CURRENT TRENDS IN EDUCATIONAL TECHNOLOGY: IMPLICATION ON EDUCATIONAL MANAGERS IN NIGERIA.

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ABSTRACT

This paper presents the current trends in educational technology and the implication on educational managers in Nigeria. The current trends in the field of educational technology are centred on the influence of information and communication technology on the development of educational management. Various challenges have been created for the educational managers, who are the custodians of educational resources. Some of the challenges include the use of computer management packages, Internet application, teleconferencing and so on. With the proliferation of computer networks and information technology there is increased efficiency in the management of educational resources and decision making hence, the Nigerian educational managers can boast of meeting the expected height of their contemporaries across the globe.

INTRODUCTION

Technology is a systematic application of scientific or other organized knowledge to solve practical problems. This technology becomes educational, if the practical problems to be solved are educational in nature. Hence in modern definition, educational technology implies- all education resources (including research information on human learning and communication principles); all planning strategies (including identification of resources, procedural analysis, assessment and evaluation) – to solve educational problems or improve education quality.

In Henry T. Ingle's words (in Ogunranti, 1989), educational technology is an integrated and systematic method of designing, planning, implementing and evaluating the total process of learning and teaching in terms of specific objectives, research information on human learning and the process of communication. Combining all these definitions, we see educational technology as briefly, a concept about how problems in human learning are identified and how they can be solved.

Technology is the bed rock of the development of any society. Show me a technologically advanced country in the world, and I will show you the good educational technology of such country that serves as a step to such a great height. Education technology resources include the use of audio-visual materials, projectors, audio-tapes and recorder, video tape recorders, computer and communication devices and so on. Prominent among the educational technology resources is the information and communication devices, which have made possible for learning to take place anywhere, that is at home, at the office, by online distance learning. Learning can continue into the work place, where there is the need to

keep up with current information. The concept of knowledge has charged from having information in the brain to having access to information about a particular topic and knowing how to use it. Teachers' roles will ultimately charge, since they will no longer be providers of information, but facilitator of academic skills and technical expertise.

2.0   EDUCATION REFORM AND COMPUTERS

Computer technology is one of the technologies that have created a recent trends in the development of educational system by providing ample assistance in accomplishing numerous reform goals. These includes:-

a. Professional bond between teachers and the administrators, through computer networking which has never been before in the history of education. Traditionally, every classroom is an island into itself, with the teacher instructing, assessing and remediation children with limited contact with other teachers, even within the same school. Networking allows teachers to exchange lesson plans and advice and debate instructional methodologies with peers around the globe, at the touch of a keyboard. Instead of waiting for annual conferences, they can compare and contrast their work with relative ease and speed. Through internet, professional fraternity between educators is achieved electronically. Networking is the term that is used to describe the connection of group of computer systems for the purpose of sharing information. The connected systems is said to form a network.

b. Collaborative learning and assessment in educational system. With basic word processing programme, students become independent publishers of ideas and opinions. With E – mail, there is opportunities for " per review" and group editing. More sophisticated interactive multimedia packages offer true inquiry-based learning, where students construct and demonstrate solutions to varieties of research topics. This is however, not suggesting that computers are used in reform to replace the role of the teachers, which is undesirable and impracticable, but rather, it is recognised as an effective

teaching tool, which assists the educators.

3.0   INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) TRENDS IN TEACHER TRAINING CURRICULA.

Information and communication technology (ICT) has a great potential for enhancing teaching and learning outcomes. The realisation of this potential depends much on how the teacher uses the technology. This would in turn depend among other things, on the kind of training that the teachers have undergone (Resta, 2002). This paper take a look at a number of ICT trends in education, educational technology and teacher training curricula. Trends in the Western World, where there are more pioneering effort in technology, will be cited before focusing on development in Nigeria, implications of the trends, in terms of prospect for the future, will be drawn.

3.1   ICT TRENDS IN EDUCATION

Latest researches and reports identified three trends in education that are directly relevant to ICT. These are:-

a. Technology-smart curricula

This is of the opinion that technology is increasingly becoming integrated into the school curriculum, and as such, the current goal is to help teachers learn how to use the computer as a tool to teach English, Mathematics, Science and other subjects.(Anderson, 2002).

b. The Digital Divide

This involves efforts ranging from collaborative efforts aimed at providing the massive funding required, to capability building programmes for utilizing ICT. (Anderson, 2002).

c. Distance learning Via Internet

This involves the opinion that there is a clear direction towards using the internet to open education to students everywhere. The use of the Internet ranges from making course materials available on-line, to using the Internet as the communication tool for the course. (Anderson, 2002).

3.2 TRENDS IN EDUCATIONAL TECHNOLOGY

A content analysis of recent journals, dissertations, conferences have identified trends in educational technology, as follows:-

- Computers in Schools
- Networking- connection of group of systems for the purpose of sharing information
- Internet facilities application
- Television in the school as teaching aids
- Advocacy for educational technology
- New delivery systems for educational technology such as the use of power point in presentation of lectures by teachers and research work in tertiary institutions.
- Teleconference- Holding a conference via network of computer connection or telephone. It also include delivering live events via satellite to geographically dispersed down link sites.
- Technology literacy for teachers
- Computer management application
- Video-conferencing- conducting a conference between two or more participants at different sites by using computer network to transmit audio and video data.
- Educational technology and educational reform
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There is a growing awareness of the political and social environment that is needed for technology use, to flourish. A 1997, study identified the following educational technology trends specific to teaching and learning:-

- Tremendous increase in technology-related in-service teacher training
- Strong trend towards the use of multimedia
- Large number of professionally created multimedia on CD-Rom
- Availability of powerful but user friendly authoring systems and multimedia tools
- Students acquiring multimedia skill earlier

- Networking of computers for communication, research and remote collaboration. (Anderson, 2002)

Several of the above trends are on multimedia, highlighting the growing importance of this tool that makes interactivity possible.

Another 1997, study identified general educational technology trends as follows:-

- Increased reliance on technology in students classroom experiences
- Increased reliance on technology in students out of school experiences.
- Increased reliance on technology in administrative and support services.
- Growth of distance/virtual education
- Constantly changing technology innovations
- A comparison of the foregoing trends, which are from the Western World and cover the period from the 1995 to 2000, all include bringing technology to the classroom, as well as virtual delivery modes. (Anderson, 2002)

3.3 TECHNOLOGIES USED BY VIRTUAL INSTITUTIONS

The virtual institutions use any of the following technologies

- World wide web (www)
- Satellite broadcasting
- Video conferencing
- Compact Disc (CD) technology- using CDs' to disseminate information

3.4 KEYEMERGING TECHNOLOGIES

As technology develops, with its characteristic high speed, the following technologies are emerging for future use:-

- Continuing development of the internet and the web
- Wireless technology
- Machine translation
- Local power generation
- Speech recognition software
- Character recognition software
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SEAMEO INNOTECH EFFORT

Seameo Innotech's effort is a private organization who is into the business of enchancing the effort of teachers training in ICT. Their effort is in the following direction:-

- Technology application in education: Teachers and teacher trainers
- Technology tools for producing instructional media
- Using leading edge technologies for quality education: The above enable participant to produce proto type teacher made materials that:
- Illustrate the use of ICT for teaching specific subjects
- Use a range of technologies, especially print, video and computers
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3.5 ISSUES IN TEACHER TRAINING IN ICT

The current issues in teachers training include the followings:-

- Access connectivity: - This has to do with ICT connection within the school and to resources outside the school for teachers' professional development. Without access to the Internet and sufficient quantity and quality of equipment, it was felt that teachers are not likely to be highly motivated to participate in professional development activities related to ICT, (Everard, 1986).
- Software tools:- This has do with easy access to productivity tools and associated learning resources

that can promote professional development, through sharing and exchange of resource materials and strategies by school and teachers.

- Curriculum resources:- This involves availability of current quality educational resources that will help teachers transcend the utilitarian use of ICT, by fully integrating them in the curriculum, and the creation of new models of learning and teaching, (Anderson, 2002).
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3.6 KEYS TO EFFECTIVE ICT TEACHER TRAINING PROGRAMME IN NIGERIA

The following keys are essential for effective ICT teacher training programme:

- Provision of incentives and support by the government for an encompassing training
- Provision of adequate access to the technology by the government.
- Provision of teachers/educational administrator directed training by the government.
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3.7 IMPLICATION OF ICT ON TEACHERS AND EDUCATIONAL ADMINISTRATORS IN NIGERIA

With ICT, there is much teachers and educational administrators in Nigeria have to learn to become competent. There is the prospect of having to keep up with the development in technology, hence, an open door to increased efficiency in operation and decision making, as mechanical ways of doing thing will have to be dropped to embrace the current trend in educational technology.

4.0 RECOMMENDATION

In view of the current trends in the use of ICT on educational technology, I strongly recommend that teachers and educational managers should wake up to the tasking challenges of accepting and integrating the current trends in educational technology, in education as it will go a long way in promoting the standard of education in Nigeria.

5.0   CONCLUSION

Attempt was made to define educational technology. The impact of computer technology on the management of on educational was considered viz-a-viz. information and communication technology (ICT) trends on the management of education and conclusion was drawn to the fact that, the technology will increase the efficiency of educational management and decision making and hence Nigeria educational managers can boast of meeting the expected height of their contemporaries across the globe.

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