

Recording and editing careers interviews: A practical guide for schools



Audio recording is a powerful tool to help children engage with employers and careers. It's simple – local businesspeople come into the classroom to be interviewed by pupils about their jobs and careers. Recordings can be made in the classroom or on school trips, and are fun to make, engaging to listen to, and can be used in future lessons or be disseminated online.

Involving pupils throughout the process is beneficial, as they have ownership of the whole process. Class time should be allocated to discussing their ideas of careers and workplaces, and introducing them to a range of business sectors and jobs including ones in the local area. As part of this, the class can create a list of who they'd like to interview, which could include parents as well as local professionals.

Pupils can play a major role in creating a list of questions they'd like to ask the visitor. During the visit, the interview is recorded on a simple piece of hand-held equipment. Afterwards, this can be played back to reinforce key points, and there are always opportunities to praise good questioning and thoughtful comments.

Audio interviews can be shared online, which parents love to hear. It also helps the school build relations with local businesses who are seen (and heard) to be working with local children. If you take pictures of interview sessions, you can create a slideshow for the interview audio.

Recording



Recording audio is easy. To get a good quality recording of an interview in a classroom or on location, it's best to have a portable handheld recorder, which normally cost £70-£120, plus a microSD memory card and headphones. A simple recorder is fine, and in this guide we will use the Zoom H1 pictured right.

You can learn how to use it in 5 minutes. If your school has other models that's no problem, but it's recommended to use small handheld recorders similar to the bottom two pictured, rather than large professional items or apps on a mobile phone.

Good recording technique is important – even with the best equipment you'll still make a bad recording if you're not aware of the environment, not holding the microphone correctly, and not listening for distracting noises.



The recording environment



Classrooms are not ideal for recording. They have hard surfaces that reflect the sound, such as tables, hard walls, noticeboards, plastic chairs, TVs and whiteboards. There are few soft items to absorb the sound. This means that recordings can sound echoey, but with good technique this can be overcome



Hold the recorder between 15cm and 30cm (6-12in) away from the person talking, and point it at their mouth. If the recorder is further away, it will hear less 'direct' sound from the voice and more 'echo' of the sound off the walls. The same will happen if the recorder isn't pointing at the mouth.

The recorder should be held firmly – the sound of fingers moving over it can be heard on the recording. This is why it's good to use headphones, as the teacher or student doing the recording becomes very aware of this.

It's best to arrange the classroom so you're not doing an interview over a desk, as its surface will reflect the sound, and it's a long reach for a pupil's arm over the table! If you arrange chairs in a circle, all pupils can see clearly, and it's easy for students to change over so they all get to ask a question.

Tip: Students love learning how the recorder works, and holding the recorder for the interviews. Do a practice session beforehand so they get used to holding the recorder correctly, and being careful not to move their fingers on it when recording.

Using a recorder – the Zoom H1

This guide gives an overview for teaching staff – we recommend also reading the user manual. The Zoom recorders (H1 & H1n) are good in the classroom because there's a simple central record button.

These recorders have a slot in the side for a microSD memory card – we recommend min 16GB. They take one AA battery.

The microphones are at the top of the unit. We recommend a 'windshield' over the top as pictured – this reduces wind noise on the microphone when recording outside, and reduces blasts of air from the mouth known as 'pops'. Also, you can change and disinfect them for hygiene reasons.

The recorder should be held firmly, to reduce 'handling noise' on the recording. Always use headphones – this is so you know how the recording is sounding when you're making it, rather than discovering problems later on playback.



Setting up

Set the switches on the rear as follows:

- Low cut ON (reduces low frequencies, such as bumps and wind noise)
- Auto Level ON (controls the recording levels automatically)
- Format MP3 – this audio format uses less data than WAV format, and quality is fine for classroom speech recording.

Insert the memory card, and plug headphones in to the labelled socket.



Recording

- Press the red record button. The red light will come on, and the time counter will increment – it is recording.
- There are two things which control volume. If Auto Level is ON (switch on back), the recording level onto the memory card is automatically controlled. The headphone volume control simply makes it louder or quieter in your headphones. However, you may need to control the recording level manually in some situations:
 - When recording, keep an eye on the recording light, and level meters. If the light flickers that means the recording is too loud – you may also see the meters going near the top of their scale. This may happen in loud environments – you'll need to switch Auto Level off (on the back),

and set the recording level manually with the Input Level buttons on the right of the unit – the level number will come up on the display. In many environments, a setting of 40 will work, but you can reduce further if necessary.

- To stop recording simply press the red button again. You have recorded a track. To record another, press the button again and it will start again.
- If the 'Hold' button (slide the power switch up – see below) is on when recording, the recording can't be stopped accidentally – useful if little hands are operating the equipment!



Playback & track deletion

- After recording, you can listen back using the controls shown above, which allow you to move between tracks and play them
- To delete a track, play it and then press the delete (waste bin) button

Downloading the audio to a computer

- Plug the USB lead in
- The display will alternate between 'USB Card' and 'USB Audio'. When it is showing the former, press the record button. This will directly connect the memory card to your PC. Navigate to it on your PC, and copy the tracks onto your own drive for editing.





Engaging pupils with the recording process

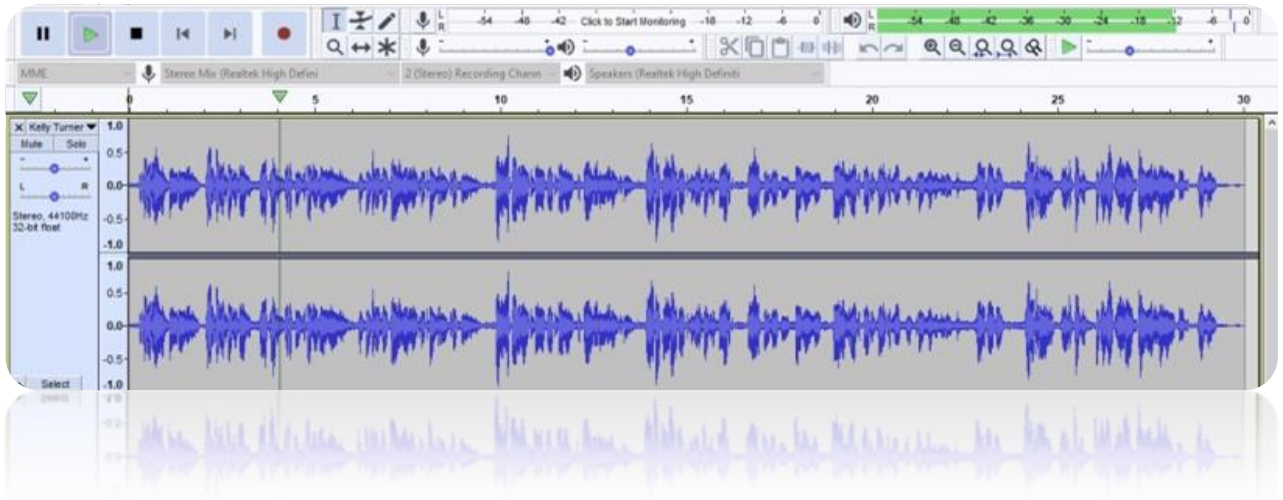
Preparation and practice are really important. Children like meeting new people, and having visitors in the classroom – pupils engage well with sessions where they choose who is coming in, and write questions. This process helps reasoning and communication skills as well as their learning about employment, and the process of learning how to record gives them a new technical skill. Children can also play a role in editing audio, although at Primary level this is best done in small groups of 3-5 children at one PC, with them taking turns.

Shy and nervous pupils feel great achievement on making a recording of their own voice (e.g. a question in an interview) and hearing it played back. They often comment on how strange their own voice sounds, but are usually good at critiquing their own performance – audio recording and listening back is a great tool for oracy.

Common problems

- Pupils often hold their finger over the record button, and sometimes accidentally stop the recording. Enough practice stops this.
- Pupils instinctively want to stop the recording between each question and answer – this results in a lot of separate tracks. Best to start recording, switch on the 'Hold' function, and leave it recording.
- Most children hold the microphone too close, especially to their own mouths. Train them to hold it further away (15-30cm).

Editing



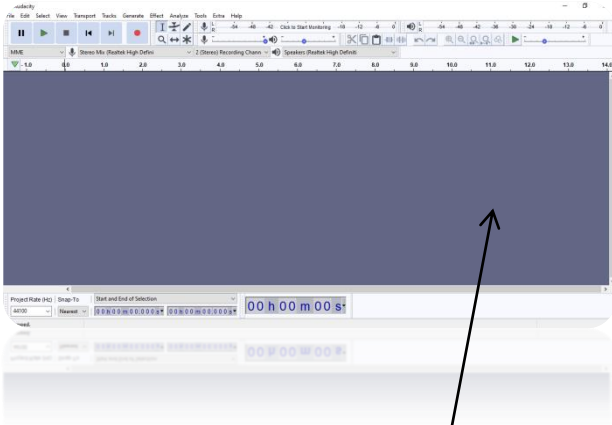
The interview you recorded may be long, with many gaps, some bumps and bangs of the microphone, and perhaps some mistakes where pupils re-start questions. The interview may be recorded in several tracks on your recorder. This guide shows you how to do simple edits using free audio software.

Editing software – things to consider

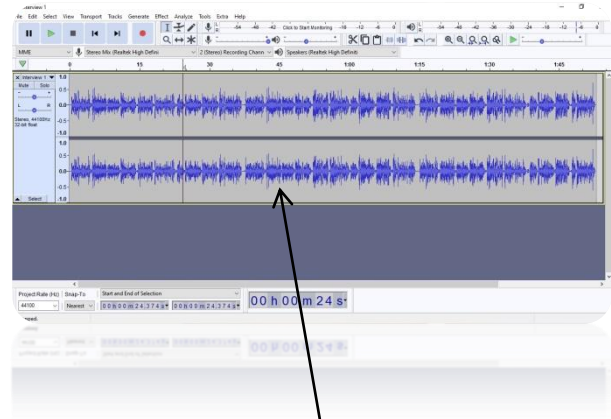
There are many types of audio editing software. This guide uses Audacity (v2.4.2), a free product that many schools use. Some schools may have an Adobe product, or music production software such as Cubase – if your staff know how to use these then that's fine, just bear in mind that Audacity is simpler to use than other more powerful products. A typical teacher can learn how to edit on Audacity in under an hour, but we recommend that in addition to this that several practices are done of the whole recording, editing and saving processes before working on careers interviews with visitors. Installation of Audacity should be done by the school's IT provider, from <https://www.audacityteam.org/>

Before you start the editing process, copy the audio onto a drive so you're editing from this copy. This means the original is still on the recorder – if you have a problem with the audio files on your drive you can always go back to the original!

1. Importing audio into Audacity



Opening audio in Audacity



- The screen is initially blank, with no audio in the working area
- To import audio, either drag and drop an audio file onto the Audacity screen, or use the File/Open menu

Getting to know the controls

Play cursor – position it with the mouse. Audacity will play from here when you press the Space Bar

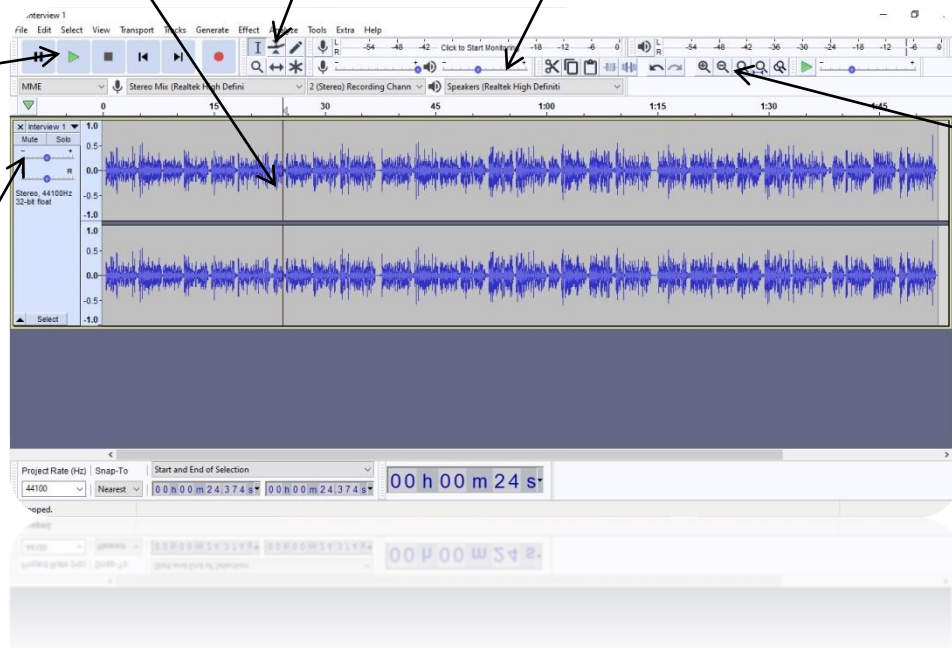
Editing tools – functions listed below

Playback volume – this doesn't make the audio itself louder, but increases the volume in your speakers or headphones

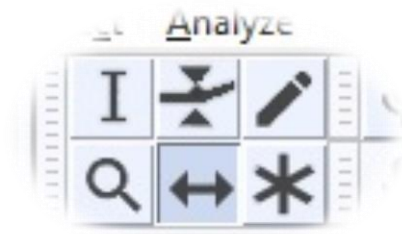
Transport controls

Gain – makes the whole track louder or quieter. Useful if your audio is very quiet

View buttons – zooms in and out



The 6 editing tool buttons



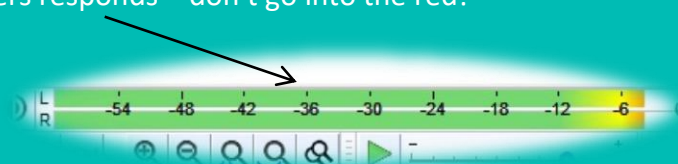
- Top-left: I-beam cursor – a left-click positions the play cursor, a click+drag selects audio (you'll need to do this when deleting audio).
- Envelope tool: Not needed for simple work - allows you to change the level of audio within a clip
- Top right: Draw function: Not needed for simple work
- Bottom left: Zoom: Allows you to zoom in and out on the audio. Holding down SHIFT toggles it to zoom out. Note other zoom controls labelled above.
- Horizontal arrow: allows you to move a piece of audio left and right by clicking and dragging.
- Bottom right: Multi-tool: Not needed for simple work

Playing and moving around

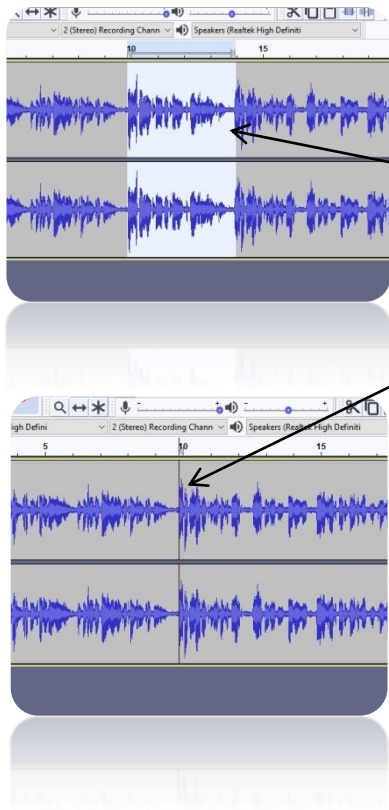
- You can use the 'Transport Controls' (Play, Stop etc) at the top of the screen, or the Space Bar will play and stop. You can start from a particular point by placing the play cursor there, using the 'I-beam cursor' button.
- HOME will move the play cursor to the left-hand edge of the screen
- End will move the play cursor to the right-hand edge of the screen (you'd rarely want to do this though...)

Task #1

- Open a piece of audio in Audacity
- Select the I-beam cursor tool and practice clicking on the audio in different places, playing and stopping.
- Set the Playback Volume slider so the volume is comfortable
- Practice with the zoom buttons, moving in and out
- Use the Horizontal Arrow tool to move the audio
- Use the Gain slider to the left of the audio to make it louder or quieter. Notice how the sound in the level meters responds – don't go into the red!

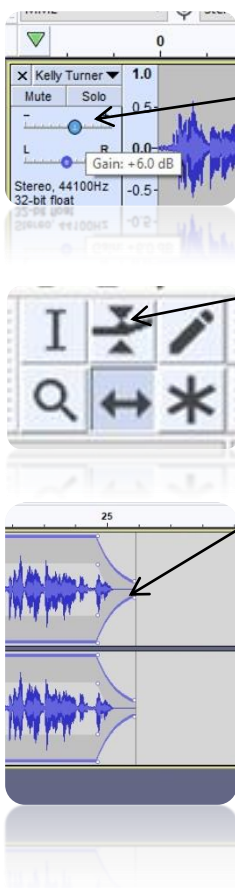


Simple editing



- Editing is the process of removing audio – on all audio editor software the process is similar – you select a piece of audio and simply delete it
- To remove audio, select across it with the I-Beam tool
- Press the DELETE button on the keyboard – the selected audio will disappear
- Play across your edit.
- *If it needs improvement Undo the edit (Edit/Undo or Ctrl-Z). After undoing, you can see where the selected area was. You can adjust the boundaries by moving the mouse over a boundary edge until it turns into a 'pointing hand' icon. This allows you to click and drag the edge of the selected area.*

Adjusting levels

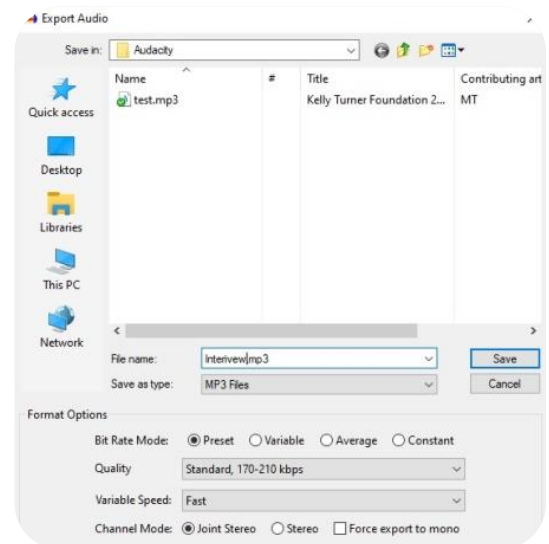


- The master level of all audio on a track can be adjusted with the -.....+ slider to the left of the track.
- To adjust the level *internally* of a piece of audio e.g. make a part of it louder, quieter, or fade in or out, do the following:
 - Click on the 'Envelope' tool (tool button with the blue line and triangular arrows).
 - Blue lines will appear at the top and bottom of each audio clip. Click and drag on the lines to create a point (a 'node') and adjust the audio level at that point.
 - If you want to adjust an existing node, place the mouse over it, and click and drag (it should turn blue).
 - If you accidentally create a node you don't need, delete it by clicking and dragging it quickly, and slamming it up to the top of the screen. This deletes it.
 - Remember, if you have very quiet audio on a track, you can increase the level of the *whole track* with the -.....+ slider on the left.

Saving

There are different ways of saving your work – it's important to understand the difference

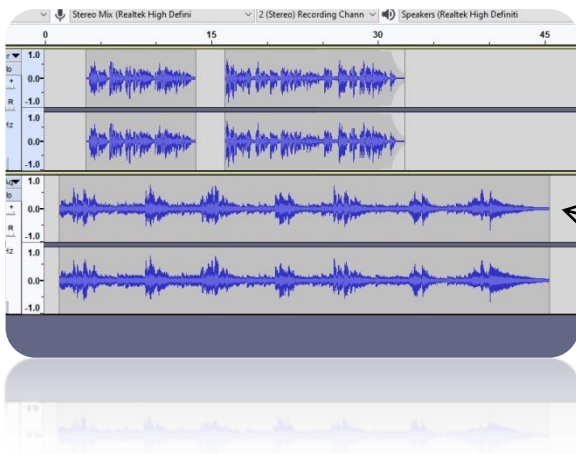
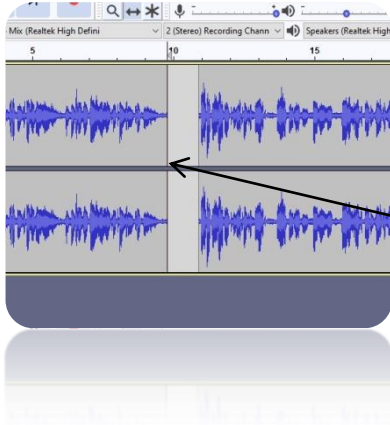
- At the end of your work (or when you want to take a break and come back to it later), it's a good idea to Save your work, as this will allow you to Open it and carry on at a later date.
- When you do a 'Save Project' on Audacity it saves a special Audacity file, called an "aup" file. This project file can only be opened in Audacity, and contains all the audio, and information about any edits / mixing you had done). A 'Save Project' is NOT saving the audio file you were editing. E.g. if you had edited a file called "interview.mp3" and then did a Save Project on Audacity, it would NOT save your edited version of "interview.mp3".
- To save your edited audio into a single audio file, you need to 'Export' it. To do this, File/Export. It will ask you where you want to save it – choose the location, and select the Save as Type as mp3. It will give you many other options for saving in a variety of formats, but the default format is fine for interview recordings.



Task #2

1. Open a piece of audio in Audacity – ideally a piece of speech you recorded on your portable recorder
2. If the audio is quiet, increase the gain on the channel
3. Perform several edits – remove some audio, ideally a mix of sentences and silence at the beginning and end
4. Save the project
5. Do an 'Export' to save your edited audio
6. Listen back to check it's exported correctly
7. Repeat the process with different audio, and this time use the Envelope tool to put fade ins and outs on the audio, or alter the levels internally.

Further editing tips



- To separate a piece of audio into several parts: Split a piece of audio by positioning the play cursor on the audio where you want the split, and pressing Ctrl-I. If you select a section of audio and press Ctrl-I, it will put a split at the beginning and end of the selection.
- After you've split a piece of audio, you can move each part to create a gap between them
- Normally, if you select a piece of audio and hit Delete, the selected piece will disappear and the audio to the right (on that track) will shuffle up to the left, to fill the gap. If you DON'T want it to shuffle up, do a 'Split Delete' with Ctrl-Alt-K (also in Edit menu).
- If you need to fine-tune the edges of a selection, hover over an edge until you get the 'pointing hand' icon, and then click and drag left/right to move the selection edge.
- You can place other audio, such as music, under your interview: Drag and drop the audio file onto the Audacity workspace, and it will open as a new track. You can move, edit, and change its levels to make it work as a music bed behind your interview.

This guide is produced by Academy FM Folkestone for the Careers Enterprise Company

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