Recording podcasts

Audio content and podcasts are most suitable for educational purposes if your educational content does not rely heavily on visual representation. Audio contributions can be accessed and played by students easily and with any device. You can provide audio contents on ISIS/moodle as well as on streaming platforms.

On a desktop PC

A notebook or desktop PC is one of several technical equipments that enables you to record a podcast. There is, of course, a broad variety of soft- and hardware. We recommend the following equipment based on our work experience with these tools. You can borrow this equipment (subject to availability):

- How To Mitigate Problematic Room Acoustics

Technical equipment

Choice of USB microphones suitable for podcast production:

- Røde NT-USB Mini: We recommend to also attach it to a microphone arm (Røde PSA-1).
- Mackie EM-USB: Includes a height-adjustable tabletop tripod.
- Blue Yeti: Allows for interview situations, adjustable sound modes (picks up sound from all sides of the microphone).
- Headsets may serve as an equally suitable solution. **To record sound with internal audio devices is not recommended, though.**

Software

- Audacity: free-of-charge and easy to use audio editor. See also this Manual (Audacity). We recommend to use an external microphone: A poor audio quality will impede your students' ability to focus on the content. Audacity is not compatible with the current **MacOS Catalina**. This issue is known to the Audacity developers, they are working towards a solution. Meanwhile, have a look at GarageBand (Tutorial, Youtube). This software is preinstalled on MacOS Catalina.
- Ultraschall (German)
- GarageBand (Mac, free-of-charge) or Logic ProX (paid solution, Mac)
- Adobe Audition: paid plan, license available (Adobe Creative Cloud).
- Auphonic: automatic audio enhancement, no editing software.

With a smartphone

With a smartphone you may achieve good quality in audio recordings, too. If you intend to use a smartphone as a recording device, attach an external microphone. The internal microphone is built for mere voice messaging and will not be sufficient. There is a broad range of microphones available on the market.

- The Lavalier microphone Rode Smart Lav+ offers a good price-quality relationship, you can find the according app in the App store.
- The Sennheiser ClipMic digital is more expensive and of high quality.

It is also possible to record an interview situation with your smartphone. The following equipment may serve this purpose well:

- Two Lavalier microphones
- Røde Reporter app
- Audio interface Røde SC6-L (iOS) **or** adapter SC6 (Android)

Postproduction and inserting additional audio data such as an intro or music requires an editing software such as Audacity.

With a fieldrecorder

A fieldrecorder provides another good option to record a podcast. Fieldrecorders are most flexible. The device can be applied quickly in various settings: exterior shots and interviews of opinion leaders or passerbys as well as audio captures at events. Fieldrecordings are saved on an SD memory cards.

To record multiple voices or the voice of the podcast moderator, you can attach additional microphones more suitable for voice recordings.

Not every fieldrecorder is suitable for podcasting. The following can be recommended, though:

- Zoom H6: 4-6 speakers, exchangeable internal microphones. You may add a directional microphone.
- Zoom H5: 2-4 speakers, exchangeable microphone capsule.

To attach additional microphones to these fieldrecorders, you need to connect them with **XLR cables**. The microphones should therefore also have an XLR connector. USB microphones will not be suitable for this purpose. A good match is the Røde PodMic along with the Røde PSA-1 Tisch-Mikrofonarm, a tabletop microphone arm.

Postproduction: Enhance your recordings

Prior to every postproduction process, leave your data aside to hear it thereafter from an entirely new perspective. This may be beneficial to your postproduction process as your ears can get fatigued over time.

In postproduction, the following methods may be of help to enhance voice recordings:

- parametric equalizer (PE)
- Compressor (multi-band compressor)
- noise removal (tutorial software: Audacity)

Hosting and Publishing

limited access

Upload your data on ISIS/moodle (password protection).

public audiences

- **External hosting**: After hosting your data externally (paid service) you can display the content on your own website or upload it to an audio streaming provider of your choice, e.g. Apple iTunes or Spotify). The latter provide their service free-of-charge. If you choose a hosting service provider, make sure to check their data protection compliance (e.g. servers in Germany, accordance with German data protection regulations) and compare prices as well as contract details. Audio streaming service providers only link to your data and update any changes you may add on your hosting site.

- **Hosting at TUB - conventional webspace**: First, you need to apply for webspace at TUB: Online portal > „IT-request" > apply for a web presence. You may also build your own website there, e.g. based on a content management system like Wordpress. ZECM will create the according directory automatically. Secondly, you can access this webspace with TUB AFS. Thirdly, you can upload your podcast audio file and the according image (300x300px) to folders created in this directory. In addition to these data, you will need to include a podcast feed (an XML-file that is composed of enclosure tags that frame your podcast information): Tutorial XML file creation. You need assistance? Please let us know.

- **Hosting at TUB - videoserver ISIS/moodle**: Firstly, apply for a server location on the videoserver. Secondly, apply for videoserver access. You need to be registered as a trainer in the according moodle course (course ID required: copy it from your browser by opening the course - it is indicated as 'id='). Please apply for a server address that allows for **public access** so that the access to your podcast is not automatically limited to your course participants. Thirdly, you need to include the server on your personal computer so that you can upload data as outlined in the above section on **Hosting at TUB - conventional webspace**. This option is a workaround. We will let you know as soon as there is another solution.

After all the above has been arranged and your data is located on webspace, you can forward its URL (Unique Resource Locator) to your preferred audio streaming platforms. The URL locates your podcast feed. Any changes to data in this location will automatically be synchronized in each audio streaming service.