"ROLE OF COMPUTER EDUCATION PROGRAMME IN TEACHER EDUCATION INSTITUTIONS OF KAKATIYA UNIVERSITY-AN ANALYTICAL STUDY"

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ABSTRACT

Information Technology is nothing but the acquisition, processing, storage and dissemination of vocal, pictorial, textual a numerical information by a micro-electronics - based combination of computing and telecommunication. Communication technology and information technology that have thin line between them but cannot do away without each other. When these technologies are applied in the field of education, it is termed as ICT in education. The teachers need to acquire new knowledge and reliable and authentic information as the burden of the development of the young generation lies on their shoulders. The acquisition of fundamental ICT skills among teachers and students helps knowledge sharing, thereby multiplying educational opportunities. However, all teachers are not willing to introduce new technologies to themselves first and subsequently to their students.

Teachers have to be trained to facilitate the learning process, make the process real, achievable, challenging, yet exciting and not intimidating. ICT can be used in support of traditional teaching methodologies like the large group lecture, student note taking and examinations. Preparing future teachers who know how to integrate effective use of information and communication technologies (ICT) in their curriculum remains a challenging goal for teacher preparation programs. Students need to acquire digital age literacy skills and learn how to responsibly use technology as a learning tool for acquiring information, solving problems, sharing knowledge, creating innovative ideas and developing global awareness. Two aims of teacher training are fundamental: teacher education in ICT; and teacher education through ICT. The application of ICT in the education setting has to be cultivated, promoted and nurtured as new interactive relationships among teachers, learners and technologies are fast emerging. It is high time for the teachers to acquire mastery over the technical knowhow or else the teachers who are literates and supposed to spread literacy may be treated as illiterates in the present scenario

KEYWORDS: Computer Education, Information Technology, Learning Process

INTRODUCTION

ICT is becoming an integral part in every field. Every change of education is depends upon the teacher. It is depend upon the quality of training. Increasing the teacher training and has been a seemingly important concern for education. But education has faced a variety of challenges. In this context information and communication technologies ICTs represent a new approach for enhancing the dissemination of information and helping to meet these challenges. Pre service and in service teacher training play a crucial role in preparing teachers to become proficient in the integration of ICT in to training curriculum. They need to help prospective teachers understand how ICT can be used to teach contain in reach programme meaningful way. Information and Communication Technology (ICT) has become one of the basic building blocks of modern society .Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing, and numeracy. There is a widespread belief that ICTs have an important role to play changing and modernizing educational systems and ways of learning Innovate use

of ICT is defined as the use of ICT applications that hold up the learning objectives based on the requirements of the modern information society. Hence, there is a need to bring out the facts on the impact of ICT on educational trainers.

Information and Communication Technology in Teacher Education

There are a variety of approaches to professional development of teachers in the context of use of ICT in education. Professional development to incorporate ICT into teaching and learning is an ongoing process and should not be thought of as one 'injection' of training. Teachers need to update their knowledge and skills as the school curriculum and technologies change. Two aims of teacher training are fundamental: teacher education in ICT; and teacher education through ICT

Importance and Role of ICT to Elevate Teacher's Education

Teacher education programs at the pre-service and in-service levels must have sample scope for inducting pedagogic skills and management of technologies as important components of teaching learning environment to enhance efficacy to transaction. These need to integrate teaching-related practices with the existing methodology course and introduce specialized course to equip the student teachers with skills to operating and maintaining hardware, acquiring and utilizing software of different kinds i.e. structured textual materials, teaching aids, audio-visual cassettes, multimedia, CD ROMs and sharing information through networking in collaborative and participative methods. The application of ICT in the education setting has to be cultivated, promoted and nurtured. Teacher educators have to develop new understanding approaches and attitudes in harmony with new developments in information technology. The proficiency in these areas would help them to train student teachers effectively. Teacher's education institutions will have to take leadership in using information Technology. As technology has created change in all aspects of society, it is also changing our expectations of what student must learn in order to function in the new world economy. Students will have to learn to navigate through large amounts of information, to analyze to make decisions and to master new knowledge domains in an increasingly technological society.

They will need to belief long learners, collaborating with others in accomplishment complex task, and effectively using different systems for representing and communication knowledge to other. A shift form teacher centered instruction to learner centered instruction is needed to enable students to acquire the new 21stcentury knowledge and skills.

Paradigm Shift through ICT in Teacher Education

- Teacher centric, stable designs learner-centre, flexible designs

- Teachers direction & decisions Learner autonomy

- Passive reception in learning active participation in learning

- Learning within the four walls learning in the wider social classroom context

- Knowledge as given and fixed knowledge as it evolves & is

- Disciplinary focus

- Lerner exposure Multiple & divergent exposure

The 21ˢᵗ Century Teachers and Student Require the Lenses of Learning form ICT with ICT around ICT with the Skills of

- Digital are literacy Basic, Scientific, and technological literacy.

- Inventive Thinking Intellectual capital ability of manage complexity courtesy.

- Effective communication-social and personal skills-Teaming collaborative and interpersonal skills.

Historical Perspective of Teacher Education in India

In India, there are nearly 3.5 million teachers in the formal school system. Primary school teachers are required to have 10–12 years of general schooling and 2 years of professional education. Secondary teachers must have a graduate degree from a university along with one year of professional education. There are several institutions and systems for pre service education of teachers, ranging from school complexes at decentralized levels to programs designed and executed at the central level, but coordination among various agencies is yet to be obtained. In comparison with other states, Andhra Pradesh with respect to the growth of higher education is high. Currently there are 50 universities, 660 college of education for teacher education.

With the view to promoting and motivating quality researching teacher education, the National Council for Teacher Education (NCTE) constituted a Research and Programme Advisory Committee in June 2004. The NCTE's concern is to enable teacher education institutions to prepare workforce of trained teachers who are fully conversant with the technology. It signed an MoU with INTEL Technology India Pvt. Ltd., Bangalore, on 20th December, 2006,with a view to achieve the objectives of imparting sustained professional development of all teacher educators formal recognized institutions and making ICT part of teacher education curriculum

Objective of the Study

- To know the role of ICT in teacher education programme.

- To study the facilities availability in the teacher education institutions

- To technical specifications of computer peripherals related software in teacher

- Education institutions.

Research Procedure

The survey method is adopted for the present study. In this study the researcher used quantitative research approach in the data collection and analysis processes. A questionnaire is used for the data collection form the teacher training institutions in Warangal district of Andhra Pradesh.

Sample

The population for the purpose of this study was defined as all the of Warangal district of Andhra Pradesh. The respondents were students of B.Ed course. Random sampling method was adopted for the survey. The data were collected by questionnaire from 100 teacher trainees from 5 selected Teacher Education Institutions, The sample containing Rural 50 Urban 50 teacher trainees.

Analysis and Interpretation of the Data

The objective of the study is to find out the status of ICT use in the teacher education institutions. Specifically, it identified how the institutions are using ICT for the students to increase their efficiency to build the digital society, which helps in providing ICT experts the survey of institutions showed that only 3. Colleges had ICT infrastructure to support teaching and learning. All of them had electricity and telephone accesses. However; the surveyed institutions had computing resources to support administrative purposes, but computers to conduct in-service training to develop ICT skills in students were insufficient. Results based on a questionnaire feedback from students in the five training colleges are given below.
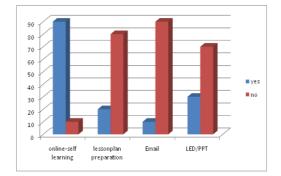

Figure 1: Status and Purpose of ICT Use in Teacher Education Institutions

Figure 1 describes the extent of the use of ICT by B. Ed students for various facets of teaching and learning

Major Findings of the Study

- The results show that more than 80% of the students explore the web for learning. But the survey shows the absence of online assessments most of the respondents collected data for studying from the Internet. But there is no facility in their institution for online assessment. Web browsing was found common among all the respondents. All the respondents depend on web pages for updating their knowledge.

- 20% of trainee teachers only able to prepare lesson plan by using of ICT most of the students are unable to create a resume, drawing graphs and preparing power point presentation.

- The study did not find any internal interaction among teachers, students or among teachers and students using email. The respondents said that they communicate with their teachers through mobile phones.

- Seminars are conducted using LCD/PPT by 30% of students. Most of the social science student's commented that they take seminars with or without LCD. They also said that they feel highly confident when they use LCD. On the whole, the study finds that only 30% of the students has effectively used ICT for acquisition of knowledge in their teacher education course.

Computer Facilities Available in the Teacher Education Institutions

Recognizing the importance of ICT in education, we raised questions on the integration of ICT in teacher education curriculum. The findings of the study show that ICT has not been included as a core course at the B. Ed level in the colleges. However, fundamentals of computer knowledge were included in the curriculum. All the respondents said that ICT is not included as a compulsory core course. For understanding the success of ICT program in an institution, we raised questions regarding the ICT staff availability, laboratory facilities, and maintenance of computers, sizable class/lab, and availability of audiovisual and electronic support facilities...
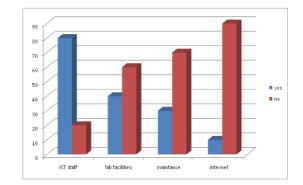
Figure 2: Information and Communication Technology Facilities Available in the Teacher Education Institutions

Major Findings of the Study

- 80% of respondents positively respond to the availability of computer teaching staff but the study showed that the respondents have gained only minimum ICT skills from their institutions there are no programs to build up the capacity of the students as visualized by NCTE

- The facilities available in their institutes students responded that only 40% of audiovisual facility was sufficient. Charts and posters- which are used as teaching aids in teaching learning process and micro teaching presentations during their courses.

- The survey of institutions showed that only 2 colleges had ICT infrastructure to support teaching and learning. All of them had electricity and telephone accesses However; the surveyed institutions had computing resources to support administrative purposes, but computers to conduct pre-service training to develop ICT skills in students were in sufficient.

- 90% of respondents said that there is no internet availability in their institutions Web browsing is usually done outside the campus. Most of the respondents are found browsing from their home and Internet cafés. Only 10% of the respondents said that the utilize Internet facility from their institutions. All the respondents complained about lack of PCs and restrictions from the authority to use Internet face. Some students said that they had taken membership from Kakatiya University Library. Browsing for their studies is done by utilizing the lab facility of the university, which is free of cost.

CONCLUSIONS

The use of ICT has the potential to allocate opportunities for learning broadly across the teaching force. The study found that teacher education institutions are no longer strictly utilizing ICT. Measures are to be taken to improve the quality and support to students, opening up new avenues for professional development of our future teachers. However, the conclusions are based on limited survey in selected five college of teacher education institutions of Warangal districts of Andhra Pradesh.

SUGGESTIONS

- Teacher training should encompass ICT skills along with a full understanding and complete mastery of ICTs as pedagogical tools.

- Teacher education institutions should be ensured with financial and human resources with training for successful incorporation of ICT.

- The faculty of education, Universities should deliver expert demonstration lessons on practical especially how to use various new teaching techniques, audio-visual aids with the help of ICT. Hence, the teachers newly appointed teacher education institutions can have some orientation

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