Golden Research Thoughts
Volume 2, Issue. 3, Sept 2012
ISSN:-2231-5063

Available online at www.aygrt.net

ORIGINAL ARTICLE

Ways Of Ict Application In Teacher Education Programme

Asore M.D.

Assistant Professor,Department of Education,
Dr. Babasaheb Ambedkar Marathwada University, Sub Campus-Osmanabad
E-mail:-maniraj.212009@gmail.com

Abstract:

The teaching profession is becoming one of the most challenging professions in our society where knowledge is expanding rapidly and much of it is available to students as well as teachers at the same time. Because of rapid development in ICT, traditional Pre-service teacher education as well as In-service teacher education institutions worldwide are undergoing a rapid change in the structure and content of their training and delivery methods of their courses. However, combining new methodologies with effective pedagogy has become a daunting task for both Pre-service and In-service teacher education institutions. Therefore this paper discusses the ways of ICT application in teacher education Programme.

INTRODUCTION

Today is the age of science and technology. There has been a break through in the progress of communication and information technology. It is the age of super computers, space satellites, Jumbo Jets and specialization in every field. This affects the whole education system also.

As we know a teacher is central point of the whole educational programmes and teaching is said to be a nation building activity. So the teachers must be skilled in the use of technology for teaching and learning and should be avail internet facilities to receive latest information related with education, teaching and training. Hence there is need to develop ability of the teacher, to facilitate learning activities and confidence in operating technology through training programmes at pre-service and In-service level. Now the teacher is not an instructor or task-master, he is a helper, a facilitator and a guide. The tree principle of teaching is that nothing can be taught and his business is to suggest and not to impose. He does not actually train the pupil's mind; he only shows him how to be perfect and how to acquire knowledge for himself. So for achieving this goal of modern education system, he has to acquire technological skills through ICT based teacher education. The developments in the field of ICT can be used in strengthening the pupil teachers in Pre-service and In-service teacher education programmes at B.Ed. level as well as M.Ed. level. So that educational reconstruction in future will be meaningful and effective.

NEED OF ICT IN TEACHER EDUCATION

The teaching profession is becoming one of the most challenging professions in our society where

Please cite this Article as : Asore M.D. , Ways Of Ict Application In Teacher Education Programme : Golden Research Thoughts (Sept ; 2012)

knowledge is expanding rapidly and much of it is available to students as well as teachers at the same time. As new concepts of learning have evolved, teachers are expected to facilitate learning and make it meaningful to individual learners rather than just to provide knowledge and skills. Modern developments of innovative technologies have provided new possibilities to teaching professions, but at the same time have placed more demands on teachers to learn how to use these new technologies in their teaching. These challenges ask teachers to continuously retain themselves and acquire new knowledge and skills while maintaining their jobs.

Today, a variety of ICTs can facilitate not only delivery of instruction, but also learning process itself. Moreover, ICT can promote International collaboration and networking in education and professional development of teachers and teacher educators. There is a range of ICT options – from video-conferencing through multimedia delivery to web sites – which can be used to meet the challenges teachers and teacher educators face today. In fact, there has been increasing evidence that ICT may be able to provide more flexible and effective ways for lifelong professional development for today's teachers and teacher educators to face the challenges of globalization.

Because of rapid development in ICT, especially the Internet, traditional Pre-service teacher education as well as In-service continued teacher education institutions worldwide are undergoing a rapid change in the structure and content of their training and delivery methods of their courses. However, combining new methodologies with effective pedagogy has become a daunting task for both Pre-service and In-service teacher education institutions.

INTEGRATING ICT IN TEACHER EDUCATION:

Researchers have proved that ICT can change the way teachers teach and that is especially useful in supporting more student centered approaches to instruction and in developing the higher order skills and promoting collaborative activities. Recognizing the importance of ICT in teaching and learning, a majority of the countries in the world have provided ICT teacher in various forms and degrees. Even though many teachers report that they have not had adequate training to prepare themselves to use technology effectively in teaching and learning, there seem to be several efforts around the world in which various countries are effectively using technology to train teachers and training teachers to use technology as tools for enhancing teaching and learning.

ICT in teacher education can take many forms. Teachers can be trained to learn how to use ICT or teachers can be trained via ICT. ICT can be used as a core or a complementary means to the teacher training process. We can organize various ICT teacher training efforts found in different countries into four categories using the framework of fig. 1.

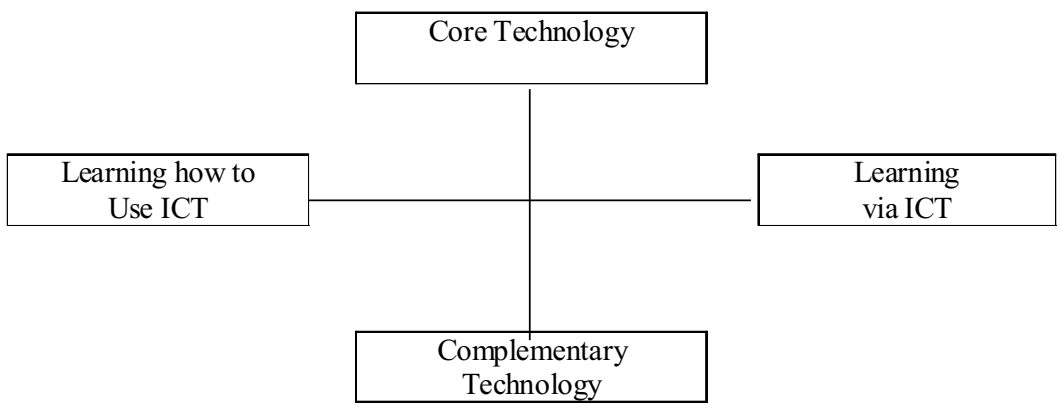

Fig. 1 categories for ICT in Teacher Education.

IMPORTANCE OF ICT IN TEACHER EDUCATION:

NCTE assumes that teachers are the key figures in arranging learning process. The institutes, therefore, have to anticipate new developments and prepare prospective teachers for their future role. Teacher training institutes therefore have not shifted their focus from dealing with present education to that of 'future education'. Accordingly, teacher's professional development in the use and application of technology must be given the priority and resources it deserves, while still maintaining a constructive critical eye on its costs and methodologies.

A component of ICT in some form or the other and to different extents is now an integral part of the teacher education curriculum for all students either at the diploma level (i.e. D.Ed.) or at the degree level (i.e. B.Ed.). Even master's degree programs in education leading to M.Ed. degree have also started introducing a component of ICT in the curriculum.

At the degree level and master's degree level an entire paper on ICT titled 'Educational Technology' is offered to the students. So most of the teacher training institutions are equipped with an 'Educational Technology Laboratory' and a 'Computer Lab' with some or all of the following minimum items as required by NCTE guidelines and regulations viz. T.V., CD/VCD player, AM Radio-cum-cassette recorder, Audio/Video cassettes, OHP, Slide Projector, Project screen, Public Address system, Audio system, Camera (film / digital) Video camera, Multimedia PC systems, driver, printer, Windows operating system software MS office suite, some items of supporting software including Antivirus Software, Scanner, Networking, LCD Projector, CD writer etc.

Having the above tools, techniques and software at our disposal, it is but natural to expect the training in ICT would be most effective. However the situation is different. The general trend is that we prefer the methods that are easy and require the least amount of preparation on our part. The recent developments in ICT require that teachers and teacher educators be ICT literate and are able to integrate ICT in classroom in teaching learning process as well as for their professional development.

WAYS OF ICT APPLICATION IN TEACHER EDUCATION:

Many studies have pointed out that new teachers have certain “knowledge” about ICT, but have little practical knowledge and little or no techno-pedagogical skill to integrate ICT into their professional practice. The international nature of the problem of integrating ICT for future teachers and teacher educators therefore appears to further reinforce the relevance of studying this issue. Hence some suggestive ideas are discussed here as follows.

1) At Pre-service B.Ed. Level:

ICT can be applied in various forms at B.Ed. level

a) ICT in General Papers:

Both instruction about ICT and use of ICT can be made in general papers in a teacher education program for example –
All written assignments must be appropriately desktop published.
Use of web based references may be allowed and encouraged
Seminars or presentations by students must make use of multimedia.
Students must be motivated and encouraged to submit some or all of their assignments as E-mail attachments.

b) ICT in “Methodology Papers”

In addition to the above mentioned approaches a few examples can be applied for methodology papers as -

Lesson plan should be based on ICT.
Presentation should be ICT based.
Blue print and question paper preparation can be documented using computers.

The analysis and interpretation of the achievement test can be done using computers.
In language lessons students must make use of CDs, DVDs and VCDs.
Use of Internet for updated content knowledge of science and other relevant subjects.

c) ICT in field experiences and project work:

Students should report their field experiences and project works in a CD form.
Teacher education institutes must keep record of field experiences with the help of video recording in digital camera.
It must give video feedback to students for their micro-teaching as well as for lesson presentations.

2) At Pre-service M.Ed. Level:

ICTs in teacher education will not function automatically, it is the teachers who are required to use the technology to enhance student learning. So the foremost task is the development of ICT trained teacher educators. Therefore following ideas are given –

a) ICT for General papers:

At M.Ed. level there is a paper for specialization in ICT titled 'Educational Technology' which is included in optional paper.
Apart from this ICT can be used for classroom teaching and online references of each subject.
All assignments, seminars and practicum should be completed with the help of ICT.
Presentations of students i.e. seminars should be make use of LCD projector or other projectors.
Use of Internet for searching relevant and current data of each subject.

b) ICT for Research work:

As at M.Ed. level research work is compulsory part of its curriculum, students must use online research references and research paper from various online journals.

Students must collect data by using multimedia approach.
They must use desktop published research tools.
For data analysis they must use software like SPSS and GPSS etc.
Thus students can use ICT from selection of problem to submission of dissertation.

c) ICT for field work and Internship observation:

M.Ed. students must use ICT devices to record the lessons to give live feedback to B.Ed. students.
They must use innovative techniques which are ICT based for observation.
They should keep recording of each activity which they would complete as their field work with the help of ICT.

3) At In-service B.Ed. & M.Ed. level:

In regular B.Ed. and M.Ed., it is very easy and convenient to use ICT for teaching and learning. But it is quiet helpful for pupil teachers and teacher educators in In-service mode of B.Ed. as well as M.Ed.

a) ICT for Guidance:

The practice teaching is essential part at B.Ed. level and the research work is for M.Ed. level. For these empirical activities, the pupil teachers can use mobiles to record these activities easily for acquiring feedback and guidance from their respective instructors. They can use mobile messages and e-mails for taking further guidance also. The teacher educator can use mobile messages and e-mails for answering the queries of In-service students.

b) ICT for Submissions:

As we know the In-service Programme has so many submissions in the form of tutorials, practicals, observation schedules, lesson plans, research data tools etc. It is not possible for in-service students to come personally for submissions every time. Therefore all these submissions can be made through e-mails easily. It will save the time and money of pupil teachers.

CONCLUSION:

New technology is supposed to add value to education, support more effective pedagogy, in part through a better relationship to knowledge for learners and enhanced communication that promotes learning. The opportunities for networking and collaborative learning mean that several principles or theories promoting learning can be more easily integrated into teaching. ICT also provides an opportunity to reconfigure and shift in time and space exchanges between people and opens new avenues for Pre-service and In-service teacher education activities that are more numerous, more diversified and especially more suited to the needs voiced by players in education and teacher education.

Thus the first challenge faced by facilities of education is to strike the right balance between maintaining some traditional aspects that have contributed extensively to teacher education for centuries, while capitalizing on the new opportunities presented by Information and Communication Technology i.e. ICT.

REFERENCES:

Agrawal, J.C. (1995). Teacher and Education in a Developing Society. New Delhi: Vikas Publishing House Pvt. Ltd.
Jung, I. (2005). ICT-Pedagogy Integration in Teacher Training: Application cases worldwide Educational Technology and Society, 8 (2), pp. 94-101.
NCTE (1998) Curriculum Framework
Panda, B.N. and Tiwari, A.D. (eds.) (1997). Teacher Education. New Delhi: APH Publishing Corporation.
Ramnath Kishan, N. (Ed.). (2007). Global Trends in Teacher Education. New Delhi: A.P.H. Publishing Corporation.
Sagar, K. (2005). ICTS and Teacher Training. New Delhi: Authors Press.
Sarsani, M.R. (Ed.). (2006). Quality Improvement in Teacher Education. New Delhi: Sarup & Sons.