

43. EMERGING TRENDS OF ICT IN HIGHER EDUCATION

Dr. B.M. Dhoot, Principal

M.Sc., B.Ed., SET, NET, Ph.D., D.Litt.

ACS College, Gangakhed Dist., Parbhani (M.S.) – 431514

Dr. U.R. Aghav, Librarian

M.Lib. & Inf.Sci., SET, Ph.D., PGDLAN

ACS College, Gangakhed, Dist. Parbhani (M.S.) – 431514

Dr. S.V. Kshirsagar

HOD, Microbiology

M.Sc., M.Phil., Ph.D.

ACS College, Gangakhed, Dist. Parbhani (M.S.) – 431514

ABSTRACT:

The objective of the present paper is to provide better understanding and appreciation of the role of ICT in teaching and learning system. Changes in higher education environment and transforming mind set of the student and teachers are essential. Further top 10 global trends in higher education are given.

keywords:

Information, Communication and Technology, Higher education, environment, Teaching-Learning environment, Teachers role, Learners role, Curricula and delivery, Media application, Multimedia.

INTRODUCTION:

Institutes of higher education play a vital role in the industrial, social, economic and cultural development of any nation. Since independence the higher education sector in India has witnessed a spectacular growth in terms of the number of universities and colleges. As per UGC statistics, the current total count of universities is 889 which include 394 state universities, 322 private universities, 125 deemed to be universities and 48 central universities. Today, in the Maharashtra state there are 58 universities, which include 23 state universities, 1 central university, 13 private universities and 21 deemed to be universities. Non-agricultural state universities in Maharashtra are 11, Health University is 1, Technological University is 1, Animal and Fisheries University is 1, Sanskrit university is 1, Law Universities are 3, Agricultural Universities are 4, Open university is 1 and the no. of colleges is 4374 in which 2938014 students are studying.

Information, communication and technology (ICT) have already considerable impact on higher education. Revolutionary changes are taking place in ICT by means of which information is

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transferred, recorded, edited, stored, manipulated and disseminated in the minimum possible time, which is directly related to open educational resources.

Electronic resources play a prominent role in facilitating access to updated and relevant information to the users and become part of the library resources. Electronic information resources are essential both for professionals and students to upgrade their knowledge in order to keep pace with changing scenario in the digital era. ICT mastering is important but also utilizing ICT to improve teaching and learning. In this process utmost important is teachers who performing their role of creators of pedagogical environments. To appreciate the integration of ICT in teaching and learning, we need to understand the major paradigm shifts in education.

CHANGES IN HIGHER EDUCATION ENVIRONMENT:

During the last three decades, the changes in educational environment have been phenomenal. The model, focus and role of the learner and use of technology have been changed drastically from traditional instruction to virtual learning environment as depicted belows:

Changes in Teaching-Learning environment

Model	Focus	Role of Learner	Technology
Traditional	Teachers	Passive	Chalk and Talk
Information	Learners	Active	Personal Computer
Knowledge	Group	Adaptive	PC + Network

Changes in Teachers role

From	To
Transmitter of knowledge	Guidance, facilitator of knowledge
Controller of learning	Creator of learning environment
Always Expert	Collaborator and co-learner
Learning to use ICT	Using ICT to enhance learning
Did active / Expository	Interactive / Experimental/ Exploratory

Changes in Learner's role

From	To
Passive learner	Active learner
Reproducer of knowledge	producer of knowledge
Department learner	Autonomous learner
Solitary learner	Collaborative learner
Solely learning content	Learning to learn/ think/ create and communicate

Changes in Curricula and Delivery

From	To

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Memorizing facts	Inquired based
Artificial Teaching Exercises	Authentic Learning
Rigid Delivery (Fixed time and Space single path progression)	Open and flexible delivery (Anytime and anywhere) Multi path progression.

Changes in Media Applications

From	To
Single sense stimulation	Multi-sensory stimulation
Single media Application	Multimedia application
Delivery of information	Exchange of information
Monologue Communication	Dialogue and collaborative
Analogue resources	Digital resources

All these changes are taking place as demand for new learning environment for learners, the power of ICT is to improve learning has the potential to transform the nature of education where, when, how and the way learning takes place. It will facilitate the emergence of responsible knowledge for society as a meaningful and enjoyable learning experiences.

TRANSFORMING MINDSET:

It is well agreed that education is a powerful instrument of social change. Education brings transformation in the belief, thinking process and thus the mind-set of the society. Learners are expected to collect, select, analyse, organize, extend and transform present knowledge using ICT in authentic and active learning paradigm. Teachers are expected to create a new flexible and open learning environment with interactive experimental and multimedia based delivery system. It is ultimately important to understand the roles of ICT in promoting educational changes. Both the learners and teachers have to change their mind-set from the present education system to access, extend, transform and share the ideas throughout the world.

MULTIMEDIA E-LEARNING IN HIGHER EDUCATION:

ICT has become an essential module of the educational process, and is giving educators new tools to transform learning and teaching.

Multimedia e-learning includes-

- i. Power Point presentation.
- ii. OHP presentation.
- iii. Audio-Visual aids.
- iv. Online group Discussion method.
- v. Co-operative learning through technology.

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- vi. Through Website.
- vii. Through Blog.

By using the above multimedia technology higher educational institutions of learning can empower their students.

GLOBAL TRENDS IN ICT AND HIGHER EDUCATION:

The top 10 global trends in ICT and education are:

1. Mobile learning.
2. Cloud computing.
3. One-to-One computing.
4. Ubiquitous learning.
5. Gaming.
6. Personalized Learning.
7. Redefinition of learning spaces.
8. Teacher-generated open content.
9. Smart portfolio assessment.
10. Teacher Managers /Mentors.

These trends are expected to continue and to challenge many of the delivery models fundamental to formal education as it is practiced in most countries.

CONCLUSION:

As per the developments increasingly supported by ICT, teaching and learning will not be the same as before. Learners and teachers will have to make use of the rich and exciting opportunities offered by the new technologies in education to reach our training goal and mission.

REFERANCES:

1. Jagtap, Bhagwantrao and others (2019): Reengineering Higher Education, University of Mumbai.
2. Shuleman L(1987): Knowledge and teaching: Foundations of the new reform, Harvard Educational Review57.
3. Majumdar, Shyamal (2006) Emerging trends in ICT for Education & training computer Science.
4. Shinde, Ganapath Z and others Ed.(2015): Emerging Technologies and future of libraries: Issues and challenges, Daya publishing House, NewDelhi.
5. Anwar, Sami (2015): Educational Technology wisdom press, NewDelhi.