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Application of Digital Technologies in Classroom Instruction Among Teacher Educators in B. Ed Colleges.

KEYWORDS: Application of Digital Technology, Classroom Instruction and Teacher Educators.

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ABSTRACT *Today we are living in an Information and Communication Technology. All over the world, there is a trend to use ICT in the teaching-learning process. The teacher and learner must gain access to technology for improving learning outcomes. ICT is a new paradigm of the teaching-learning process widely accepted as a necessary tool for attainment of developmental goals. Particularly higher education plays an important role for achieving society.*

In the process of education teacher plays vital role for promoting quality education. In order to development of teacher's professional efficiency, gaining update knowledge and promoting quality education ICT is very much necessary in the present knowledge and information explosion age. Application of Digital Technologies in classroom Instruction is widely accepted and it can be rich and as valuable as the classroom teaching. it is more useful in educational research.

In the circumstance, Digital Technologies plays an important role for creating awareness among Teacher Educators. In the present study the investigator made an attempt to study the Application of Digital Technologies in classroom Instruction among Teacher Educators in B.Ed colleges from Trichy District. Sixty Teacher Educators Teaching in B.Ed College were taken as representative sample of the whole population.

The Tools Based an Application of Digital Technologies in Classroom Instruction among Teacher Educators was used for collecting the data. The means of both groups were tested for the significance of difference by using 't' test. The difference in the groups were statistically significant and the application of digital Technologies was more favorable for Teacher Educators among B.Ed colleges of Trichy District in Tamilnadu.

INTRODUCTION

Science and technology play an important role in the new millennium. Tremendous explosion of knowledge in science and technology has changed the life style of people. Without science and technology we cannot go forward.

Now a day's science and technology is as essential as our basic needs. Today's technology leads the way to productivity and the internet has become the vehicle of choice for markets and educational institutions. Digital Technologies is the changing trend in education. The modern technologies particularly the internet made education no longer limited to the four walls of the class room. Application of Digital Technologies comprises all forms of electronically supported learning and teaching.

The information and communication systems, whether networked or not serve as specific media to implement the learning process. The term will still most likely be utilized to reference out-of classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum. Application of Digital Technologies may include the use of web-based teaching materials and hypermedia in general, multimedia CD-ROMs, websites, discussion boards, collaborative software, e-mail, blogs, wakes, test chat, computer aided assessment, educational animation, simulations, games, learning management software, electronic voting systems and more, with possibly a combination of different methods being used. Digital Technology is naturally suited to distance learning and flexible learning, but can also be used in conjunction with face to face teaching, in which case the term blended learning is commonly used. Digital Technology is a means of education that incorporates self-motivation, communication, efficiency, and technology. Because there is limited social interaction, students most keep themselves motivated.

Application of Digital Technology is a flexible term used to describing a means of teaching through technology. Digital Technology refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance (Rosenberg, 2001). In general, Digital Technology is the expression broadly used to describe "instructional content or learning experience delivered or enabled by electronic technologies". Therefore, proper understanding of the Applications of Digital Technology in which the man lives is inevitable. Since the college level is the crucial stage of the present educational system in our country, it needs special attention. Therefore, the necessity of getting the teachers well acquainted with Application of Digital Technology in college stage can never be minimized. Computer knowledge and Application of Digital Technology should spread all over the world. It is found that there are different reasonable opinions in this regards.

It is an urgent need for developing certain strategies which can improve their knowledge, attitude and skills on Application of Digital Technology in Classroom Instruction. The investigator intends to restrict his research work to Trichy district of Tamil Nadu.

STATEMENT OF THE PROBLEM

The problem for the present study may be specifically stated as "Application of Digital Technologies in Classroom Instruction among Teacher Educators in B.Ed Colleges".

NEED AND SIGNIFICANCE OF THE STUDY

In the last decades, the global economy has been to what so called ''knowledge - based economy '' where knowledge is created, acquired, disseminated, and utilized more efficiently and effectively by enterprises, organizations, individuals and communities for greater socio-economic development and global competitiveness. The new knowledge economy puts a premium on intellectual capital making lifelong education more important than ever. However, the education constrains are becoming more present. Accordingly, Application of Digital Technologies in classroom instruction is a vital asset for all employees in the new knowledge economy.

Technology offers tremendous opportunities for increasing the effectiveness and efficiency of education in the future. Students, faculty, staff and administrators now use technol-

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ogy extensively in their daily activities and have become reasonably technologically literate. The trend of using Application of Digital Technology as a learning and technology tool is now rapidly expanding into education although Application of Digital Technology environments are popular. Many educators and researchers had high hopes for Application of Digital Technology, believing that it would provide more access to information and communication, and would ultimately lead to a new revolution in education.

Application of Digital Technology environments increasingly serve as important infrastructural features of colleges that enable teachers to provide students with different representations of knowledge and to enhance interaction between teachers and students and among students themselves. Education is one of the most important inputs that influence the all round development of any nation - economic, physical, social, cultural, ethical and spiritual.

Teachers are essential players in promoting quality education and no education reform is likely to succeed without the active participation and ownership of teachers. Teachers have to develop appropriate competencies to be able to create a learning environment in which he/she designs and enhance the learning experiences. She/he must be able to incorporate Application of Digital Technology with the traditional learning and competent enough in Web Based Teaching.

Therefore, the researcher feels that particularly the teacher Educators opinions or their attitudes can never be ignored, rather those should be reviewed or re-explored time to time, it is this feeling that has urged this investigator to take up the present study on a particular region of Trichy District of Tamil Nadu. It is expected that this study, will be able to make some significant contributions in the field of education.

SCOPE OF THE STUDY

- A Comparative Survey of the Application of Digital Technologies in Classroom instruction among Teacher Educators in B.Ed Colleges of Different State in India.
- A Comparative survey of the Application of Digital Technologies in Classroom instruction among Teacher Educators in Different District of Tamil Nadu may be Under taken.
- The Attitude of the College Teachers belonging to Different Socio – economic Status may be investigated.
- The Application of Digital Technologies in Classroom instruction belonging to Rural and urban areas of a signal state may be compared.

DELIMITATIONS OF THE STUDY

- The investigation was delimited to only Trichy district of Tamil Nadu.
- The study was restricted to the Teacher Educators teaching in the B.Ed Colleges only.
- Among the college teachers only the Arts and Science streams Teachers of general Colleges were considered as the subjects of the present study.
- Only intra - district comparison between the Male and Female teacher Educators or rural and urban teacher Educators or Arts and Science teachers were done.

OBJECTIVES OF THE STUDY

- To ascertain the Application of Digital Technologies in Classroom Instruction among Teacher Educators in B.Ed Colleges.
- To Compare the Application of Digital Technologies in Classroom Instruction between Male and Female Teacher Educators in B.Ed Colleges.
- To find out the Application of Digital Technologies in Classroom Instruction between Rural and Ruban Teacher Educators in B.Ed Colleges.
- To Compare the Application of Digital Technologies in Classroom Instruction between Arts and Science among Teacher Educators in B.Ed Colleges.

HYPOTHESES OF THE STUDY

- The Teacher Educators will have more favorable attitude towards Application of Digital Technologies in Classroom Instruction among B.Ed Colleges.
- There is no significant difference between the mean scores of male and female Teacher Educators towards Application of Digital Technologies in Classroom instruction among B.Ed Colleges.
- There is no significant difference between the mean scores of Arts and Science among Teacher Educators towards Application of Digital Technologies in Classroom instruction among B.Ed Colleges

Sample and Sampling Procedure

20 Teacher Educators of Four rural college and 40 Teacher Educators of urban colleges of Trichy District of Tamil Nadu were taken as representative sample for the whole population. Stratified random sampling technique was followed for selecting the colleges. There are a number of college teachers in each college. Only Arts and Science teachers were selected following purposive sampling technique.

Tool Used

The Investigator was used own Tools for the Application of Digital Technologies in Classroom Instruction among Teacher Educators in B.Ed Colleges.

Statistical Technique

The 't' test was used to analyze the collected data and verify the hypotheses.

RESULTS AND DISCUSSION

Table: 1

To Ascertain Application of Digital Technologies in Classroom Instruction among Teacher Educators in B.Ed Colleges.

Category	N	Mean	S.D
Teacher Educators	60	109.82	10.64

Hence it can be said that the Application of Digital Technologies in Classroom instruction among Teacher Educators of B. Ed Colleges in Trichy District is more favorable towards digital Technology.

Table: 2

Showing significant difference between mean scores of male and female teacher Educators Towards application of digital Technologies in Classroom instruction among B.Ed Colleges.

Group	N	Mean	S.D.	Df	't' Value	Critical Value of t at 0.05 level	Remark
MALE	40	112.94	10.48	58	2.03	1.96	Significant at 0.05 level
FEMALE	20	107.26	10.07				

The Table: 2 shows, the Mean Score of Male teacher Educators being greater than that of Female teacher Educators.

Hence, it can be said that the Application of digital Technologies in Classroom instruction of male Teacher Educators is more favorable than that of Female teacher Educators. Hence the null Hypothesis is rejected.

It may be due to the fact that the Male teachers have realized more the importance of Application of Digital Technologies in Classroom instruction for quality education and their professional efficiency of Male teachers feel that use of Application of Digital Technologies provides a better learning experience.

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Table: 3
Showing significant difference between the mean score of Rural and Urban College Teacher Educators towards Application of Digital Technologies in Classroom instruction among B.Ed Colleges.

Group	N	Mean	S.D.	Df	't' Value	Critical Value of t at 0.05 level	Remark
Rural Colleges	20	109.02	10.12	58	1.408	1.96	Not Significant at0.05 level
Urban Colleges	40	112.96	10.42				

From Table: 3, it was found that, there is no significant difference between the mean scores of Rural and Urban College Teacher Educators towards Application of Digital Technologies in Classroom Instruction among B.Ed Colleges. Hence the null Hypothesis is accepted. So it may conclude that difference in location or area is not a factor for differentiation of teacher's towards Application of Digital Technologies in Classroom instruction.

Table: 4
Showing significant difference between the mean score of Rural and Urban College Teacher Educators towards Application of Digital Technologies in Classroom instruction among B.Ed Colleges.

Group	N	Mean	S.D.	D.f	't' Value	Critical Value of t at 0.05 level	Remark
Arts Stream	35	112.46	9.45	58	3.515	1.96	Significant at0.05 level
Science stream	25	122.4	11.67				

The Table shows that the obtained value of 't' 3.515 is much more greater than 1.96. Hence the null hypothesis is Rejected. Its concludes that there is significant difference between the mean scores of Arts and Science stream among Teacher Educators towards Application of Digital Technologies in Classroom instruction among B.Ed Colleges. The mean scores of Teacher Educators in Science stream being greater than that of college teacher Educators in Arts stream.

Hence the Application of Digital Technologies in Science stream among Teacher Educators is more favorable for Arts stream Teacher Educators. So, it may conclude that subject difference is one of the factors for differentiation of teacher towards application of Digital Technologies in Classroom instruction.

EDUCATIONAL IMPLICATIONS:

- It is a humble attempt in this direction to assess the level of knowledge and Application of Digital Technologies in Classroom instruction
- This study contributes a new teaching learning in the form of assessing the level of knowledge and Application of Digital Technologies in Classroom instruction
- This study is very much essential for the development of teacher's interest, attitude, knowledge, motivation towards Application of Digital Technologies in Classroom instruction.
- This study is very much essential for the development of professional efficiency and quality education of college teachers.
- The need of the day is to make teachers realize their capabilities and improve upon capabilities to help solve the problems of their life through Application of Digital Technologies in Classroom instruction.
- Special efforts should be made in order to develop Application of Digital Technologies in Classroom instruction awareness among the Arts stream teachers.
- Special efforts should be made in order to develop Application of Digital Technologies in Classroom instruction awareness among the Female teachers.
- This study will be of immense use for the educational administrators, which will throw light upon the attitude of teachers' of Higher Education towards Application of Digital Technologies in Classroom instruction.

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