

Capturing Voice with sufficient clarity and volume

Get the audio right: One of the biggest challenges in hybrid lessons, irrespective of teacher ability with the technology, is the quality of the audio and in particular picking up the teacher's voice and relaying it to remote pupils. Classroom microphones or those on webcams or laptops are prone to picking up lots of background noise as the teacher moves away from the microphone, making it very hard for those listening, inevitably reducing the effectiveness of and interest in the lesson. This constraint can also play on the teacher's mind, keeping them unnaturally close to their computer and compromising their teaching to those physically present. Providing each teacher with their own headset removes this problem but there are some practical considerations.

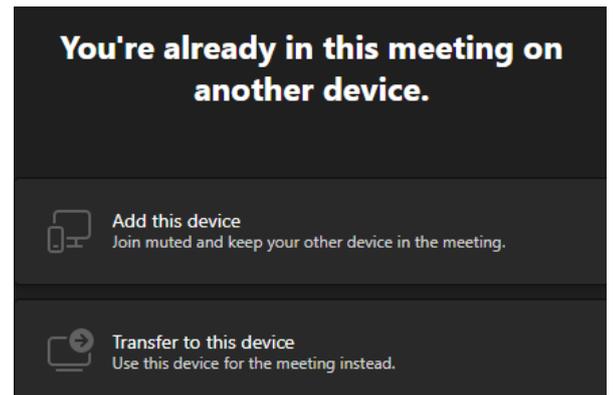
Audio headsets provide the best experience as they pick up less background noise and any questions (or comments) from remote pupils are only accessible to the teacher and other remote users. **Bluetooth headsets** are the ideal solution for teacher and remote pupil as the teacher has relatively free movement around the classroom however they do have limitations. The main one being most headsets will typically only pair with 2 devices at a time making it challenging for teachers who teach in multiple rooms, along with battery life and the need to charge them daily. However, for those who teach with a device (laptop/ tablet) issued to them or those predominantly in the same classroom this is an ideal solution. A Bluetooth adapter may be required for computers without inbuilt Bluetooth. For those who move between classrooms the next best solution is a **wired headset** (check the audio connection as many are USB only now) with a long lead. Some have up to 8m of cable, or coiled extensions are available, which enable the teacher to not only teach from the PC but also move around the front of the classroom – albeit with a little care. The table below highlights the best choices

	Bluetooth headset	Wired headset	Camera mic and device/ room speakers
Teacher at home	Ideal	Ideal	OK
Teacher issued device	Ideal	OK	Poor audio
Mainly teach in one classroom	Ideal	OK	Poor audio
Roaming Teacher		OK	Poor audio

One particularly effective and mobile solution (though reliant on staff being willing and able to use their smart phones) is as follows:

- Staff smart phone with the relevant app installed (Teams, etc) and connected to the school wifi
- Staff Bluetooth headphones connected to phone (e.g. AirPods or similar) and worn in one ear only, allowing the teacher to hear remote pupils and their classroom simultaneously. This could work almost as effectively with wired headsets plugged into the phone
- Teacher joins the lesson from their PC/ laptop with the mic and speakers both muted (it's really just to capture their teaching slides/ annotations etc) and shares the screen with the meeting

- Teacher also joins the lesson from their phone, using this version of themselves to capture the high quality and totally mobile audio of their voice (image shows the options when joining a Teams meeting from another device; selecting “Add this device” will enable the teacher to join with 2 devices and one identity.



This is clearly dependent on some staff goodwill and the relevant Bring Your Own Device requirements the school will have being met, but is by far the most flexible and effective solution for anyone who teaches in more than one room or who cannot access a school-provided Bluetooth headset.

If the only option is a laptop or webcam microphone, the staff need to understand its limitations and the school implement a 'best endeavours' solution, where as much delivery as possible is from the teacher being near the microphone. This is likely to impact on the flow of the lesson and underlying principle of giving priority to those in class while lifting the experience of those at home should still stand.

Note of caution:

Schools should always test solutions both technically (is it possible?), practically (with digital champions) and in policy terms (particularly safeguarding) to iron out issues and provide best practice guidance before rolling out to the whole staff population.