Effectiveness of ICT Training Program on Computer Literacy

Of

Teacher Educators

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Abstract

"Undoubtedly, ICT is bringing about new opportunities for educators, because it can provide powerful support for educational innovations"

This paper takes one such specific initiative for In-service and pre-service teachers and the effectiveness of this ICT training program on computer literacy of Teacher Educators. The overall goal for the assessment is to support ICT literacy instructional initiatives at teacher education colleges. For the present study data are collected from 30 in-service teacher-educators working in Dev Samaj School, Chandigarh affiliated to CBSE, New Delhi. A self designed questionnaire is used for collection of the data. Analysis comprises the percentage to assess the computer literacy of teacher educators and t-test to discover differences between the scores of pre-test and post-test of teacher educators. Findings are reported with descriptive explanation.

Introduction:-

The need for teacher training is widely acknowledged. Professional development to incorporate ICTs into teaching and learning is an on going process. Teacher education curriculum needs to update this knowledge and skills as the school curriculum change. The teachers need to learn to teach with digital technologies, even though many of them have not been taught to do so . The

Aim of teacher training in this regard can be either teacher education in ICTs or teacher education through ICTs. A teacher's professional development is central to the overall change process in education. They are unsure of how to make most effective use of ICT as a powerful and diverse resource and one which can potentially after traditional teacher-student relationships. If they are to invest time and energy in embracing the technology, teachers need to understand and experience the potential benefits of using ICT.

ICT digital literacy is ability to use digital technology and communications tools, and/or networks to access, manage, integrate, evaluate, create and communicate information in order to function in a knowledge society. So, it involves a working knowledge of current high-technology and understanding if how to use it for education. The Government of India efforts have been made to integrate ICT in teacher training programmes. The Government of India set up a national taskforce on Information Technology and software development in 1998 to universalize computer literacy. The NCF-2005 for school education also emphasizes a paradigm shift in respect of the entire process of education. In the eleventh Five Year Plan (2007-12) importance of ICT in education has been emphasized looking potentialities of ICT . National Council of Teacher Education (NCTE) has put lots of emphasis on its use. NCTE also did ICT orientation camps for training the teacher educators; one of these programs is 'Intel Teach Program'. It is a Worldwide effort to help In-service and Pre-service teachers to integrate technology in the classroom.

Researches have suggested that a crucial for successful technology integration into the classroom is the teacher. There is variety of approaches to professional development of teachers in the context of use of ICT in education. The most obvious technique for this purpose is to provide training in basic ICT literacy. ICT Programs help teachers to promote higher order thinking among the students and create students-centric learning environments. Teacher's attitude towards ICT programs and digital literacy are major factors related to both the initial acceptance of ICT as well as future behavior regarding its use. Therefore , the present study has been conceptualized to investigate the potency or effectiveness of one of such ICT programs on the computer literacy of Teacher Educators working in Dev Samaj School in Chandigarh.

Objectives

The Present study is aimed to achieve the following objectives:

1. To study the Computer Literacy of teacher educators.

2.   To investigate the effectiveness of ICT training program to Teacher Educators in relation to digital literacy.

Hypothesis

There will be no significant difference between pre-test and post-test scores related to computer literacy of Teacher Educators attending ICT training program.

Methodology

A. **Sample and Sampling Technique**

The present study was conducted on 30 Teacher Educators who attended 6 days 'Computer Training Program' conducted by Skill Development Society. Purposive sampling technique was used to collect the data.

B. **Procedure and Statistical Technique used**

The present study is pre- experimental in nature. The design for the present study is single group pre-test post-test design. The data are collected through a self-designed comprehensive questionnaire on computer literacy. It consists of 56 items and four responses as proficient, Adequate Knowledge, Little Knowledge and Not Known to me which carries weight age of 3,2,1,0 respectively. The possible range of scores and to find out the significance of difference of means between pre-test and post-test,'t' value are calculated.

Analysis And Interpretation

Keeping in view the objectives of the study, data is analyzed and interpreted. The main objective of the present study the Computer Literacy of Teacher Educators .For this purpose, the percentage of the scores is calculated.

Table-I Percentage of Pre –test and Post-test of Teacher Educators about the computer Literacy

	Proficient	Adequate Knowledge	Little Knowledge	Not Known to me

Pre-test	23.85%	19.49%	26.87%	29.81%
Post-test	67.24%	28.09%	4.39%	1.11%

See Table I

As evident form table 1 , it can be seen that in pre-test 23.58% teacher educators are proficient in Computer Literacy, 19.49% posses adequate knowledge, 26.87% posses little knowledge and 28.09% adequate knowledge, 4.39% little knowledge and 1.11% reports now known to them . So, proficient and adequate knowledge are increased in post-test as 43.39% and 8.6% respectively. It means that after the traning program, 67.24% teacher educators have got proficiency in ICT skills. Now they can make effective use of Ms-word for documentation, can create certificates, Result cards etc through Ms-Publisher.

Table-II Comparison of Mean Scores of Present and Post-test of Teacher Educators regarding their Computer Literacy

Groups	N	Mean	S.D	't' value	Result
Pre-Test	30	78.10	4053		Significant at both levels 4.884
Post-Test	30	128.40	37.84		

See Table II

Table-II given above reveals that mean scores of Pro-test and Post-test scores of teacher educators regarding their digital literacy come out to be 78.10 and 128.40 with S.D 40.53 and 37.84   respectively. The   't'- value testing the significance of mean difference between the two groups was calculate as 4.884 which was significant at 0.05 and 0.01 both the levels of significant difference between the pre-test and post-test of Teacher Educators regarding their digital literacy Thus, the hypothesis that there will be no significant difference between the pre-test and post-test scores related to digital literacy of teacher educators attending ICT program is rejected.

Conclusion

Finding of the present study report that before the training program 29.81% Teacher Educators didn't possess any Knowledge and literacy about computer and only 23.85% were proficient in ICT skills. But after the training program, there was n increase of 43.39% in the number of proficient teacher educators in computer literacy. Having the above results viewed, it could be concluded that training in ICT is most effective for teacher educator's professional development, the results clearly supported by the findings of the research by Bylor and Ritchie that teacher educators must have the skills, knowledge and attitude necessary to inculcate ICT into the curriculum. Rakes and Dowson also conducted that if teachers have higher education in ICT literacy, they promote students and school in this area. Thus ICT can play an important role in term of capacity building of the teachers by equipping them to face the emerging challenges. The recent developments in ICT require that teacher should be ICT literate and should be able to integrate use of ICT in classroom teaching learning activities. Thus, the completion of this ICT training appears to iron out difference in knowledge and attitude among teacher educators occurred during pre-test. ICT in education will not function on their own. The foremost task is the development of ICT trained teacher educators. Therefore, unless teacher educators stand out models in the classes, it i8s not possible tom prepare a new generation of ICT literate teachers. For this happen, there is a continuous need to facilitate teachers training on ICT at the pre-service and In-service level. But such trainings would produce fruitful results only when teacher educators would become more and enthusiastic and the lack of technical and social support, good equipments and resources would be minimized. And the latter-day teacher should not only be an information provider, but also an example to be followed, an advisor and supporter in building up the students capacities and mobilizing them to acquire knowledge and wisdom.

Educational Implications

The present study also bears some important applied theoretical implications. A few of them are enumerated here:

a. The present study is helpful for policy planners, administrators and teacher-educators. The policy planners can sign a MOU between the colleges of Educational and affiliating bodies that ICT must be compulsory subject and paper for theory as well as practical course for teacher's education programmes i.e. D.Ed, B.Ed, M.Ed etc. so, perspective teachers will be able to clear the needs of future generations.

b. It is also helpful for administrators to impart the training of ICT at in-service level by organizing refresher and orientation programmes at state and district level in collaboration with various ICT agencies and NGO's.

c. It is suggested to compile national and global standards for developing ICT literacy in different levels especially between teachers and students.

d. The official and educational organization should evaluate ICT literacy based on global scales and evaluate ICT literacy of teachers and students.

e. More and more seminars, conferences should be arranged for the teacher educators so that they can update their knowledge in the field of ICT and can provide latest knowledge to their students.

f. U.G.C should provide more grants for the extension of ICT labs in colleges of Education.

g. Only provision of grants will not sufficient, so there should be time evaluation by the administrators to check on the adequate use of grants.

h. In the name quality, we must not forget quality. the quality education of ICT an really be helpful in the professional life of pupil teachers, for the preparation of which they come to colleges of education.

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