Indian Streams Research Journal
Vol.1,Issue.V/June; 12pp.1-4
Dr. Shazli Hasan Khan
ISSN:-2230-7850

Research Papers

Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System

Dr. Shazli Hasan Khan
Assistant Professor,
Dept. of Education & Training, MANUU,
Hyderabad-500032

ABSTRACT

In the modern era, Information and Communication Technology (ICT) is becoming part and parcel of the educational system. ICT has not only became a medium of teaching and learning, but also an assisting tool for making assignments, collecting data and documentation, communicating and conducting research. ICT brings changes in the pedagogy of academic transaction. ICT is also useful for organizing and managing schools.

ICT provides an enjoyable environment for both the teacher as well as learner. This shift develops a creative and interactive environment for both. Therefore it is imperative that teachers should be competent enough to use ICT effectively in the classroom situation. Hence, it is important and need of the time for teachers to have practice and learning in ICT during their pre-service experience. While the curricula and teaching methods are important, it is necessary to know how one could implement ICT in the curriculum.

The present paper discusses the significance and need of ICT in teacher education and how effectively it could be implemented in the present teacher education curriculum.

This paper also explains the need and importance of ICT and training in ICT skills at the teacher education level. Highlighting the current status of ICTs in India, the present research paper illustrates that how ICT integration in teacher education is able to improve and transform the quality of present teacher education system.

KEY WORDS: Higher Education, ICT, ICT Integration, Information Technology, Private Institutes, Quality Education, Teacher Education,

INTRODUCTION

The role of education is the most pivotal factor in the development of any society as well as of nation as a whole. It was rightly remarked by Kothari Education Commission (1964-66) that, "The destiny of India is being shaped in its classrooms". This statement shows the importance of education in modern India. But this education should be of high quality, because only quality education can help the country to progress and bring about desired changes among its people. If the education needs to be

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)

qualitative, it should continuously be in tune with the contemporary changes and developments in the society. That is why there is so much hue and cry for the changes needed to update, and assess and restructure the existing system of education. Teachers of today should realize the significance and need for presenting different learning experiences so as to overcome the individual differences among pupils and make attempts to effectively use media and methods generated by Educational Technology.

The advantages of technology should be exploited to the maximum to raise the quality of education and also to give meaning to teaching learning process. The National Policy on Education (NPE 1986) has emphasized upon the use of computers in higher education and for the first time in the history of Indian Education, NPE (1986) has observed that, "Educational Technology will be employed in the spread of useful information in the training and retraining of teachers to improve the quality of education". Although, several efforts had been made in the past to use technological inputs and various educational technology aspects for improving the quality of education, but still there is much left to be done so as to bring desired changes in improving the quality of present teacher education system.

In development literature, ICT has been characterized as having the potential to enable national development. However, ICT has been conceptualized mostly as a monolithic and homogenous entity (Sein & Harindranath, 2004)8. To a great extent, the ambiguous findings and diverse opinions on the role of ICT in improving the quality of education and national development can be attributed to this limited focus. From activities and operations, from research to development, from health services to amusement, from education to governance, ICT has become part and parcel of life. Thus, ICT has become one of the basic building blocks of modern society. In developed countries, it has pervaded every aspect of academic and non-academic activities. Many countries now regard understanding of ICT as part of the core of education, alongside reading, writing and numeracy. It has the ability to address illiteracy and improve the quality of education in all sectors of education and through multimedia capabilities such as simulations and models. ICT can give learners access to concepts that they previously could not grasp (Selinger, 2011)9.

OBJECTIVES OF THE PRESENT STUDY

The main objectives of the present study on which the author focused are as following:

1. To study the role of ICT in teacher education as well as in education, general.
2. To study the current status of ICTs in India.
3. To study the way, ICT is changing and improving the quality of present teacher education system.
4. To study the rationale and need of integration of ICT in higher education.
5. To study the impact and effectiveness of implementation of ICT in teacher education institutions and in teacher education curriculum as a core course.

METHODOLOGY OF THE STUDY

The author based his present research work on the survey method, keeping in view of availability of the resources. The author through his present research studies tried to find out the status of ICTs used in the teacher education institutions of Aligarh district of Uttar Pradesh. A sample of three hundred students from five B.Ed colleges of Aligarh district was selected by the researcher. These B.Ed students were from Natural science and Social science branches. Random Sampling method was adopted for the survey.

The researcher prepared two sets of questionnaires. One questionnaire identified different uses of ICT and the efficiency of using the ICT. This questionnaire contained hundred questions which elicited information from the respondents on the extent of use of ICT for various facets of teaching and learning, like on-line assessment, on-line self learning, web-browsing, email, use of LCD/PPT package, need of ICT and its advantage, computer availability, number of computer literate, other uses of ICT as a teaching tool etc. The data was collected from the respondents and conclusions were drawn.

In another study, the investigator through the second set of questionnaire tried to find out if ICT has been integrated as a core course at the B.Ed level. The questionnaire contained hundred questions in the form of 'yes' or 'no'. Questions regarding the ICT staff availability, computer laboratory facility, maintenance of computers, sizeable class/lab, availability of electronic support material, availability and use of audio-visual content and availability of one computer per student etc were raised. Interpretation of the data collected was done on the basis of percentage of answers given in the form of 'yes' or 'no' by the

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)

respondents.

ROLE OF ICT IN EDUCATION

The Information and Communication Technology insurgency brings particular challenges to education system around the world. This mainly occurs in three broad areas. One occurs with participation in information society. The second is ICTs impact on access to do with the way ICT changes the education process. Here the formal learning of ICT is in school and higher educational institutions which make available better organized education. Thirdly, through ICT, non-formal education occurs with 'continuing education', 'adult education' through distance education and other organized programmes. The acquisition of ICT skills in educational institutions of higher learning helps in knowledge sharing, thereby multiplying manifold educational opportunities. Integrating ICT literacy will be crucial as it means harnessing technology to perform learning skills. It must encompass the use of ICT to manage complexity, solve problems and think critically, creatively and systematically towards the goal of acquiring thinking and problem solving skills, (Yves et al; 2006)11. For the students, this can be used for making assignment, collecting data, documentation and conducting research. It can be an effective medium for teaching and learning. This can act as the medium through which teachers and learners can learn. Here, in order to introduce and understand the need of ICT in educational institutions, teachers or students undergoing teacher education must first comprehend and be at ease with ICT. They must be given opportunities for acquisition of new knowledge. This can be made possible by promoting ICT based training programs introduced in their curriculum. ICT has influenced all aspects of the present teacher education system. It provides the capacity to store, to retrieve and to process e-content both fast as well as accurate.

In 1998, the United Nations Educational, Scientific and Cultural Organization (UNESCO) 10 in its World Education Report, “Teachers and Teaching in a Changing World”, described the radical implications of ICT in the conventional teaching-learning process. Now in the present educational scenario, ICT has become integral part of the curriculum of teacher education.

The following essential conditions must be met for the effective use of ICT in the teaching-learning process:

1.) Students and teachers must have sufficient access to digital technologies and the Internet in their classrooms, schools and Teacher Education Institutes (TEIs).

2.) High quality, meaningful and culturally responsive digital content must be available for teachers and learners.

3.)Teachers must have sufficient knowledge and skills to use the new digital tools and resources so as to help all students achieve high academic standards.

The use of ICT can make substantial changes in education and training mainly in two ways. Firstly, the rich representation of information changes learner's perception and understanding of the content. Secondly, the vast distribution and easy access to information can change relationship between teachers and students. ICT can also provide powerful support for educational innovations. By using ICT technologies such as Computer, Laptop, Digital camera, video, Internet, websites, CD-ROMs, DVDs, web camera, Radio, TV, application of software such as word-processing, spreadsheet, e-mail, digital libraries, computer mediating conferencing, video-conferencing, LCD and slide projectors, etc, we can overcome all barriers in communication and instruction in higher education institutes of learning. Therefore, the challenge for teachers has been to create a new generation of teachers capable of employing a variety of technology and tools in all phases of academic, administrative, research and extension functions.

CURRENT STATUS OF ICTS IN INDIA

ICTs are being used in India for development in respect of social and economic issues such as poverty elimination, inequality removal, empowerment of the marginalized sections of the society etc. The field of education, however, especially higher education is lagging far behind. Certain areas of education, such as teacher education, need ICTs training and awareness very urgently. With setting up of National Council for Teacher Education (NCTE) in 1995, the much needed coordination and maintenance of standards in the field of teacher education has largely been realized. In India, several institutions and Universities are, through programmes like Village Resource Centres, providing contents

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)

and information to rural communities. These programmes are based on satellite communication system. With the availability of EduSat, high quality transmission with wider bandwidth has become possible, which is thus fulfilling the goal of EFA (Education for All). In1980's Govt. of India started Computer Assisted Learning and Teaching (CALT), under which teacher educators were trained in the use of computers. NCTE started ICT literacy camps for teacher educators through out India. Besides these statutory and Government organizations, some corporate sectors like INTEL and Wipro are also jointly actively involved in technology enabled teacher development. Much, however, remains to be done.

Despite, India being a global leader in the manufacture, development and use of ICTs, the fact is that the number of poor and illiterate people is still daunting. Our society needs skilled workers in the installation and operation of ICTs as well as trained teachers at all levels. A very large number of teachers at various levels are untrained and those who are trained have only traditional teaching skills devoid of modern ICT skills. Teachers need to develop skills for the use of ICTs in classrooms, in schools and in higher institutes of learning. The syllabus in all training institutes should be substantially ICTs-based, to provide theoretical as well as hands on experience. For teachers who are doing research and who have to work on vast literature and huge data in their areas, ICTs are a boon which saves a lot of labour and time. The demand for education has increased manifold over the past few decades, and it is only ICTs which can help in successfully meeting the challenges of exponentially increasing demand for education.

ICTs have become quite common place in all aspects of life in India. But education sector seems comparatively less influenced by ICTs. As Prasad says, "India has made impressive strides in the application of ICTs in recent years and this reflected in a vibrant and fast growing economy. However, the education sector, particularly the area of teacher education, has lagged behind other sectors of the Indian economy in benefiting from the fruits of technological development", (Prasad, 2005)5. Hundreds of new higher educational institutions have come up, (especially in the private sector), despite the rather stringent norms set by the NCTE. Many of the institutions do not employ qualified teaching staff. The quality of teacher educators has suffered. The competence of teacher educators remains very weak, not withstanding their pleasing qualifications. As a result, the quality of teacher education continues to be quite poor than in any other sector of education.

ICTS IN IMPROVING THE QUALITY OF TEACHER EDUCATION

The need for ICT in teacher education and training is widely acknowledged. Professional development to incorporate ICTs into teaching and learning is an ongoing process. Teacher education curriculum needs to update the knowledge and skills as the school curriculum change. The teachers need to learn to teach with digital technologies while 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.

Teachers professional development is central to the over all changing 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 alter traditional teacher-student relationship. If they are to invest the time and energy in embracing the technology, teachers need to understand and experience the potential benefits of using ICT and to have access to the evidence that supports the improvements in teaching and learning, which include case studies and examples of effective practice. In addition, they need strong leadership and support and school development plan for the integration of technology if the necessary changes in education are to be realized. They also need technical support so that they feel comfortable in using the technology and are more willing to experiment. ICT can enhance the quality of teacher education in several ways, viz; by increasing learner motivation and engagement, by facilitating the acquisition of basic skills and by enhancing teacher training.

A) MOTIVATING TO LEARN

ICTs such as videos, television and multimedia computer software that combine text, sound and colourful moving images can be used to provide challenging and authentic content that will engage the student in the learning process. Interactive radio likewise makes use of sound effects, songs, dramatization, comic skits and other performance conventions to compel the students to listen and become involved in the lessons being delivered. More so than any other type of ICT, networked computers with Internet connectivity can increase learner motivation as it combines the media richness and interactivity of other ICT tools with the opportunity to connect with real people and to participate in

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)

real world events.

B) FACILITATING THE ACQUISITION OF BASIC SKILLS

The transmission of basic skills and concepts that are the foundations of higher order thinking skills and creativity can be facilitated by ICT through drill and practice. Educational television programmes use repetition and reinforcement to teach the alphabets, numbers, colours, shapes and other basic concepts. Most of the early uses of computers were meant for computer-based learning (also called Computer Assisted Instruction or CAI) that focused on mastery of skills and content through repetition and reinforcement.

C) ENHANCING TEACHER TRAINING

ICT has also been used to improve access to and the quality of teacher training. For example, institutions like the Cyber Teacher Training Center (CTTC) in South Korea are taking advantage of the Internet to provide better teacher professional development opportunities to in-service teachers. The government funded CTTC, established in 1997 offers self-directed, self-paced, web-based courses for primary and secondary school teachers. Courses include, "Computers in the Information Society", "Education Reform", and "Future Society and Education". Online tutorials are also offered, with some courses requiring occasional face to face meetings. In China, large scale radio and television-based teacher education programmes has for many years been conducted by the China Central Radio and TV University, the Shanghai Radio and TV University and many other RTVUs in the country. At IGNOU, satellite-based one-way video and two-way audio-conferencing was held in 1996, supplemented by print-materials and recorded video, to train 910 primary school teachers and facilitators from 20 distinct training institutes in Karnataka state. The teachers interacted with remote learners by telephone and fax. The Future lab study shows many affirmative results from a review of a number of UK case studies on teacher training. Although they are not representative, most of these studies highlight positive impacts of teacher training with ICT, such as increasing teacher self-assurance and aptitude in the use of IT resources by providing them fully equipped Multimedia Portable Computers (MPTP) or by supporting online teacher communities. Another UK (2002) pilot study reviewed by Future lab on learning to use ICT for science teaching showed that for the 40 schools that participated, the impact of equipped computers reached far beyond individual teachers. It prompted department wide exploration of new teaching strategies and reviewed enthusiasm for sharing and collaboration (Fischer et al; 2006) & (Yves et al; 2006)11.

POTENTIAL BENEFITS OF ICT TO TEACHERS

The following are the potential benefits of ICT to teachers:

1. ICT enhances the initial preparation by giving good teaching and training materials, use of simulators, recording and feedback in teaching.
2. Reduces isolation of teachers, especially for teachers working in Special educational needs area by enabling them to access easily with colleagues, schools, institutions and universities, expertise, rich resources in cyber space etc.
3. ICT enables interaction with students over a physical distance.
4. ICT supports reflection on professional practice via online communication.
5. Didactic software and intelligent tutoring systems can dramatically reduce the cost of teacher training.
6. ICT provides life long professional development by providing courses in a virtual situation, training on demand, orientation and refresher courses through video conferencing and online.
7. ICT facilitates sharing of ideas, experience as well as collaborating on projects, and exchange materials through virtual communities.
8. Materials already in electronic form (for example, from the Internet) are more easily adapted into accessible resources such as large print or Braille. Therefore, teachers should have deep knowledge and strong attitude towards skillful use of ICT.

Findings and Results of the Study

The objective of the present study is to find out the status of ICT use in the teacher education institutions. Specifically the study attempts to find out that how the institutions and Colleges of Teacher Education (CTEs) are using ICT for their students, so as to increase their efficiency to build the digital

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)

society which helps in producing ICT expert teachers.

In this research, a questionnaire survey was conducted to identify the status of use of ICT in five teacher educational institutions from Aligarh district in Uttar Pradesh (UP). Structured questionnaire was formulated in order to identify different uses of ICT and the efficiency of using the ICT. All the respondents selected for the study were students of B.Ed course. Information regarding need of ICT, its advantage, computer availability, number of computer literate, use of ICT as teaching tool etc; were collected from the respondents.

A survey of institutions showed that only two colleges had ICT infrastructure to support teaching and learning. All of them had electricity and telephone access. However, the surveyed institutions have computing resources to support administrative purposes, but computers to conduct in-service training to develop ICT skills in students were insufficient. Results based on questionnaire feedback from students in the five training colleges are as follows:

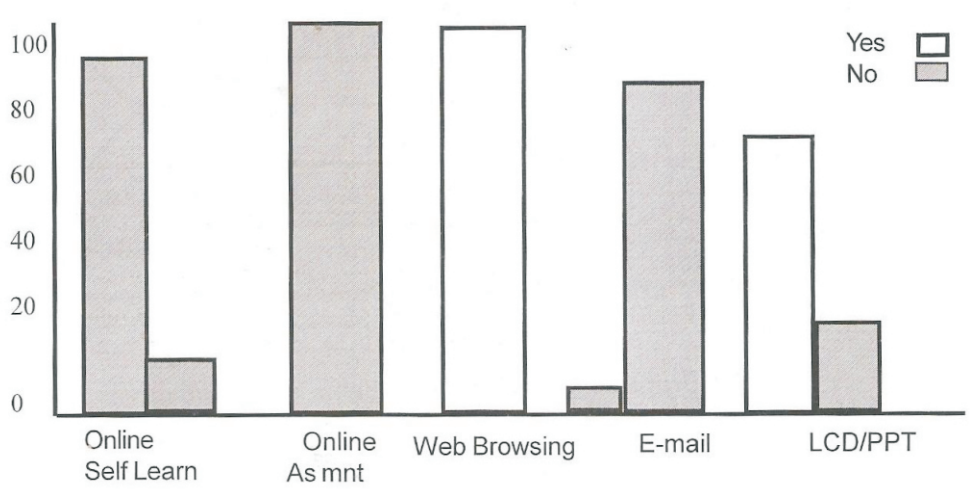

Fig. Graph 1 : Nature and Purpose of ICT use

The figure 1 graph (drawn above) describes the extent of the use of ICT by B.Ed students for various facets of teaching and learning like on-line self learning, online assessment, Web-Browsing, Email use for the interaction with teachers and the use of LCD (Liquid Crystal Display) and PPT (Power Point) package in the institution. The results show that more than fifty percent of the students explore web for learning. But the survey shows the absence of online assessment completely.

The study found that most of the respondents collected data for their studies from the Internet. But there is no facility in their institution for on-line assessment. Web-Browsing was found common among all the respondents. All the respondents were dependent on web pages for updating their knowledge. Web Based Instruction (WBI) can be developed with the help of ICT. According to WBT (Web-Based Training) Information Centre, Web-Based Instruction is an innovative approach to distance learning in which Computer-Based Training (CBT) is transformed by the technologies and methodologies of the World Wide Web (WWW), the Internet and Intranets. WBI presents content in a structure format allowing self-directed, self-paced instructions on any topic. WBI is media rich learning fully capable of evaluation, adaptation and remediation, all independent of computer platform (Sansanwal, 2009)7.

The study did not find any internal interaction among teachers, students or among teachers and students using Email. The respondent said that they communicate with their teachers through mobile phone. Seminars are part of the curriculum of B.Ed. It was found that eighty two percent of the students used LCD/PPT during their seminar presentations. Most of the Social science students said that they took their seminars with or without LCD. They also said that they feel highly confident when they use LCD. The inferences drawn from the feedback shows that web-browsing ranks first among all the respondents using the Internet facility. On-line self-learning ranked second with ninety percent and in the third position comes LCD/PPT using for seminars and conferences by the institution with eighty two percent.

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)

On the whole the present study finds that more than 90% of the students have effectively used ICT for acquisition of knowledge in their teacher education course.

Implementation of ICT in Teacher Education curriculum as a core course

ICT has been recognized as an important component and part of the teacher institution. In another study, questions were raised by the researcher regarding the ICT staff availability, laboratory facilities, maintenance of computers, sizeable class and laboratory, availability of audiovisual, electronic support and library facilities etc.

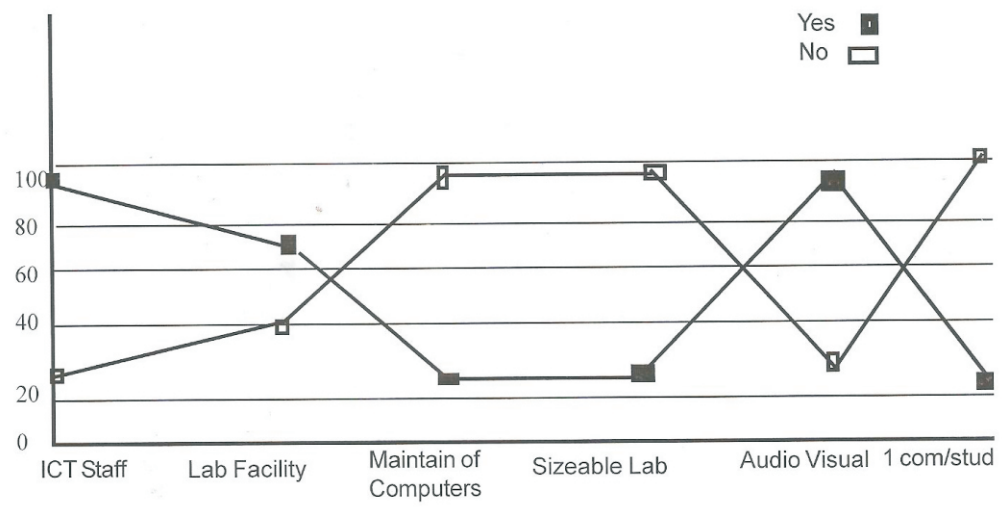

Fig Graph 2 : ICT Facilities Available in the Institutions

The findings from this study further strengthened the opinion that there is an urgent need for revamping the present teacher education curriculum through the inclusion of ICT as a core course at B.Ed level especially. The staff availability for ICT exclusively was found less than fifty percent during the study. Lab facilities (Yes-56%), maintenance of computers (Yes-8%), sizeable class or Lab for ICT (Yes-8%) and availability of one computer per student (Yes-0%) was found very low. (Figure graph No.2). It was also found that web-browsing was usually done outside the campus. Most of the respondents were found browsing from their home and Internet Cafes. Only 14% of the respondents said that they utilize Internet facility from their institutions. All the respondents complained about lack of Personnel Computers (PCs) and the restrictions they have to face from the authorities to use Internet face. Some students said that they had taken membership from the Central Library of AMU, Aligarh. Browsing for their studies was done by utilizing the lab facilities of the University, which is not free of cost. The study perceived that students have developed ICT skills which they use in learning basic ICT related tools such as word processing, presented and mediated communication etc; (Table No. 1).

TABLE 1: NATURE OF ICT SKILLS AMONG RESPONDENTS

SNo.	Nature of Skill developed among the respondents	Yes	No
1.	Knowledge in basic word-processing tasks	90	10
2.	Can create Power Point presentation	87	13
3.	Design presentation with multimedia	22	78
4.	Edit and design graphics	14	86
5.	Internal communication using an electronic mail	4	86
6.	Published research activities using ICT tools	0	100
7.	ICT presentation tools used as teaching aids	84	16
8.	ICTG presentation tools used in Seminars	82	18

Source: Survey data

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)

It was further shown by the present study that the respondents have gained only minimum ICT skills from institutions. There are no programmes to build the capacity of the students as visualized by NCTE. The use of ICT tools in seminars, synopsis presentation and as teaching aids was restricted to the use of LCD/PPT and slide presentations. Their knowledge for learning is gained from outside the institution. The colleges provided neither training in ICT nor provisions for Internet browsing. For the pedagogical purposes students are developing ICT skills by themselves. Thus, the present study concluded that the students needed more structured support of ICT development from their educational institutions.

Conclusion

Studies have shown that proper use of ICT can spectacularly improve educational outcomes. The new pedagogy that incorporates technology will prepare students for working in the information age. The most encouraging sign is that the students are taking interest in and understand the value of technology, and are eager to learn quickly. The study found that teacher education institutions are no longer seriously utilizing the potential benefits of ICT. But the present study conducted has also shown that there is lack of expert and skilled teachers in the field of ICTs and that there is an urgent need for proper implementation of ICT and ICT related tools in the present teacher education curriculum if the quality of teacher education is to be significantly enhanced.

Although, with the onset of privatization and mushroom growth of self-financing private educational institutes, the quality of teacher education has taken a nosedive. Without proper checks, scrutiny and evaluation, these private colleges of teacher education have just become factories who are churning out half baked products. The world is shrinking in size and a global competitiveness demands a thorough and perfect professional. Therefore, society and the government have a great responsibility to see that the standard of education is raised through honest and devoted teachers who are skilled and interested in the use of ICTs. Moreover, measures are to be taken to improve the quality and support to students, opening up new avenues for professional development of our future teachers.

REFERENCES

1. Balasubramaniam, N (2002). "Need for computer education in teacher training curriculum", Edutracks, pg16-18, April, 2002.
2. Dahiya, S.S.(2005). "ICT-enabled teacher education", University News, Vol 43(18), May 2005, pg 109-114.
3. Kamat, V. "ICT initiatives in teacher education", University News, Vol 43(18), May 2005, pg 103-108.
4. Krishnaveni, R & J. Meenakumari (2010). "Usage of ICT for Information,Administration in Higher Education Institutions-A study", International Journal of Environmental Science and Development, 1(3).
5. Prasad, S.N.(2005). "ICT in Pre-service Teacher Training in Asia & Pacific: India Case Study", A Survey Report.
6. Panigrahi. M, Rajan. (2010). "ICT Enable Teacher Education-A Challenge", University News, Vol 48 (20), May 2010, pg 19-24.
7. Sansanwal, D.N. (2009). "Use of ICT in Teaching-Learning and Evaluation", Educational Technology Lecture Series, Institute of Educational Technology, NCERT & State Institute of Education, Chandigarh.
8. Sein, Maung, K & Harindranath, G(2004). "Conceptualizing the ICT Artifact: Towards Understanding the Role of ICT in National Development", The Information Society, 20(1).
9. Selinger, Michelle (2011). "The impact and role of ICT in delivery of education & training in Africa". Accessed from website, www.britishcouncil.org.
10. UNESCO (2012). "Information and Communication Technologies in Education: A curriculum for schools and Programme of Teacher Development, www.unesco.org, Accessed from website.
11. Yves, Punie et al (2006). "A review of the Impact of ICT on learning", working Paper for DGEAC, www.futurelab.org.uk, Accessed from website.

WEBSITES

1. www.unesco.org
2. www.britishcouncil.org.uk.
3. www.futurelab.org.uk.
4. www.ictpolicy.gov.ac.in

Please cite this Article as : Dr. Shazli Hasan Khan , Integration of ICT Component in Teacher Educational Institutions: An unavoidable Step towards Transforming the Quality of present Teacher Education System : Indian Streams Research Journal (JUNE ; 2012)