

Audio Capture and Editing

Presentation for **STAND**

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Introduction



Objectives

Tips to improve audio quality via

- Capture
- Editing

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Introduction



Why is audio important

- Provides additional information
- Improves accessibility
- Sets tone/emotion



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Writing the Script

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Writing the Script



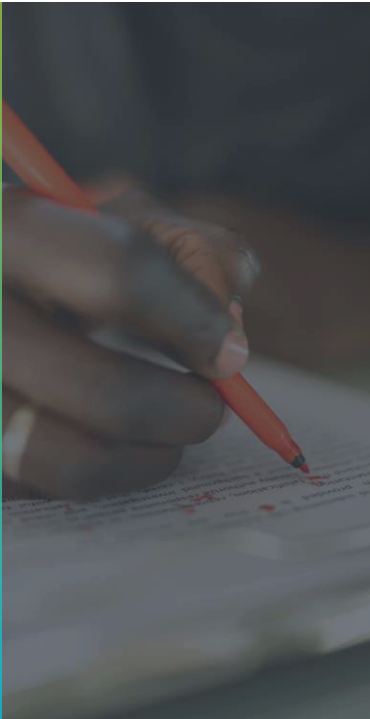
Why do we need a script

- "Roadmap" to voice over
- Allows us to convert from written to spoken English



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Writing the Script



Written (Formal) English

- Longer, complex sentence structure
- As a rule, does not use contractions
- As a rule, does not use slang or colloquialisms
- Has punctuation
- Rigid

Spoken (Conversational) English

- Shorter, simple sentence structure
- Almost always uses contractions
- May use slang and colloquialisms
- Uses tone in place of punctuation
- Approachable

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Writing the Script

Examples

Contractions

- F Unfortunately, the team *could not* replicate the results.
- I Unfortunately, the team *couldn't* replicate the results.

First-person Pronouns

- F The students *were asked* to fill out the questionnaire.
- I *We* asked the students to fill out the questionnaire.

Proper Verbs

- F It was something the protestors could *endure*.
- I It was something the protestors could *put up with*.

Excerpted from Language Tool Insights | *Understanding The Difference Between Formal and Informal Language in Writing*
<https://languagetool.org/insights/post/formal-vs-informal-style/>

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Writing the Script

Practice, practice, practice!

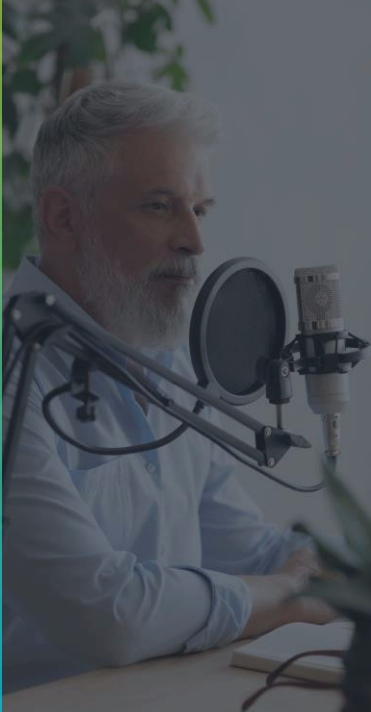
- Read your script out loud several times.
- Try different styles/tones of speaking and find your cadence.
- Diction and enunciation.
- Identify words you may have trouble pronouncing.
- If you can, change words or phrases that you find challenging to pronounce.
- Pacing.
- Work out where your pauses are located.
- Breathe normally and note where you take big breaths. You might need to break the sentences up if you feel you are running out of air.

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Audio Capture

E N V I R O N M E N T

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Capture Environment

Distracting environment sounds:

Ambient noise
Noise associated with a given environment.

- Voices
- Air movement (HVAC)
- Computer fans
- Footsteps

Noise pollution
Noise that is loud and disruptive.

- Shouting
- Loud laughter
- Mowing
- Traffic
- Dogs barking

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Capture Environment



Additional distracting sounds:

Clothing

Be aware of buttons or zippers that may tap against the edge of the desk or chair.

Jewelry

Be aware of any jewelry that can tap against desk or chair or jangles (such as charm and stacked bracelets.)

Mouth and nasal sounds

Echo

Furniture movement

Bumping desk, rolling and creaky chairs.

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Capture Environment



Capture Space

Give yourself enough room

You should have space to place your script and be able to turn the pages easily.

If you are reading from your display, make sure you're able to view your script on the screen while speaking into your mic.

Have needed items in reach such as pens for quick edits and water.



PROTIP

Don't worry about capturing a "flawless take." You can always edit errors in editing. Rather than stopping the capture, take a short pause and then begin speaking again.

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Microphone (Mic)

USB

All in one – no additional hardware required (plug and play.)
Blue Yeti, Shure MV7, Jlab Talk, Logitech for Creators X, Movu UM700

XLR

Requires an XLR cable that is plugged into an audio interface.
Cannot be plugged directly into a computer. ShureSM58, Rode NT1-A, AKG P420, HyperX ProCast, Audio-Technica AT2020

Headphone mic

Any mic attached to a headset, less superior to USB and XLR mics. *Do not recommend for voice over.*

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Microphone Technique

Proximity: Your mouth should be 6" away from the mic, generally the width of your hand (*note that pop filters can change proximity.*)

Voice Level: Speak at a consistent level.

Pop Filters: Pop filters help to soften splotives and should be placed 1-2" from the mic. When you speak you want to be 1-2" from the pop filter.

Read the User Manual: Not all mics are created equal! Be sure to understand the settings and positioning of your mic.

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Audio Capture Hardware

Blue Yeti Microphone



- Stereo**
Wide capture range (recording music)
- Omnidirectional**
Captures sound from all around mic (capturing ambient sound)
- Cardioid**
Captures sound directly in front of the mic (voice over, podcasts, single musical instrument)
- Bidirectional**
Captures sound at front and back of mic. (two-person interview, musical duet)



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Audio Capture Hardware

Blue Yeti Microphone



Do not speak into the top of the microphone

Speak into the front of the microphone above the "Blue" logo.

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Before Capturing Audio

- Don't record if you are ill.
- Avoid consuming dairy products, fruit juices, chocolate, and spicy, fried, or salty foods.
- Warm your voice up by reading through your script out loud at least twice.

NOTE: Talking to co-workers or on the phone is not a substitute for warming up your voice.



PROTIP

Once you click **Record**, wait at least 5 seconds before beginning to speak to capture the ambient room sound. This captured section of ambient sound is helpful to have when editing.

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Audio Capture & Editing

S O F T W A R E

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Audio Capture Software

Audio Capture & Editing Software

Free Software

- Audacity
- OceanAudio
- WavePad

Paid Software (licensed and one time purchase)

- Adobe Audition
- Avid Pro Tools

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Audio Capture Software

Basic Audio Terminology

Input audio going out of source (such as a mic) and into the system (such as a computer)

Output audio going out of system (such as audio coming out of a speaker)

Volume loudness of processed audio from the output device

Gain loudness of unprocessed audio from the input device (mic)

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Audacity Interface

Audio Capture Software

The screenshot shows the Audacity software interface. At the top, there is a menu bar and a toolbar. Below the toolbar, there are two audio tracks with blue waveforms. At the bottom, there is a timecode display showing '00 h 00 m 00 s'. Three green arrows point to the toolbar, the audio tracks, and the timecode display.

Tool bar →

Audio tracks →

Timecode →

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Audacity Interface

Audio Capture Software

Audacity Tool Bar

The image shows a close-up of the Audacity toolbar. It is divided into three sections: Recording controls (play, stop, record, previous, next), Editing tools (select, copy, paste, delete, undo, redo), and Setup tools (audio setup, share audio, volume, pan, solo, mute, and channel faders). Three green arrows point to these sections.

Recording controls

Editing tools

Setup tools

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Audio Capture Software

Audacity Interface

Audacity menu | recording controls

The image shows a horizontal toolbar with seven buttons. From left to right: a pause button (two vertical bars), a play button (green right-pointing triangle), a stop button (black square), a rewind button (black left-pointing triangle), a forward button (black right-pointing triangle), a record button (red circle), and a loop button (square with a circular arrow). Labels with arrows point to these buttons: 'Play' points to the play button, 'Rewind' points to the rewind button, 'Record' points to the record button, 'Pause' points to the pause button, 'Stop' points to the stop button, 'Forward' points to the forward button, and 'Loop' points to the loop button.

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Audio Capture Software

Audacity Interface

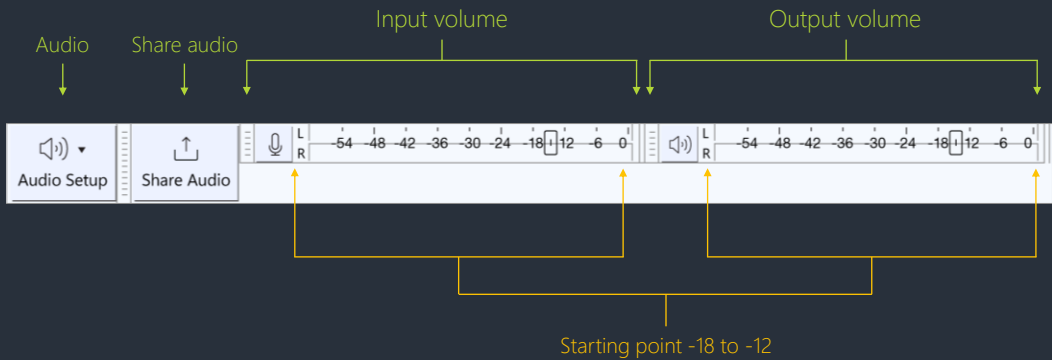
Audacity menu | editing tools

The image shows a grid of editing tools. The top row contains: Selection (I-beam icon), Envelope (line with two dots), Zoom in (magnifying glass with plus), Zoom out (magnifying glass with minus), Fit selection (magnifying glass with selection rectangle), Fit project (magnifying glass with selection rectangle), and Zoom toggle (magnifying glass with double arrows). The bottom row contains: Draw (pencil icon), Multitool (starburst icon), Trim (wavy line with scissors), Silence (wavy line with vertical bars), Undo (curved arrow pointing left), and Redo (curved arrow pointing right). Labels with arrows point to these tools: 'Selection' points to the Selection tool, 'Envelope' points to the Envelope tool, 'Zoom in' points to the Zoom in tool, 'Zoom out' points to the Zoom out tool, 'Fit selection' points to the Fit selection tool, 'Fit project' points to the Fit project tool, 'Zoom toggle' points to the Zoom toggle tool, 'Draw' points to the Draw tool, 'Multitool' points to the Multitool tool, 'Trim' points to the Trim tool, 'Silence' points to the Silence tool, 'Undo' points to the Undo tool, and 'Redo' points to the Redo tool.

■ Indicates tools used most often

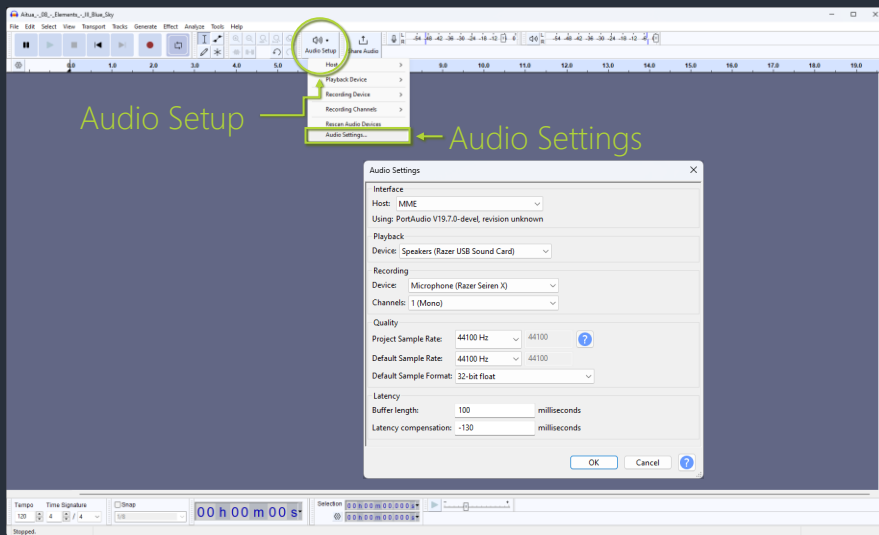
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Audacity menu | setup tools



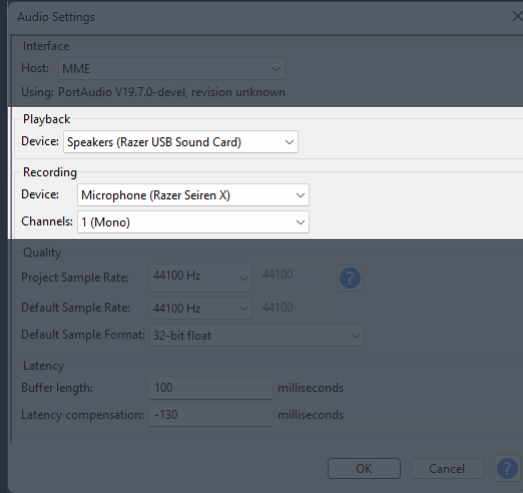
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Audio Capture Setup



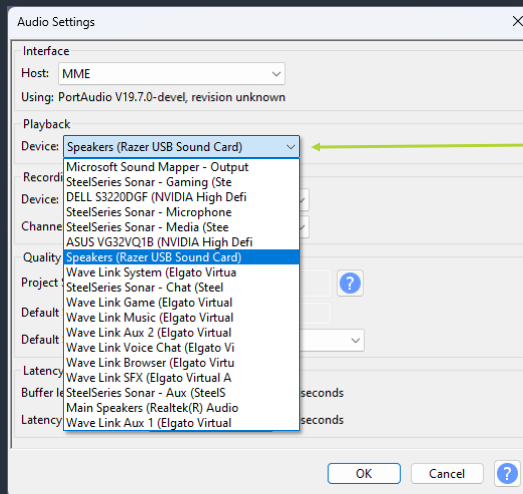
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Audio Capture Setup



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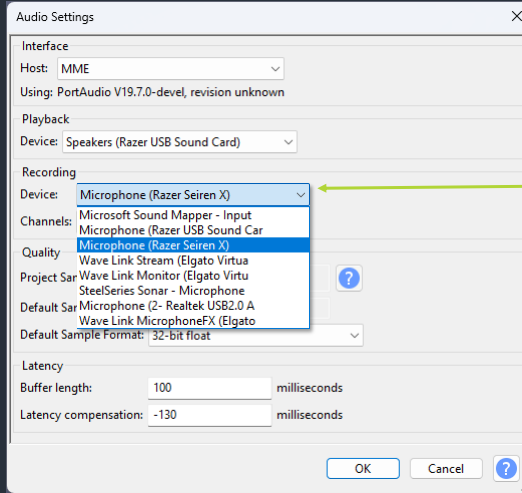
Audio capture setup | playback



Playback device (output)

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Audio capture setup | input



Recording device (input)

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Let's Edit!



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Why We Edit

The process of editing audio can be subjective and is dependent on capture quality and intended use. While there is no "one size fits all" editing process, all audio can benefit from the following basic steps:

- Remove unwanted takes.
- Tighten timing (removing dead air.)
- Reduce/minimize ambient sound.
- Improve voice quality by compressing high and lows.

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Unedited captured audio



Audio edited with Audacity

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Basic Workflow

- Remove unwanted sections/takes/dead air and shorten extended pauses.
- Apply sound editing filters
 - Noise reduction
 - Compressor (brings highs and lows closer together)
 - Limiter (reduces any residual amplification/distortion issues in highs and lows)
 - Equalizer | EQ (boosts and/or cuts specific frequencies)
 - Normalize (sets volume of audio files in relation to the loudest part)