PATNA UNIVERSITY
Dept. of Education
E-CONTENT
COURSE SC5

Unit IV : Modern Technologies in Education

Some other trends in E.T - 1

Objectives : *After going through this topic, students will be able to understand:*

- Improve the online communications ability for individuals and groups associated with the School of Education.

- Expand and enhance technology support tools to meet the School of Education's current needs and expectations.

- Obtain feedback from users on satisfaction levels of current services, as well as, new services and implement changes accordingly.

Contents

1 Videotapes

Videotape is an effective and useful medium for distance education. The videotape technology, a comparatively new device in education, provides all the advantages of television while eliminating its crucial disadvantages of imposing a rigid time schedule on its users.

- The videotape, besides, may serve as an effective medium for illiterate learner who depend on spoken words and on visual images for communication.

- Educational videotapes can be stored for future and can be used in a wide range of teaching-learning situations,as and when required.

- Videotape provides flexible learning,situations as the student-user can exercise control over the presentation of the medium.

- Students can monitor the repay of the learning material with their individual pace of learning.

- That is, the videotape technology allows learners to stop, interrupt and discuss the material as often and for as long as they wish.

2 Radio Vision

Pioneered by the BBC, the technique of radio-vision allows the subject-matter to be presented through two channels, the audio and the visual.The visuals are presented in the form of still film strips, chart, slides, models etc.,while the explanation is given through recorded narration.
This is used by educational institutions as a substitute for educational television.

- It is economical.

- It is easy to produce such programmes at institutional level or the learning centres.

- It provides visual support to the concept that is taught.

3 Tele-Conferencing

Teleconferencing means meeting through a telecommunications medium. It is a generic term for linking people between two or more locations by electronics. There are at least six types of teleconferencing: audio, audiographic, computer, video, business television (BTV), and distance education. The methods used differ in the technology, but common factors contribute to the shared definition of teleconferencing:

- Use a telecommunications channel

- Link people at multiple locations

- Interactive to provide two-way communications

- Dynamic to require users' active participation

- Interactive Technologies

4 Types of Teleconference:

4.1 Audio Teleconference:

- Voice-only sometimes called conference calling. Interactively links people in remote locations via telephone lines.

- Audio bridges tie all lines together. Meetings can be conducted via audio conference.

- Preplanning is necessary which includes naming a chair, setting an agenda.

- providing printed materials to participants ahead of time so that they can be reviewed.

- Distance learning can be conducted by audio conference. In fact, it is one of the most under utilized, yet cost effective methods available to education.

- Instructors should receive training on how to best utilize audio conferences to augment other forms of distance learning.

4.2 Audiographics Teleconference:

- Uses narrowband telecommunications channels to transmit visual information such as graphics, alpha-numerics, documents, and video pictures as an adjunct to voice communication.

- Other terms are desk-top computer conferencing and enhanced audio.

- Devices include electronic tablets/boards, freeze-frame video terminals, integrated graphics systems (as part of personal computers), Fax, remote-access microfiche and slide projectors, optical graphic scanners, and voice/data terminals.

- Audiographics can be used for meetings and distance learnig.

4.3   Computer Teleconference:

- Uses telephone lines to connect two or more computers and modems.

- Anything that can be done on a computer can be sent over the lines.

- It can be synchronous or asynchronous.

- An example of an asychronous mode is electronic mail. Using electronic mail (E-Mail), memos, reports, updates, newsletters can be sent to anyone on the local area network (LAN) or wide area network (WAN). Items generated on computer which are normally printed and then sent by facsimile can be sent by E-Mail.

4.4   Video Teleconference:

- Combines audio and video to provide voice communications and video images.

- It Can be one-way video/two-way audio, or two-way video/two-way audio.

- It can display anything that can be captured by a TV camera.

- The advantage is the capability to display moving images. In two-way audio/video systems, a common application is to show people which creates a social presence that resembles face-to-face meetings and classes and enables participants to see the facial expressions and physical demeanor of participants at remote sites.

- Graphics are used to enhance understanding. There are three basic systems: freeze frame, compressed, and full-motion video

- Video conferencing is an effective way to use one teacher who teaches to a number of sites.

- It is very cost effective for classes which may have a small number of students enrolled at each site.

- In many cases, video conferencing enables the institution or a group of institutions to provide courses which would be canceled due to low enrollment or which could not be supported otherwise because of the cost of providing an instructor in an unusual subject area.

- Rural areas benefit particularly from classes provided through video conferencing when they work with a larger metropolitan institution that has full-time faculty.

- Through teleconferencing, institutions are able to serve all students equitably.

References

[1] R.A. Sharma. *Technological Foundation of Education: Theory, Practice & Research*. Surya Publication, 2001. URL: https://books.google.co.in/books?id=GrdhGwAACAAJ.

Self check questions

1. Write brief notes on various trends of educational technology.
2. Discuss uses of different trends for education.
3. Discuss types of tele-conferincing

Topics for next class

ETV, CCTV, INSAT, EDUCATE

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