards ICT; they also took into consideration their experiences and practical implementations of ICT in educational processes. Their study concluded that the actual integration of ICT pedagogy might not take place due to the large number of differentiated levels of ICT skills required by teachers. They tried to unfold the status of ICT- integration by exploring the attitude, skills and proficiency of teachers towards the technology. They revealed a strong positive correlation between the elements they took into consideration. Brun and Hinostroza (2014), investigated the situation of ICT integration in teacher education in Chile using the admissible conclusions from the national studies. The study expected much improvement in the process of teaching-learning through the integration of ICT but it also favoured ICT infrastructure and support

in teacher training institutions. Kidd and Murray, focused on the challenges COVID-19 shutdown posed for teacher educators. They examined the pedagogies adapted during COVID- 19 which relocated new online spaces. Their study also showed 'pedagogic agility' which resulted in adopting changes in the established practices. The study revealed that many principles remained unchanged even after relocation of new spaces for ex orientation values. As a result, it could be said that there was a sense of both sameness and difference in some of the innovative pedagogies developed during this phase.

Research Hypothesis

On the basis of literature reviewed, following hypotheses are framed for the present study:

H1: There is no significant difference between the perception of rural and urban teacher educators towards the pedagogic use of ICT during pandemic situation.

H2: There is no significant difference between the perception of male and female teacher educators towards the pedagogic use of ICT during pandemic situation.

H3: There is no significant difference between the perception of teacher educators of self-finance and government institutions towards the pedagogic use of ICT during COVID-19.

Research Methodology

On the basis of the objectives and the nature of the problem, descriptive method has been used. The nature of data collected includes both quantitative and qualitative. In order to know the perception of teacher educators towards pedagogic use of ICT during COVID-19 with reference to their gender, locality of college and type of college a close ended self-administered questionnaire was developed which includes

30-items to be scored on a one point scale. These 30 items were divided into 5 different dimensions (use of ICT in personal life, use of ICT in lesson planning, use of ICT in assessment, use of ICT in online teaching, and use of ICT in transacting study material). Purposive sampling method has been used to choose the sample. Data has been collected from primary sources; they are 40 teacher educators of bachelors and masters programmes of self finance (20) and government institutions (20) affiliated to Chaudhary Charan Singh University, Meerut (U.P.).

In the present study perception of teacher educators is the independent variable and pedagogic use of ICT is dependent variable.

For data analysis mean, standard deviation and t-test were used as statistical tools.

Data Analysis and Interpretation

On the basis of hypothesis made following data analysis has been done

Table No- 1- Summary of t-test result about the perception of rural and urban teacher educators towards the pedagogic use of ICT during pandemic situation.

Type of Area	N	M	SD	t-value	df
Rural	20	24.05	2.6	2.18	38
Urban	20	26	3.1		

In the above table it is shown that the rural teacher educators have mean of 24.05 with SD 2.6 and urban teacher educators have mean of 26 with SD 3.1. The calculated value of t-test is 2.18 which conclude that there is no remarkable difference in their perception towards the pedagogic use of ICT at 0.01 levels (2.71), whereas it shows significant difference in their perception towards the pedagogic use of ICT at 0.05 levels (2.02). Then it can be said that rural

and urban teachers may have similar or different perception towards the pedagogic use of ICT.

Table No-2-Summary of t-test result about the perception of male and female teacher educators towards the pedagogic use of ICT during pandemic situations.

Gender	N	M	SD	t-value	df
Male	20	25	2.82	0.41	38
Female	20	25.4	3.28		

In the above table it is shown that the male teacher educators have mean of 25 with SD 2.82 and female teacher educators have mean of 25.4 with SD 3.28. Value of 't' calculated is 0.41; the calculated t value is not significant at .01 levels and .05 levels, as a result the null hypothesis is accepted. Acceptance of null hypothesis concludes that gender doesn't affect the perception of teacher educators.

As the mean value is in the favour of female teacher educators of self finance, government and government aided colleges, it concludes that female teacher educators have better perception towards the pedagogic use of ICT.

Table No-3-Summary of t-test result about the perception of private and government teacher educators towards the pedagogic use of ICT during pandemic situations.

Type of College	N	M	SD	t-value	df
Private	20	25.5	2.9	1.07	38
Government	20	24.6	2.7		

It is clear from above table no 3 that on the basis of type of college mean of private college teacher educators is 25.5 and SD is 2.9 and the mean of government college teacher educator's is 24.6 and SD is 2.7. The calculated t-test value

is 1.07 which does not show any significant difference in their perception. Hence it can be said that type of college does not have any impact on the perception of teacher educators towards the pedagogic use of ICT.

Conclusion and Suggestions

All the fields concerning human being are hugely affected due to this COVID- 19 and hence education field is also majorly affected due to this pandemic. Human beings are trying to cope up with the situation all around the world using different measures. In this scenario ICT is acting as a boon to overcome the distance problems; through the use of ICT people are able to connect each other from distance and continue their educational process with social distancing. As far as the perception of teacher educators are concerned it can be said that teacher educators are finding ICT useful in continuing the teaching learning process during COVID times. Urban teacher educators have better perception towards the pedagogic use of ICT than the rural teacher educators; It may be because of the better availability of resources, training programmes and competitive environment in the urban areas as compared to rural areas of the country where there is lack of technical resources and training as well as lack of awareness about the quality and ease of work ICT could bring into education. Female teacher educators have better perception towards the pedagogic use of ICT than the male teacher educators. Although female have more work load and busy schedule they are good at learning new things in life for their personal as well as professional development and ease. Private teacher educators have better perception towards the pedagogic use of ICT than the government teacher educators; it may be because government teacher educators have

less work load and lack of comparison among teachers related to result, whereas private teacher educators suffer from more work load and huge result and development comparisons to stay in the field. To be in the competition, they have to provide something extra and innovative to their students at every phase.

The purpose of any research problem is to present alternative solution of a problem and find out a new and relevant knowledge related to the problem. With regard to this study, there are varieties of implication that may be extended to both private and government institution settings. The education implications of the present study are of much concern. The subject of the present study is of great significant in present era's context, to assess the perception of teacher educators towards the pedagogic use of ICT. In the present study the researcher found various implication of present study for the field of education; It gives detailed analysis of the perception of teacher educators towards the smart technological techniques used by them in delivering the lectures during the shutdown period, which could act as a smart tool for the future pupil teachers who are unable to attend the physical classes due to various constraints. Government could consider this study to analyze the success rate of delivery of online teacher training programmes in future. It could act as a base for the initiation of online teacher training programmes in the country, which would be a great initiative for those who aspire to hold teacher training degrees/diploma but could not achieve it due to unavailability of online programmes.

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