ICT’s: An Innovative Tool for Academic Excellence

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Abstract

The purpose of this paper is to describe the result of research that was undertaken in order to examine the impact of information and communication technology to students, teachers and teaching process of the educational institute. The factors which are found to be most important to the teachers in their teaching were making the lessons more interesting, easier, more diverse, and more motivating for the students. Additionally for improving presentation of materials, allowing greater access to computers for research, administrative work of material, allowing greater access to computers for research, administration work more efficient and providing professional support through the E-learning and video conferencing.

Keywords: Administration work, E-learning, Information and Communication Technology, Teaching process, Video conferencing

Introduction

Information & Communication Technology (ICT) refers to the electronics and computerized devices and associated human interactive materials that enable the user to employ them for a wide range of teaching and learning processes in addition to personal use. ICT includes computers, videos, television, connection with satellite connections and all the software materials which enable us as teachers to use them to teach our students.

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**Necessity of ICTs**

- Globalization of
  1. Economy
  2. Information
- Tech Innovations
- Knowledge-based
  1. Economy
  2. Society
- Rising Demand for Education

**Benefits of ICT**

- Convenient
  - self-service (mix and match)
  - on-demand (anytime, anywhere)
  - private learning
  - self-paced
  - Flexibility: (modular package)
- Cost-effective
  - Virtual learning environment
  - Share lessons among schools
  - Reduce material cost
  - Reduce travel/accommodation costs
- Consistent
  - Central control of content
  - Same quality of content for all
  - Same quality of education for all
- media-rich
  - Easier to understand & more engaging
- repeatable
  - As many times as you like
- easier to monitor progress
  - less administrative work
  - can be more precise
ICT Impact Attributes in Education:

- Brings positive changes in the social organization of the classroom; achieves higher student-centric focus and delivery
- Enhances teaching and learning through dynamic, interactive, and engaging content
- Develops, enriches, accelerates, and deepens student skills
- Relates classroom experience to work place, provide opportunity for connection between classroom and world
- Enhances learning opportunities and resources to the students and teachers
- Stimulates, motivates and sparks students’ appetite for learning and helps to create a culture of success

ICT Stages in Learning & Teaching

Impact of ICT on What is Learned

- Conventional teaching has emphasised content.
- Teachers teach through lectures and presentations interspersed with tutorials
- Learning activities are designed to consolidate and rehearse the content.
- Contemporary settings encourage curricula that promote competency and performance.
- Curricula are now emphasising capabilities
- More concerned with how the information will be used than with what the information is
Impact of ICT on How is Learned

- access to a variety of information sources;
- access to a variety of information forms and types;
- student-centred learning settings based on information access and inquiry;
- learning environments centred on problem-centred and inquiry-based activities;
- authentic settings and examples;
- teachers as mentors rather than content expert

(ICTs comprise many technologies for capturing, interpreting, storing and transmitting information)

Potentials of ICT:

1. Expanding Educational Opportunities

- Radio Broadcast
- Interactive Radio Instruction
- Television
- Virtual Schools
- Virtual Universities
2. Increasing Efficiency
   - Dual Shift Systems
   - Multi-grade Institutions
   - Small Urban or Rural Institutions
   - Flexibility in Learning Schedule

3. Enhancing Quality of Learning
   - Motivate and engage learners
   - Bring life to concepts and processes
   - Foster inquiry
   - Provide flexibility
   - Allow application of information
   - Provide access to world of information
   - Bring the world into the classroom
   - Offer collaborative opportunities and communication
   - Offer tutored and individualized learning

4. Enhancing Quality of Teaching
   - Difficult Profession
   - No One-Shot Training
   - Continuum
     - Initial Training
     - Lifelong Upgrading
     - Connecting

5. Facilitating Skill Formation
   - New Workplace Realities
   - E-Training
     - Just-in-Time
     - Convenient Place
     - Up-to-Pate
     - User-centric

6. Sustaining Lifelong Learning
   - Workers need to learn new skills
   - Modern societies demand constant updating
   - The “educated” can become obsolete
   - Life-cycle pattern is changing

7. Improving Policy Planning & Management
• Management of Institutions and Systems
  ▪ Institution: Admissions, student flow, personnel, staff development, facilities...
  ▪ System: Institution mapping, personnel payroll, MIS, communication, information...
• Management of Policy Making
  ▪ Storage and analysis of data
  ▪ Construction and assessment of policy scenarios
  ▪ Tracer studies and tracking systems

8. Advancing Community Linkages
• ICT access varies within countries
• Disparities is magnified by gender factor
• ICT access contributes to escape from poverty
• ICT access for all requires attention to
  ▪ Infrastructure
  ▪ Cost
  ▪ Laws and regulations

Building ICT Culture

Conclusion

ICT is fast growing field throughout the world due to its usability. ICT have no doubt transformed the manner in which we consume knowledge, the sheer breadth of the resources at our disposal. The role of ICT in education is significant, as we access and absorb information more quickly than before. Today more than 1.7 billions people are online almost a third of the humanity. ICT in education guarantee a long and exciting journey ahead to brush up the level of education all over the world.
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