THE IMPLEMENTATION OF LATEST TEACHING AIDS IN THE EDUCATION SYSTEM

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Abstract: The term ICT refers to "An umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. Traditionally, possible to distinguish different ICTs by their unique features (text—print; audio—radio; audio visual—television).Since 1990s, such distinctions have become blurred as convergence, or the blending of what were discrete media, onto a single platform has become a reality. ICT devices and applications are used in the production, storage, and sharing of information and knowledge. In our paper we are trying to highlight ICTs and their potential, Promises, Pitfalls in current Higher Education Scenario.

1. Introduction:

1.1. Understanding ICTs--Scope and Definitions: ICTs are often spoken of in a particular context, such as ICTs in education, health care, or libraries. The term is somewhat more common outside of the United States". Traditionally, possible to distinguish different ICTs by their unique features (text—print; audio—radio; audio visual—television). Since 1990s, such distinctions have become blurred as convergence, or the blending of what were discrete media, onto a single platform has become a reality. ICT devices and applications are used in the production, storage, and sharing of information and knowledge.

1.2. ICTs in Education: Impact of ICTs on education second only to impact of ICTs on business practices. Key issues plaguing developing country attempts to address educational issues are:

- Access
- Equity
- Resources
- Quality

Sectors in which ICTs in education are applied most effectively are:

- Formal Education—Schools
- Formal Education—Tertiary level
- Non Formal Education
- Teacher Training

ICTs in Use in Higher Education

- ► Print
- ► Radio/Television
- Community Radio, radio use by ODL
- Gyan Darshan, Vyas Channel, by open universities
- ► ICTs to
- administer higher education—admissions, assessment, student record management
- As teaching supports and substitutes—e learning, virtual and online learning

2. ICTs in/for Indian Education by State Actors:

Some of the highlights about the usage of ICTs in Indian Education System are:

- ► India's own satellite system providing round the clock multipurpose services;
- ► Nearly 100 per cent reach of radio;
- ► A satellite to cable and terrestrial system of television, including more than 50 channels in English, Hindi, and Indian languages within the private and public sector
- ► One of the largest television systems in the world.
- ► About four 24 hour dedicated satellite to cable educational television channels
- ► A 24 hour EDUSAT channel available for use in teleconference support for education
- ► Private sector channels and websites covering information technology and bio technology
- ► State level initiatives underway for the use of satellite based systems on the Ku Band in almost all the states of the country, capable of providing bandwidth for data, voice and picture transmission through the EDUSAT network
- ► Wide reaching telephone access, through PCOs throughout the country
- ► The fastest growing sector of the economy being that of information and communication
- ► Mission 2007
- ► NME-ICT
- ► Higher education bodies—UGC-CEC; IGNOU all having extensive digital repositories of e content

3. Understanding ICTs and Education in the New Scenario

- ► ICT Education
- As skills for the new global scenario (Basic ICT literacy)
- As meeting the needs of the employment market
- ► ICT in Education
- As integrating ICT into the educational process
- As assistive technologies to enhance access, equity, quality with limited resources
- Administrative tools to make educational processes efficient, effective, speedy, and responsive
- ► ICT Enabled Education

4. **Teacher Training:**
► ICT use calls for a completely new teaching and learning paradigm,
► Reasons why the context of teaching changes are
▪ ICTs will make certain teaching resources (static textbooks) obsolete.
▪ ICTs will make some forms of assessment redundant.
▪ It will become necessary for teachers to encourage critical thinking skills, promote information literacy and accept and absorb collaborative learning practices.
▪ Teachers will have to reassess the way in which they meet their students' learning needs.

Teachers and ICTs in Education
► **Role of the teacher:**
▪ Teachers remain central to the learning process.
▪ Lesson planning is crucial when using ICTs.
► **Pedagogy:**
▪ Introducing technology alone will not change teaching learning processes.
▪ ICTs are tools to help teachers create more 'learner centric' learning environments.
▪ ICTs can be used to support change and to support teaching practices.
▪ Using ICTs as tools for simple information presentation is of mixed effectiveness.
► **Teacher technical abilities**
▪ Not just about technical skills
▪ One-off training is insufficient
▪ Few teachers have broad expertise in using ICTs in teaching/learning
▪ Computer literacy less important than 'how to use ICTs
▪ Students are more sophisticated than teachers in using ICTs
► **How teachers use ICTs**
▪ For research and self improvement—academic work
▪ For administrative functions—email, assessments, admissions, management of a system
▪ In improving the quality of teaching and learning among students

What should a teacher do?
► Adopt
► Adapt
► Create

5. **Consortium for Educational Communications:**
► Inter university centre set up by UGC in India
► Has a storehouse of educational videos that can be accessed through
▪ Gyan Darshan
▪ Vyas Channel
▪ Online through its e content platform

Khan Academy:
► Contains a library of educational videos freely available across the world

► For students
▪ A complete self based learning tool
► For teachers
▪ Ability to see any student in detail
▪ Ability to get intelligence to do targeted interventions
▪ Supplementary materials to enhance teaching

Massive Online Open Courseware(MOOC):
► MOOC stands for a Massive Open Online Course. (Coursera, Udacity)
► A massive open online course (MOOC) is a model for delivering learning content online to any person who wants to take a course, with no limit to attendance.
► Open online courses aimed at large-scale participation and open (free) access via the internet.
► They are similar to university courses, but do not tend to offer academic credit.
► A number of web-based platforms (initiatives) supported by top universities and colleges offer MOOCs in a wide range of subjects.

Examples of what a teacher can do to integrate ICTs in classroom:
► The Flipped Classroom
▪ Teacher records small segments of content (3 to 7 minutes) and uploads to Internet (YouTube, etc.)
▪ Students watch these lectures at their own time and pace, and on their own access devices (mobile, computer, tablets, etc.
▪ Classroom is used for engagement with students on a given topic through discussions, exercises, etc.

What Teachers Can Do:
► Start with baby steps
► Rethink your pedagogy and course design
► Rethink and restructure your teaching time
► Invest time and some money
► Rethink the time you spend with students—offline, online
► Rethink your technical skills
► Rethink the way you teach and learn
► Learn continuously. Take an online course to experience e Learning yourself

Conclusion: From the above observations, it is clear that the usage of ICTs will definitely strengthen the education system effectively. A carefully thought-out, integrated approach to introducing computers and the Internet into learning environments in developing countries can have a significant impact on teaching and learning at all levels of education sector. As a result, those with access to ICTs have been greatly empowered, and now believe they can compete in a global knowledge-based economy because they know that their knowledge, ideas, culture, and passions are as valuable as any in the world.

In order to more effectively prepare students to participate in ICT-driven education, greater commitments and willingness to share and adopt innovative solutions are needed from all aspects of society—from Governments, the private sector, communities, donors, parents, and students. Schools should be transformed into active learning environments open to their communities; telecommunication and power infrastructure policies should focus on schools as starting points for rural transformation; teachers and students must be empowered to be creative agents for change in their schools; and leaders must embrace a vision that will prepare their youth for tomorrow's challenges.

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