

4.2.5 Electronic Conferencing

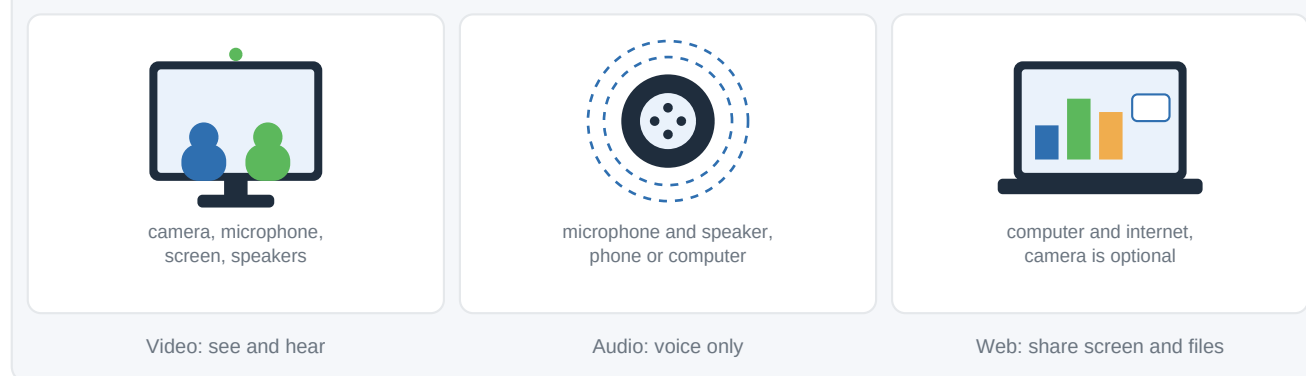
Syllabus 2026 - 2028

WHAT YOU NEED TO KNOW

- Characteristics, uses, advantages and disadvantages of video-conferencing, audio-conferencing and web-conferencing
- The hardware, software and network connection needed for each type of electronic conference

An **electronic conference** lets people in different places meet in real time using a network, without travelling.

Figure 11: Types of electronic conference



Type	Characteristics and uses	Advantages	Disadvantages
Video-conferencing	People see and hear each other live through cameras and screens. Used for business meetings, interviews, online lessons and remote medical consultations.	Face-to-face contact, body language and expressions are seen; good for discussion; saves travel	Needs a good camera and fast connection; video can freeze; time zone problems; less personal than meeting in person
Audio-conferencing	People speak to each other by voice only, using phones or computers. Used for quick meetings and where bandwidth is low.	Cheap; simple; works on a poor connection or a phone; quick to set up	No visual contact, so body language and shared visuals are missed; hard to tell who is speaking; easy to lose attention
Web-conferencing	A meeting through a browser or app where people can share screens, slides, files, a whiteboard and chat. Used for webinars, training and presentations.	Can share and edit documents live; can be recorded; large audiences; includes polls and chat	Needs a reliable internet connection and an account; can be distracting; people need to learn the tools; security risks if links are shared

What is needed to set up each type

	Hardware	Software	Network connection
Video	Computer, tablet or phone; webcam; microphone; speakers or headset; screen	Video-conferencing app or system that compresses and sends video and sound	Fast broadband or mobile data with high bandwidth, a stable connection
Audio	Phone or computer; microphone; speaker or headset	Conference call service or audio-conferencing app	Telephone line or internet (VoIP); needs little bandwidth

	Hardware	Software	Network connection
Web	Computer or tablet; internet; microphone and webcam are optional	Web-conferencing application or browser with screen sharing and chat	Reliable broadband; a medium to high bandwidth

Advantages and disadvantages of conferencing in general

Advantages	Disadvantages
+ Saves travel time, cost and the effects on the environment	- Needs equipment, software and a good connection
+ Meetings can be arranged quickly with people anywhere	- Technical faults can interrupt the meeting
+ Documents can be shared and the meeting recorded	- Time zone differences can make timing hard
+ Useful in emergencies or when travel is not possible	- Less personal than meeting in person; security and privacy risks

EXAM TIP

Match the conference type to the **need**: video for seeing people, audio for a quick call on a weak connection, web for sharing slides and files. State the need and then the type.

Key terms

Term	Meaning
Electronic conference	A real-time meeting between people in different places over a network.
Video-conferencing	A conference with live video and sound.
Audio-conferencing	A conference using voice only.
Web-conferencing	A conference through a browser that includes sharing of screens and files.
Webcam	A camera that sends live video.
Bandwidth	The amount of data a connection can carry each second.
VoIP	Voice over internet protocol; calls made over the internet.
Webinar	A seminar or presentation held through a web conference.

Practice questions

Answer each question in full sentences. Command words used: State (give a short answer), Describe (say what it is like), Explain (give reasons), Analyse (break it down and examine it), Suggest (apply your knowledge to a situation), Compare and contrast (similarities and differences), Evaluate (weigh up and reach a judgement).

No.	Question	Marks
1	State two items of hardware needed for a video conference.	[2]
2	State one piece of software that is needed to run a web conference.	[1]
3	Describe how a video conference could be set up between two schools.	[3]
4	Explain why a video conference needs a faster network connection than an audio conference.	[2]
5	Analyse why a company might choose web conferencing for a staff training session.	[3]
6	Compare and contrast audio-conferencing and video-conferencing.	[4]
7	Suggest a suitable type of conference for a teacher who wants to show slides to learners at home, giving a reason.	[2]
8	Evaluate the use of electronic conferencing instead of travelling to meetings.	[6]

Total: 23 marks