

Uses of CCTV and Television in Instruction

CCTV (Closed Circuit Television):

Closed-circuit television (CCTV) is the use of video cameras to transmit a signal to a specific place, on a limited set of monitors. It differs from broadcast television in that the signal is not openly transmitted, though it may employ point to point (P2P), point to multipoint, or mesh wireless links.



Closed Circuit Television (CCTV) is a system where the circuit in which the video is transmitted is closed and all the elements (camera, display monitors, recording devices) are directly connected).

CCTV comprises of Camera, Wires, Monitoring screen, Recorder and combination of which is called CCTV.

Components of CCTV System

Analog System

- ❖ Camera
- ❖ DVR
- ❖ Hard Disk for recording
- ❖ Wiring – for Video - Coaxial or CAT 5(with video balun)
- ❖ Wiring – for power (not required if video balun is used)
- ❖ Power Supply
- ❖ Connector – BNC or RJ45 (in case of video balun)

IP System

- ❖ Camera
- ❖ NVR with video analytics
- ❖ Hard Disk raid enable.
- ❖ Wiring – for Video – CAT 5/CAT 5E / CAT6
- ❖ Wiring – for power
- ❖ Power Supply not required if POE switch used
- ❖ Switch / POE switch in case of POE used
- ❖ Connector – RJ45

Types of CCTV Camera's Selection

- ✓ Indoor Camera
- ✓ Outdoor Camera
- ✓ Infrared Days/ Night Camera
- ✓ Dome Camera
- ✓ Bullet Camera
- ✓ Hidden Camera
- ✓ Pan tilt zoom Camera
- ✓ Motion Detection
- ✓ Wireless



Advantages of CCTV

- Can improve work quality
- Reduce costs
- Improves communication
- Groups can meet more frequently
- Critical meetings can be conducted in less time
- More faculty and staff can be involved

Disadvantages of CCTV

- Difficult to see and hear people who are not close to the microphone/camera, Thus difficult to have multiple people at one site, sharing a computer to.
- Lack of personal interaction during the videoconference.
- Body language can be lost if movement is jerky and/or picture quality is reduced.
- Some people are naturally 'camera shy' and do not like being filmed; a person who is confident with phone conferencing may be nervous in front of a camera.

Uses of Television and CCTV in Instruction

- To show practical application of principle already written in the textbooks and to show the laboratory work and demonstrations.
- To humanize distance education and to improve language skills and teaching skills by showing model teaching techniques.
- To show real life situation and microscope things on magnified scale
- Animations, dramatic presentations, slow motions and case studies.

Why Television in the field of Education

- ✓ Instructing
- ✓ Explaining ,Clarifying
- ✓ Summarizing
- ✓ Reinforcement
- ✓ Imposing study speed
- ✓ Supporting and enhancing teaching
- ✓ Motivation and encouragement
- ✓ Using as supplementary for the other materials
- ✓ Presenting a reference to large masses
- ✓ Presenting unreachable facts and events