STORYTELLING TOOLKIT

Recording

Smithsonian Institution

MUSEWEB FOUNDATION
This handbook will guide you in recording the stories of your community.

Both audio and video project recording tips are in this handbook. If you are recording a video project, remember that audio is a very important aspect to your video, so read all the audio sections as well. At the end of the handbook is a Recording Release Form template. Get everyone you record to sign either this form or a similar one to ensure that everyone being recorded understands how their recording will be used.
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There are many elements to sound that we don’t notice until we are trying to record a specific event. Below are tips to help you record your interview and voice over narration audio. Learn more about audio recording from B-side Radio: http://bsideradio.org/learn/recording-audio-in-the-public-radio-style/

1 Choose an appropriate recording location. Interviewees often want to meet at a local coffee shop, but the only time you want to record there is if you’re doing a story about coffee. It is best to talk to people in their natural environments or a location relevant to the story, so the sound under the interview advances the story (or at least doesn’t distract from it). Except, of course, when that environment is really noisy – interview them in a quiet spot then go to the noisy place for ambiance and to get them to show you around.

2 Position the mic. Hold or place the mic or other recording device fairly close to the person’s mouth. The best place to hold the mic is 3-5 inches away from their mouth. If you have a high-quality standing mic and you’re in a quiet environment, you can place it 6-8 inches away. Explain to the interviewee that it helps you get the best possible sound. Often when people say words that start with the letter P, the burst of air makes a popping sound in the mic. This is what we call “P-popping” or plosives. To avoid it, hold your mic slightly off to the side – out of their airstream.

3 Position yourself. If you are holding the mic, rest your arm on a table or against your torso. You don’t want to be holding your arm out in front of you unless you have to because it will start to hurt very quickly. Hold your hand steady. The mic will pick up everything: your fingers rubbing against the mic, tapping, rustling papers, cameras clicking, or phone notifications.
4 **Record a test.** Test your equipment before your interviewee gets there or while you are introducing yourself and your project, to make sure it all sounds right. Listen to the audio playback with headphones. Headphones help isolate the audio and you’ll be able to hear any problems better than if you listen with speakers.

5 **Set your levels.** For the best quality, set the levels on your recorder manually and as high as you can without having the sound distort because it’s too loud. This is something that you constantly have to think about. Some people speak more loudly than others. Some people are really soft and then get animated. Ask the interviewee to give their name and title in the beginning to set the initial levels, and pay attention to their volume throughout the interview.

6 **Be silent.** When you’re having a conversation, it’s natural to respond with an occasional “yes” or “uh huh.” But when you’re recording an interview, that’s a big no no. No one want to hear you saying “uh huh” in the middle of a sound bite. Resist your inclination to vocalize and instead tell the interviewee you’re listening with facial expressions. Smile, nod, scrunch your nose, just don’t vocalize.

7 **Dampen the sound.** When recording voice over narration, avoid the audio bouncing around the room by finding some way to focus the audio on the mic, rather than the walls of your room. Some people use foam boxes around the back of their mic. Others use pillows or record under a blanket.
Reading the Script

Reading a script for voice over narration is not as easy as you may think. Here are a few simple tips to help you create professional voiceover recordings. Learn more from “Can You Hear Me Now?”: [http://lpd.nau.edu/can-you-hear-me-now-tips-for-recording-your-best-audio/](http://lpd.nau.edu/can-you-hear-me-now-tips-for-recording-your-best-audio/)

1. **Make sure your script is easy to read.** Don’t try to fit your entire script onto one page in tiny font. Make the font large and double or triple space it. Record in a well-lit room that will make the script easy to read.

2. **Face the microphone.** This can be hard when you need to read a piece of paper on the table or held in your hands. And holding a script in your hands can cause unwanted noise in your recording. Tape your script or place it upright somewhere so you are facing the microphone.

3. **Avoid excess noise.** Your microphone picks up on everything. If you swivel in your chair, tap your ring on the table, someone walks in and shuts the door (even in the next room!), redo that audio.

4. **Stand up while recording.** You’ll feel more energized and be able to breathe better. If you do sit, don’t slouch. Sit up straight and keep your chin out. Don’t let it drop to your chest.

5. **Don’t ad-lib.** Odds are that you’ll have to do multiple takes. Sticking with the script lets you find a common edit point on re-takes.

6. **Practice.** It can make perfect sense on paper, but when you speak it, it doesn’t work. Read it, make edits, read it again, and again, and again. Knowing what you are reading will make a real of difference when you record.
**Create a conversational tone.** Pretend like you’re talking to someone rather than just reading a script. If you mess up, leave a noticeable pause and keep on going. You can cut the error out of the audio in editing.

**Stress vocal emphasis.** Pay attention to the most important piece of information within the sentence. Read a sentence aloud, then go back and read that sentence with different emphasis on different parts of the sentence. Did you notice how the focus and meaning of the sentence changed?

**Pay attention to inflection.** Much like vocal emphasis, inflection – the change in volume and tone of your voice – can change the way your information comes across. Inflection is also important in avoiding being monotone. Sound excited and interested. This will translate to your audience and help keep them excited, interested and engaged.

**Record silence.** By recording up to a minute of silence, you have a way to sample the ambient noise to filter it out later, or use it to smoothly transition into audio with different room and ambient noise.

**Mark your retakes.** If you do multiple takes, create a marker. Leave about 5 seconds of silence and then indicate what it is, like “section one, take two...”
If you can’t access any of the below equipment, you can record all audio on your smartphone and create your own dampeners and screens if you need them. Here is a list of basic audio recording equipment you may want to consider:

**Recorder.** The industry standard is a flash type recorder. You want to be able to adjust your record levels. You want to be able to plug in a microphone. And ideally, the recorder would also have a great built-in mic because sometime plugging in an external mic isn’t practical.

**Omni-directional microphone.** This type of microphone tends to record sound with a very warm quality, picking up not just what you’re pointing at, but some of the other sound around it. This is good for recording interviews in quiet places and for gathering the general ambient sound of a place.

**Unidirectional microphone (shotgun mic).** These microphones tend to be long and thin. They are very sensitive and pick up mostly the sound of what you’re pointing at. They’re great for recording interviews in noisy places and for gathering sound of quiet or distant things.

**Laveleer microphone.** Lav mics are extremely small, and are designed to easily clip onto the shirt or jacket collar of the speaker. This gives very close proximity to their mouth. It will take some time to attach the lav to your subject and run cables back to your digital recording device or setup a wireless system, so keep set-up time in mind if using this mic.
**Handheld microphone.** Handheld mics are large, designed to be seen but take no time to set up. This makes them perfect for a quick audio recording, where you may need to approach the subject and begin recording immediately in a busy environment. They are best used when placed very close to the chosen sound source, so microphone technique is important.

**Headphones.** The bigger, the better. Wear headphones at all times while recording so you know what you’re getting on tape. It’s best to use headphones that fully cover your ears.

**Sound dampener.** Sound from your voice reaches the microphone directly and then indirectly after bouncing off walls, floors and ceiling. That distance is enough for the sound to become out of sync and record a bit of an echo. Most people use foam tiles on their walls or place their microphone in a sound dampening box.

**Pop Filter/Microphone Screen.** A pop filter or pop shield is noise protection filter for microphones. It serves to reduce or eliminate ‘popping’ sounds caused by fast moving air on the microphone during recorded speech. It also keeps moisture off the microphone which can cause mold growth.

**Wind screen.** Wind on a microphone makes a rumbly distorting sound. Foam windshields work indoors to reduce noise, but are not good for outdoor recording unless there is very little wind around. For outdoor recording in the wind, get an outdoor windscreen known as a deadcat.
There are a lot of things to keep in mind when recording video footage. Below are a few tips to help you record your video project. Learn more about recording video from UC Berkeley: https://multimedia.journalism.berkeley.edu/tutorials/shooting_tips/

1. **Don’t talk while the camera is rolling.** When the camera is rolling it picks up all ambient sound, not just what you’re focusing on. And you won’t be able to separate the unwanted audio out in the editing process.

2. **Hold your shots.** Hold shots for at least 15 seconds before you pan, zoom or go onto another shot. That way you’ll be sure you have enough video of a scene to work with later when you do your editing.

3. **Don’t excessively pan and zoom.** Don’t constantly pan from side to side or zoom in and out with the camera. Instead start with a static, wide angle shot, and hold it for 15 seconds. Then make your move to zoom in or pan, and hold the next static shot for an additional 15 seconds.

4. **Get all the shots you need.** Make sure you get a variety of shots, even if you don’t think you’ll use them. They may come in handy. A-roll is the main subject of your shot, usually with audio like an interview. B-roll is the background video, often just video over which you’ll lay an audio track.

5. **Be aware of depth of field.** Be aware of ways to increase the sense of depth within your shot, since video images are inherently flat. If you’re shooting someone, try to include other objects in the background or foreground that give the viewer a sense of depth.
6 **Change angles and perspectives.** Look for interesting perspectives. Don’t shoot everything from eye level – it’s boring. For example, if you’re shooting a scene like people walking on a sidewalk, hold the camera low to show their feet moving, rather than just shots of their faces. Or if you’re shooting someone working at a computer terminal, take one shot from over their shoulder, then another that is a close-up of their hands and fingers using the keyboard and mouse, then a shot of their face looking at the screen. A good ratio is 50 percent closeups and extreme closeups, 25 percent medium shots, and 25 percent wide shots.

7 **Have people in your scenes.** Try to get people in your shots, which almost always makes the video more interesting. Don’t do a static shot of a building – include people walking in and out to animate the scene.

8 **Use tripods for steady shots.** Use a tripod to get a steady shot, especially if you’re shooting something that is not moving or an interview. If you don’t have a tripod or you’re doing a shot where you’ll have to move quickly, use something to steady your camera, like leaning against a tree.
Interview footage is often the main element of a nonfiction video project. It’s important to get it right. Below are tips to help you record your interview. Learn more about recording interviews from UC Berkeley: [https://multimedia.journalism.berkeley.edu/tutorials/shooting_tips/](https://multimedia.journalism.berkeley.edu/tutorials/shooting_tips/)

1. **Scout the location.** Physically go to the location ahead of the shoot. What type of lighting is there? Is there electrical power? Is there ambient noise? What other problems can you anticipate?

2. **Pack extra batteries and memory cards.** You don’t want the limitations of your batteries or memory to cut a shoot short, so bring plenty of both.

3. **Communicate with your interviewees.** You don’t want to find that your talent has worn a shirt that doesn’t work on camera. Send them an email with what to expect, clothing considerations, and contact information.

4. **Define a creative style for your production.** How will the interviews be lit? Will the interviewer be on camera as well? Will the subject look at the interviewer or the camera? Make sure the look is clearly defined and used across all interviews.

5. **Repeat the question in the answer.** Try to have your interviewee repeat the question in their response. For example if you ask, “What is your favorite color?” and their response is “Green”, it doesn’t give the editor much to go on. Instead a better response would be “My favorite color is green.”
Watch out for distracting noises. Don’t use a chair with wheels or that squeaks. Beware of nervous activity – like tapping fingers or jangling change. Stop your shoot, point it out, and then start shooting again.

Get multiple angles. Having at least two cameras will make editing much easier and more dynamic. For example, if your subject had to pause to sneeze you can cut it out by switching to the other angle in editing.

Shoot b-roll of the interviewee. Capture this footage at the start or end of the interview. Typical shots include asking the interviewee to nod on camera, or getting shots of them at their job or other relevant activity.

Don’t use the zoom function. Instead use care when framing and composing your shots and do any additional cropping and zoom work in the video editor.

Frame and compose your shots. Pay attention to your surroundings and don’t be shy about rearranging furniture, moving things on a desk, pushing plants out of view, or asking the interviewee to change positions so you properly frame the shot. If you’re having technical problems, stop the interview until you have fixed them.

Leave noseroom and headroom. Don’t leave excessive empty space above a person’s head – that’s dead space. Put a little room above a person’s head in a shot, but have more room below the person’s face – space you can use to add text in editing. If you’re shooting a person standing, get their entire body in the shot. And if the person is looking to the side, add space in the direction in which the person is looking.
If you aren’t able to access any of the below equipment, you can record all video on your smartphone. If you are recording video on your phone, you will need an external microphone for audio recording the scenes you are shooting. Here is a list of basic video recording equipment you may want to consider.

**Video Camera.** What camera you choose depends on your budget, the type of shooting you’re doing (static, stealth, etc.) and where you plan to showcase your film (web-only, theater, broadcast). You can shoot on anything from your smartphone to a DSLR to a top-of-line camera such as the Red Epic.

**Tripod.** A necessary piece of equipment to keep your footage looking steady and professional. Get a tripod with a fluid head for smoother looking pans.

**Camera Light.** Sometimes a nice pop of light from the camera can help fill in shadows. This is a nice accessory especially in a shoot where you might not have time for a full 3-point lighting set-up.

**Three-Point Lighting Kit.** You only need this if you’re planning a lot of shooting inside. Creating a well-lit scene usually involves a 3-way lighting set-up.

**Microphone.** You cannot depend on the camera’s microphone. They aren’t strong enough. See the page on audio recording equipment for other options.

**Boom Pole.** A boom mic set-up comes in handy to capture audio from a group interview, crowd scenes or any situation where you need to gather professional audio quickly.
**Audio (XLR) Cables.** If you plan to use a professional audio set-up with your camera, you’ll need XLR cables to go from your camera to the mic.

**Light Reflector.** A reflector is a tool that reflects existing light. Their primary purpose is to fix shadows. If you are shooting outdoors during the day, a reflector can be used to fix odd shadows on the face, or prevent a backlit subject from becoming a silhouette.

**Lenses.** There are many options. The standard lens is among the easiest to use, as it provides a similar viewing angle to the human eye. A wide-angle lens capture more of the scene than the human eye can focus on. Telephoto lenses are designed to zoom in on very far-away subjects. Macro lenses are specialized lenses that excel at close-up scenes. A prime lens is the opposite of a zoom lens: it has a single focal length, so they can’t zoom, but because they have fewer moving parts, they often produce higher-quality images.

**Extra Batteries.** Don’t get caught without enough batteries out on a shoot.

**Memory Cards.** You’ll need somewhere to record the footage you’ll be shooting. One memory card will not be enough. They can fill up quickly.

**External Hard Drive.** A portable hard drive comes in handy if you plan to do a lot of shooting in the field and need to offload your footage from your camera’s memory cards.

**Camera Bag.** You need something sturdy and weatherproof to put all your gear in.
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If this release is obtained from a presenter under the age of 19, then the signature of that presenter’s parent or legal guardian is also required.

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Laws pertaining to the recording of sound differ from state to state. Best practice for recording conversations, and for the purpose of this project, is to get the consent of all parties. For more information on your state’s laws on recording conversations, you can reference the Reporting Committee’s Reporter’s Recording Guide: http://www.rcfp.org/reporters-recording-guide.

Use the form on the opposite page (page 16) to gain written permission from anyone you record – audio or video – for your project.