

ASSOCIATION OF MIDWEST MUSEUMS
TECHNICAL WORKSHOP 3:
PODCAST EDITING AND COLLABORATIVE PRODUCTION MODELS
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>> : Hello and welcome to the final technical session for Module 6, Podcast Editing and Collaborative Production Models. This webinar is brought to you by the Digital Empowerment Project, a nationwide initiative organized by the six U.S. regional museum associations and dedicated to providing free, self-paced training resources for small museums. This inaugural series of online training focuses on digital media and technology topics and it is made possible by funding from the Institute of Museum and Library Services. My name is Dan Yaeger, Executive Director of the New England Museum Association, my pronouns are in the he/him series and I am your host for today's program. In this era of virtual meetings when digital spaces may substitute for our physical sense of place it is important to reflect on the land we each occupy and honor the indigenous people who have called it home. I'm speaking to you from Swamp Scott, north of Boston, the historical homelands of the Massachusett peoples. Wherever we are each located, let us acknowledge all indigenous nations as living communities, their elders both past and present, as well as future generations. We at the Digital Empowerment Project recognize that our organizations and those of our members were founded within a colonizing society which perpetuated the exclusions and erasures of many native peoples throughout the United States and beyond.

We ask you to reflect on the place where you reside and work and to respect the diversity of cultures and experiences that form the richness of our world and our profession. Thank you. Now just a couple housekeeping notes before we get going. If you have questions or comments during today's webinar please use the chat box and we will relay your thoughts to the presenter toward the end of the program. We will address as many of your questions as time allows. But if you have additional questions after the program we suggest that you visit our website museum-hub.org and connect with our online community forum. I would like to acknowledge today's ASL interpreters and let you know that captioning for today's program is embedded in a box just below the YouTube player on our website with controls to adjust your experience. Following today's program, you will be sent a link to a satisfaction survey. Sharing your experience through the survey will only take a few minutes and will greatly improve our

work so we would be grateful for your opinions.

And last, please follow us on social media to be aware of future programs. Links will be posted in the chat. Now it is my pleasure to welcome, once again, Hannah Hethmon as our presenter. Hannah is the Owner and Executive Producer of Better Lemon Creative Audio, a production audio company focused exclusively on museums, history organizations, and cultural nonprofits. She is the author of the popular handbook your museum needs a podcast: a step-by-step guide to podcasting on a budget. She is the three-time winner of AAM's news awards for podcasting and her first podcast has been selected for collection by the U.S. Library of Congress. Hannah lives and works in historic Greenbelt, Maryland. Hannah, thank you for being with us here again today. Take it away.

>> : Okey-dokey. Webinar three. I did not change the number on my slide, but I promise we are on webinar three. Today we are going to talk about a few things. Software and tools for editing. I know we like the technical stuff here and we want to get those practical tips. We are going to talk about editing workflow because this is a huge thing. A lot of editing software honestly -- I'm not just saying this because this is what I do, it is not too hard to figure out and learn. But getting your workflow correct is where you will prevent yourself from hitting balls. We are going to talk about principles of great editing, kind of some high view, what should you cut, what you should not cut, how you should be approaching editing your audio. We will talk about where to find music and sound effects. And how and when to outsource editing and production and as part of that how you can kind of create a more bespoke arrangement there that the traditional brief that someone executes and brings back to you without your involvement.

Let's start by talking about editing tools. The first editing tool, this one I think was sent by the angels to people who want to do podcasting without being audio engineers. So auphonic is a website -- actually, I am on this tab so I'm pretty sure I can just show you auphonic. I hope you're seeing auphonic right now and for pennies on the minute you

can upload your audio and you can see the top -- the bottom one here is the original audio and then auphonic will basically do all of your sound engineering for you. It will level it, do your noise removal, and all of that and it is a very simple tool to use. So this is the -- this is what you have to fill out if you want to do with auphonic. And the only thing that is really not included is to check noise and hum reduction. You will put your podcast automatically at negative 16 LUFS volume. I don't really understand LUFS as a loudness measurement, but that is how loud your podcast should be. You want to make sure that your podcast is consistently loud, consistently volume across the episode, and that it is loud enough that when someone is listening in the car, listening as they are outside or walking they don't get all the way to the top of their volume and realize they still cannot hear your show. That is a problem. So auphonic is a very cool tool. The pricing is again pennies. It is a really tiny amount of money and this will help you get your audio in as good a shape as possible before you start cutting and pasting and putting it where it needs to go. I will go back to my slides here. I recommend everyone run their idea through auphonic before they start editing. That will save you a lot of time messing with tools and stuff in your platforms. Then I'm going to talk about a few different digital audio workstations. So DAW. So some tools you can use for editing your audio, cutting, pasting, getting it in the order you want it, getting it to sound like what you want.

We will talk about audacity, GarageBand, Hindenburg journalist, and then Descript, which is a kind of hybrid tool. I will go back here and I'm going to stop sharing right now and go into the actual tools to talk about them each for a few minutes. So I am stop sharing now and I am going to go share -- give me a second here. Entire screen. Okay.

So now we should see audacity. So audacity is a free open-source editing platform. A lot of people like this or have liked it because A, it is free. B, because it is open source there's a huge community of people who use it for all kinds of things. So if you want to learn it this is what I started editing on. It is not necessarily my favorite now. For reasons I will explain. But if you just go into YouTube and type audacity basics you will

have an endless supply of tutorials on how to get started on audacity, which is what I did when I first started podcasting.

And there's an open-source wiki as well and if you want because so many people have used it for so many years, every version is fairly similar, anything you will encounter you can probably YouTube it and someone will have done a demo on how to do it with audacity. So you can see it is not too complicated. There is a little bit of a learning curve. Things aren't always so self -- aren't always obvious on here. You can see these tools at the top right corner are kind of odd symbols. But this is kind of what an audacity workstation looks like that you can see here I have some audio on the top, I have some music in the second track here and I could zoom in and out to take a closer look at my audio here. And then I will be able to go in and cut and paste things. Through here which is kind of the basics of editing audio. Is mostly cutting things out that you don't want and moving things around.

Busy with the waveforms looking there. Audacity again can be a little clunky to use. It's destructive which means once you delete some audio like let's say I take this section here and I delete it I can hit command Z or control Z to undo but short of that your undo button it is more or less destructive which means that audio is more or less gone. So if I get 25 minutes into editing and I realized that audio is no longer there but I need it I have to reimport this audio file and find it again and so on. So it can be a little scary working with that and you can kind of mess it up a little easier.

So that is audacity. The next one I want to show you is built into anyone who has a Mac and that is GarageBand. And GarageBand is also a free tool so if you have a Mac, whether a desktop or a laptop, you can use GarageBand. You can see it is a little sleeker in look. I think it is mostly designed for people who are making music but the simplicity and the freeness of it does not mean that it does not work pretty well. I can't truly demo anything because I don't use GarageBand. But I know a lot of people who are really happy with it. It is fairly simple to use. You can see tracks, tracks, you can add another track. Adding another audio track. Here. And I could add my other thing

there. I can cut and paste just like with any other tool. So GarageBand is a great free one to use. GarageBand again there's going to be tons of tutorials on YouTube or GarageBand should have their own tutorials. They have a little how to learn when you first log in like how to use tutorials that you can kind of play with those templates as well. To get the feel for how it works. So Audacity and GarageBand are free tools. Now, the other tool I want to show you is my favorite. Hindenburg Journalist. And Hindenburg there is a few different versions and packages you could buy. Sometimes you can rent it. Basically you are going to think about spending \$100 and then you can get Hindenburg.

And I think if you are planning on doing a podcast it is well worth it to invest. You will save time that you would spend learning Audacity. So this is a project in Hindenburg for me and you can see I have all of my tracks. Here's a particularly complicated one. It is a nondestructive editing software. So let me actually zoom to the end here. What I really like about Hindenburg is it's the only one designed for telling audio stories. Versus music. Everything else is primarily music and the secondary is audio and radio stories.

But Hindenburg has this clipboard on the side where you can import your files and then you can also clip your files in here and move them back over here. So Group 3 right in the middle here, this is where I have organized clips of narration. So I can change and rename all of these bits and that will help me keep track of all of the different parts of my story. So it is really, really thinking about audio that has a text, that has a speech component. So I could pull this over here, for example. And what is great about it being nondestructive is sorry it is a little jumping around a little confusing here let me get back to that. So let's say I cut out this bit right here in the middle. Then I am working and so on and 20 minutes later I'm listening to this playback and I realize I have cut that too short. I can just grab the end and pull it back out. To whatever the original audio I imported into the software is.

No matter how many times I do it, no matter how many changes I make, to the software,

if I have gone through and I have done something crazy with all of this I can fade in, fade out, it is very intuitive in that you grab the edges and move. So there is a kind of, it makes sense. I can still go, you know what that was all wrong, pull it back out here is my original audio. So that is one of the things I really like about Hindenburg. It is very simple. You can see up here, here are your main tools. There's really not that much you can do if you're making music this would be a nightmare. Because there's not that much you can do. But because it is designed for text-based things -- and want to break that up, everything is label. Set best part. So everything is labeled, I can label this best part, it helps me to keep track of everything and it's really simple to use and if you run everything through auphonic before you put in here you won't need to do anything else afterwards. You can clean it up and export it.

I use Hindenburg for almost everything that I do. So I am going to go now back to my slides. No, sorry. I am not going to go back to my slides. I'm going to go back to the entire screen and show you one more tool. And the other tool is Descript. Now, this is something that is new and totally different. Because while Hindenburg is an audio editor that is designed for audio that is spoken audio right, audio storytelling, radio, it is made for radio people. Descript is a platform designed to edit text vocals, right, edit narrative stories like speaking using the text so instead of you see down here, here is my audio instead of using cutting and pasting here I can simply highlight the text and it will automatically cut out you can see right here if I hit backspace it will automatically cut out that word. So this is from a project I'm working on with the archives of American Art, this episode is already out, so the podcast articulated. Now, Descript is really, really, really good for organizing your story and putting it together. So you can see all of these sections you can drag, you can take this section here and drag it out now it's not letting me drag sorry I think it is the setting I am on. But you can put together and import all of your files and then pull them right here and it will automatically transcribe them. And then you can just cut things out as you want just by the same as you would editing text in a Word document.

So it is a really familiar way and if you're working with something where you're looking at

the text it is a really easy way to think about it and organize your project. Now, they do have a lot of new tools as well for cleaning up your sound or doing your entire podcast in a Descript. I like to then export it and clean it up a bit in, sorry bouncing back and forth between these things, I hope this isn't making anyone dizzy, I like to then export it and clean it up in an audio editor. Another audio editing platform but that is my preference. There's lots of people who make podcasts entirely in Descript. So you can use Descript either to organize your story, put your story together and we will talk a little bit more about that a second or you can use Descript to do your entire podcast and especially if you are moving around a lot of parts or if you are someone who really thinks by seeing the text in front of them this is a great way to go. I am also have recommended this to the London Metropolitan archives I work with in London and they have been using this and have been really happy with it. I think a lot of museum people have found it, we are all used to creating documents and typing up and organizing ideas in text so in that way Descript can be a really, really, really helpful tool.

Going back to my slides. So we just talked about Audacity, GarageBand, Hindenburg Journalist, and Descript. Now of course there are also lots of other tools like Adobe Audition. Like ProTools. Like logic pro. These are much more advanced audio -- audio tools so these are a bit of a -- they can be a bit tough to learn and not necessarily intuitive. But if you already know how to use Adobe Audition for something for example if you already make music or you already do some kind of production and that is the tool you already use, go for it. If you are already using audacity and feel comfortable there, use it. If you are already using something else to edit, use it. It is really about again like I said in the other webinars it is about results. If it sounds good in the end, it does not matter what you use. Don't feel like you have to use something fancy. Just because that is what someone else says. If it is working for you that is fine. But those are some of the tools that I might recommend you take a look at. Again, Hindenburg journalist is my favorite. And Hindenburg has a really, really excellent set of tutorials on, Hindenburg has a really, really excellent set of tutorials on their website so if you go on there you can download, do a 30 day free download trial and then you can if you just watch through all of their little tutorials it's like how to do every little thing and then

practice trying a few of those things and I think you'll find that it took me even a few years ago it only took me a day to learn Hindenburg. A day of playing around I think we get anyone who has any sense for this kind of up and running.

Okay. So those are some tools and if you have questions about those make sure to put those in the chat and the moderators will get those to me at the end. And let's talk about editing workflow. So the order. The first one I talk about, how audio editing, there are kind of two ways of approaching it. Kind of cutting down to the story or building up the story. So if you've got a simple interview episode and it is just one person interviewing one person, question, maybe an intro and an outro at the end, editing that interview can mean more like whittling down something like this image of wood whittling down to what you want left. So you go through and you will cut and you will cut until it is what you want. If you're building a more complex narrative or documentary episode instead what you might be doing is taking clips from different interviews and different bits of narration and putting them in order how you want them and then once you have them in order clean them up and make it into a smooth finished product just like so the image of the cutting board on the end, where you are taking multiple pieces of wood and trimming them down to the size you want putting them all together and then finishing it all off once you have it where you want it.

So I'd like to have two kind of metaphors just to conceptualize the two different approaches you can do. Again, on the left a simple interview. On the right if you have more you are working with. So it is kind of a different approach based on the type of episode you are making. So what I like to do is, first things first, I have my audio whether it's a single interview or whether it is 15 interviews that I am cutting down to one episode. Get a transcript. You can use TEMI, it's like 15 cents a minute. Or Rev if you can afford to pay a bit more, I think like 1.25 a minute or any other transcription, Otter.ai...everyone, everyone has their favorite transcription service that uses something else, get a transcript and have it so that you can work side-by-side because with video you can see what you're editing as you go you can like scroll through your shots or your frames. With audio all you're seeing is this waveform the whole way so it

is really important to have a visualization of the story and that way if you're thinking do I need to cut this out you can scroll down to see what else did I say and look for things and it just really makes it easier to work side-by-side with text and audio.

So once I have a transcript of all of my audio files I then process all of my audio files with Auphonic so we talked about in the beginning that is that website Auphonic.com and then make sure that they are all labeled and organized in a specific file. Where you want to work on your project on your desktop or your computer. This is really important. You may think I will remember which file I have but you won't and you will lose things. So really, really make sure things are organized and labeled. At the beginning. This is really important. Then once you have that, you're going to open up your transcript side-by-side with your editing software. And this is the kind of basic workflow that I would use for either a simple interview podcast or a more complex documentary narrative style show. Then if you are doing a single interview the following steps would be or maybe an interview with two or three people with just the interview and the questions back and forth one continuous conversation.

Is with each speaker on their own track, I have shown you, on all of these you can do different tracks. Go through get them all roughly lined up right in order then you go through making any content cuts so this is this sentence that sentence we are going to cut out this question. I want to cut out this word that they said that I don't want. I want to end the interview two minutes earlier than the audio ends. And so on. So you have these big decisions on what is being talked about and where. And any obvious fine edits. So coughs, long pauses, et cetera. So we are going through and we are doing -- to go back to our woodworking example, I don't woodwork, I am making this up, we do our first layer of sanding, right, the rough first pass over to get it in the right, in a decent condition.

Once you go start to finish like that, I like to go back and go through doing fine editing. So breaths, pauses, little noises, the really little, get as perfect as you want or don't. From the end. The reason I like to do that is because if you try to do it all at once it is

hard to focus on the content and the flow of the conversation. And also if you're focusing on the flow of the conversation and what is being said you might miss a lot of these fine details that would be annoying when you listen back as a listener.

So I like to do them one and then two so going back in layers, then I'm going to add my intro, outro narration if I have it and then music on separate tracks clean those up make sure they are ready to go then once everything feels like it's in order and it has been edited I like to listen once more. But first I export it so I can listen in iTunes or on my phone or some headphones just to listen to it in a different environment and make sure that it sounds the way I want to and then take any notes or stop and fix things as I hear them.

And then if you have made any big changes again export and listen once more through. And that is just an example of how a simple interview would be set up in Hindenburg. So you can see up top there is a track for my narration which I don't have in this little example here. Then there is the interview and the questions and then you can see the music on the bottom, so you can see all of the little cuts where I've made small edits and then you can see the big content cuts or where each section stops and starts.

Not too crazy I hope. So then going back if you are doing a narrative audio documentary what I like to do is have all of my separate interviews transcribed in separate documents. And then as I choose clips to cut into my story I cut and paste them into a master script and transcript. So what you will do is you will rough edit each interview kind of just like you did with the regular interview and then isolating the clips you like to use and then making sure to match your work in your transcript so as you choose a clip let's say a one minute clip to use highlight, mark, bold cut and copy however you mark that section in the transcript that that is what you want to use and that's what you have clipped in your audio editor do the same thing.

Then you're going to determine the order of clips and write narration and transitions between them. So again, this is something where Descript comes in handy because

you can visualize this at the same time instead of having a transcript and an audio editor next to it, it is all combined into one. So you can just kind of cut and drag and drop your text and your audio will follow. So again Descript and Hindenburg both have that text component that allows you to visualize what you are doing. Once you've got your order of clips and narration sorry your order of interview clips in the order you want them let's say we're going to have this person talk about this, this person talk about this and this person talk about this does not have to be too complicated you might want to [poor audio] you can see here all of the things assembled in order, let's say I have got my questions and then I drag them in however, it's hard to talk about this without talking about specific audio platform but however that gets dragged and dropped in there.

Once everything is in order then I go through a round of fine-tune editing so making large adjustments as needed where things don't sound right like ooh that's a bit sudden I'm going to make a change here or I am going to move the section to the front. But going through and cleaning up and listening again to the flow of how everything goes. And I add music and sound effects if you have them you don't have to. And have one more listen through, a round of fine editing again export and check your work afterwards. So this might be a lot of text here but I wanted to put this in order here so that you can reference this workflow later if you -- once you start doing your editing.

And this is what a more complex story again like I showed you before looks like in Hindenburg. You can see I have my music at the top, I have the script for Alyssa as the narrator, I have the interview with Hilda, I have the interview with Dr. Kate Lister, I have the interview with a company called fur and you can see how I have dragged those all into order and how everything is on its own track. And I have clipped those bits and strike them from the clipboard and then I go through once everything is in order and listen for small edits and overall flow of the story.

So that is workflow. Again, if you have questions throw those in the comments now and the moderators will get those to me at the end. I know this can be a bit confusing and I am trying to give you a high overview so that you have a good sense of how things work

so that when you get in and get started you have, use best practices instead of tripping yourself up by doing things the long way. So next we are going to talk about the actual what to cut and what to keep. So I'm going to give you an example. I am going to play for you an unedited clip that I did from a shark museum in Bjarnarhofn in Western Iceland. So I will play this clip. This is an interview I did four years ago. It's not the best audio quality and we will just listen through and I will go and play you a quick edit so you can hear the difference between raw audio and an edit and we will talk about what we can draw out of that.

So I'm going to hit play here and I hope you will be able to hear this. I am actually going to stop sharing now and re-share just to make sure that the audio gets shared on this. Because I know there's no one to hear me. No one to tell me if you can't hear me. So share screen. Okay. Here we go.

[video playing]

>> : Introduce yourself and tell me why, why you personally are here and what you do here.

>> : My name is Kristjan Hildibrandsson and this here is a family museum. My father founded this museum and yeah, now I am here.

>> : Okay. So why is there a shark museum here in Bjarnarhofn?

>> : Well, there is no short answer. My grandfather was a shark hunter, and well, generations for 400 years back probably with gaps though, and like when my grandfather stopped hunting sharks back then he used to live in Vestafordjur in the peninsula north from here, in an area where there are a lot of sharks, but once he stopped he moved here to this farm which was much better farmland and the bay here is so shallow there is no sharks for many kilometers, but after he moved here people

kept asking him if he had some shark meat so he would just buy one and one every once in a while, prepare for himself and for others, and it just kind of grew into all of this. Like we never planned for this. It just sort of happened.

>> : It just sort of happened.

>> : So that is the unedited audio you can hear there is a lot of noises where I am mishandling the microphone. He pauses a lot. He is kind of struggling to articulate what he wants to say. It is still fun to listen to but it can be a little hard to follow the story especially without a transcript in front of you. So here's a quick five-minute edit that I did of this and let's have a listen and you can see how much easier it is to hear what he is saying.

[video playing]

>> : I added some music, too.

>> : My name is Kristjan Hildibrandsson and this here is a family museum. My father founded this museum. My grandfather was a shark hunter, and generations of 400 years back. Probably with gaps though. And when my grandfather stopped hunting sharks back then he used to live in Vestafordjur the peninsula north from here in an area where there were a lot of sharks, but once he stopped he moved here to this farm which was much better farmland. But the bay here is so shallow, there are no sharks for many kilometers. After he moved here people kept asking him if he had some shark meat so he would just buy one and one every once in a while, prepare for himself and for others, and it just kind of grew into all of this. Like we never planned for this. It just sort of happened.

>> : So you can see here that overall I've shortened it by half a minute even with the music. That just gives you a sense of how music can really take the story somewhere

else. I have cut out a lot of his pauses. I cut out some of his digressions. I have taken his sentences and just made them flow a bit better. It still sounds like him. I haven't tried to change what he is saying. I have not tried to make him not sound Icelandic. Or tried to cut out every digression or I have left some of his natural speech in there. And then in one place he says we moved here it was much better farmland and he originally says and the bay here is so shallow. But really what he meant to say but the bay here is so shallow. So I found a but somewhere else and I moved it over there just so that it was easier for people to hear. And in my mind the ideal is when someone listens and they say oh you made me sound better than I sound so we are helping the person that is talking we are elevating their speech a bit. We are just cleaning it up and presenting it in a way that makes it easier to listen to the audience. I have also cut myself out of a lot of here because well I don't need -- you don't need to hear me say what is your name and where are we? Right? He is going to answer that question already. So I cut myself out where I did not think was helpful or added anything to the listening experience.

I had gone through and trimmed up all of the mic bumps that I did. Not knowing what I was doing with that particular mic on that day. And then I think overall it sounds better. So here is some broad editing tips. Again, like I said, you want to make it easy to listen to the person without altering the meaning or natural voice of the speaker. We are not trying to make them sound like someone else and we are never changing their meaning. So what that means is if someone has a digression where they kind of just trail off and come back to the sentence that it's okay to cut out that digression so it's easier to understand the sentence as they intended to deliver it. However, if the digression is something like I am telling you this and I want you to know that I didn't come up with this idea this is an idea from my mentor blah, blah, blah. Well, I'm not going to cut out that digression because that would change what they wanted to say. That would be an unethical edit. Where the digression is and I am saying this as an individual and not on behalf of the museum, well that is important, that needs to stay in there. So not changing the meaning of their sentence. Just cleaning up the sentence. Like a good editor would on text, right. And the question I always like to ask myself as

I'm going through over and over is does the listener need to know this detail or this bit of background or this so whatever to understand and enjoy story or the episode as a whole. So it can be really easy when you've done an interview and it's 40 minutes and you need to get it down to 30 minutes and all of the 40 minutes is good it's like everything is good I really want them to hear this digression about the role of the railroad in our town but if the story is about the women's suffrage movement and the railroad is not relevant it is just a fun digression that is interesting on its own but it doesn't contribute to the overall story and it adds time I would lean towards cutting that and maybe sharing it as a bonus little bit later. But thinking about the overall listenability of this episode, if we are going all over the place and not keeping everything focused and tight it is going to be hard for people to follow and at the end they are not going to get as much out of it. Even if there is more content. So does the listener need to know this in order to enjoy the story, in order to understand the history? Or can we simplify that, take this bit out to give them more time to focus on the main theme if that makes sense. And then in terms of pacing I like to ask is every five-minute section as interesting as the rest? Is the first five minutes really good and then if I listen to the second five minutes, I'm like this is a really boring five minutes. If I only gave them this five minutes they would probably trail off.

So if you -- and sometimes it can even be good to think of three-minute sections is this section interesting, is this section interesting if not why is it long, do I need to move something else around to change the order of the information? Is this too wordy? Can this be said in less? Can I cut in half? Can I trim this down in any way? Can I introduce a break? Can I introduce narration? What can I do to make this five minutes interesting? Whether it is cutting or adding. So going through and listening, making sure that you're not getting a 10 minutes that are really interesting in the beginning and then the last 20 minutes just dragging on. So kind of making sure that it has a consistent pacing, a consistent sense of interest. And story throughout. And then a really important thing to think about when editing is, is the information being delivered in the order needed to follow it easily? So when you are listening to audio you can't stop and restart the sentence like you can when you're reading a book. And it can be easy

to kind of drift off mentally and not absorb for example the image that might happen in a visual documentary. So it is really important to give people the information they need to know in the story in the order that they need to do it. So if you're talking about something and you haven't introduced it yet and someone does the basics the introduction later in their interview you might want to cut that and move it to the beginning so that they know what they are hearing about when they get to it.

Just thinking about order of listening. When you're editing it can be really easy to get lost in the material and you've listened to it 20 times and you never want to hear it again so it is hard to tell if the order is important or the order is working so get someone else outside to listen and maybe take notes as they go if there's any areas where they were confused or they weren't sure what was happening.

In terms of how to begin. I like to start by telling people do a little simple practice interview whether it's on your phone or on your new equipment. Something short, five minutes, that you can scrap and restart as needed and if you accidentally deleted the entire file oh well. So import that into your audio editor and get really, really comfortable playing around and learning the five or six important functions that you use 95 percent of the time. Most of these software have a lot of different tools but you're going to use the same handful over and over and over again. So play around with it, get it where you like. And then once you begin on episode one give yourself a deadline. It can be -- you can take an episode, no matter how simple, and work on it for five months. But this is not like the novel that we may publish one day in our life. This is a product that you need to put out, a program that you need to put out for your museum. So give yourself a deadline, a reasonable deadline, work on it, get it as good as you can by then and then do better on episode 2, get episode two out by your deadline. Work on episode 3, do better and so on and so on.

Obviously it has to be to a certain standard but with podcasting it's one of those things where if you are not publishing, it is not a podcast. It's an audio program on your computer. So better to have something out there and to get better than to never release

it and kind of spend a lot of time tinkering on episode one and getting episode 1 perfect but then never having an episode 2. Music and sound effects. I think a general rule of thumb to think about music is less is more. You don't want it to overwhelm anything. If you are not feeling comfortable or sure about how you want to use music, listen to your favorite podcast with the style you want to do, see if you like the way they use music or you don't and pay attention accordingly. You can just use a little music in the intro and outro, it can be the same song every single episode. Something that doesn't overwhelm the music. Something that adds ambience and adds emotion without being, just taking over. Because the voice and the speaking is always going to be the most important thing.

And sound effects you do not have to use sound effects. But they can be fun sometimes. To add a cannon or a bird singing, there are shows like I did, stories, Smithsonian Stories for Main Street where I used tons of sound effects so water and birds and trees and I sort of, I went nuts with it and I think it sounded really good. But if you're starting out I would say be a little, err on the side of less. Where are you going to find the stuff? It has to be copyright-free or you have to have permission from the copyright holder. You cannot just grab something off the Internet and use it. This seems obvious but to some people this is news. Which is okay if it is news to you. But remember it's important. So tools that I like sound stripe is like \$12 or \$15 a month and it lets you license unlimited tracks for that, within that fee you can sign up for just one month and cancel once you've got the music you want and you will still have a license, the key is you can just only use it for the thing that you license it for. So if you license it for your podcast you can't use that same track for a video project that you are doing that is separate unless you relicense it. And they have great music that you can sort by mood and sound and instrument and genre, really, really love sound stripe that is where I get 95 percent of my music. Epidemic sound is a similar platform, it's \$30 a month, again you can sign up and then cancel after the first month and get a bunch of music. The free music archive has tons of music on it. And a lot of it is bad. But there is some good stuff in there. And you do also need to be aware that not everything on there is public domain. So sometimes it is under an attribution license so you might have to

give credit to the artist. So just be aware of the licensing when you're looking at free music archive. The other thing you can do is pay indie or unsigned artists directly, say hey, reach out, we would like to use the music in our podcast, what would you charge us or we have this much money to pay you for a to use your music as our soundtrack for our podcast. I have done that with a lot of artists. There is so much music out there online that is not connected to a record label and a complicated machine of bureaucracy.

The other thing is to do is a bespoke commission you can ask an artist creator in your communities, someone who works with your museum. To create a soundtrack piece you can use in your podcast. For sound effects, free sound is super supercool. People upload the sounds I don't know why particularly they think is fun they go record sounds I think anything you want. You want the sound of fake volcano noise, you want the sound of a tree falling, you want the sound of a teacup stirring, you want the sound of a Baltimore street, you want the sound of an underwater Icelandic harbor, these are all things I have found on free sound. Again, check the license and make sure it's public domain. If not, make sure you have the attribution to attribute, credit people correctly. And then Soundly, there is a free and paid version. It is basically a sound effects library so this is really good for ambience you want water running you want a farm you want animals you want children running or laughing that is really good for that.

Lastly, I'm going to take five minutes from the question section to talk about outsourcing. So you may need some help and this may or you may not have the time. To do everything yourself. There are here are some terms you might need to know if you're planning on outsourcing. An editor, audio editor, cuts and organizes and assembles your audio as instructed. Typically charged by the hour. This is kind of a loose definitions here but if you're hiring an editor, you can more just say here's what I want, can you clean this up, finish it, do what you want. So I work with the Smithsonian archives of American Art and they put together their episode in Descript they have exactly how they want they have written it they have edited it they've got the clips the size they want and they have marked notes and then they say here Hannah here's the

music here are our clips here is our narration put it together clean it up make it sound good. And that's what I do.

A producer is someone who is typically more of a showrunner. So they may also be doing the editing. There's a lot of shows where I produce and I edit. They are typically more involved with the creative side of the show, right, they can be conducting interviews, planning stories et cetera. So the migration museum in the UK outsourced to a longtime audio producer. And she did the interviews, wrote the narration, put it together in collaboration with them on the subject matter they wanted to talk about. And that can be more or less involved. And then there is also of course you can go to a full production company that employs producers and editors to make podcasts from start to finish. They might have more people on the team, it's going to be more expensive. So when to outsource. I like to say that podcasts cost time or money so you can like I said in my previous webinars you can do it all for very little money if you have the time to dedicate to it. If you do not have the time to dedicate to it then you can pay money to have someone do it. You probably can't get anything done without putting either one or the other or a mix of both in there.

So I say hire an editor or producer when you have more money than time. And I know I'm talking to small museums, I know none of us are rolling in grant funds that we don't know what to do with. But if you have the money to create this programming that can be helpful. Sometimes you might want to ensure that your podcast is professional sound quality, again if you have a grant that is tied to something. Or if this is a really high-profile thing or if you don't feel that you have the capacity in-house to get a professional sound quality, outsourcing can do that. If you want to tell more complicated or nuanced stories that require experience in putting together these complicated stories you may want to outsource. For example you have heard from the Vermont Historical Society and they put together complicated, nuanced stories on their own. They put a lot of time into it. But if you don't feel like you have that internal capacity or that time or the will you might want to outsource.

How would you choose an editor or producer? This is a question that I get a lot. The number one thing is to listen to what they have already edited and produced. If you like it, great, if you do not like it and if you think it sounds bad then don't consider them. Right. Or listen to everything that they have done and get a feel for whether or not you like it or if it feels like something that fits what you want to hear. Ideally find someone who understands your organization mission broadly. So if you're looking to do something on again at the history of suffrage or a history documentary, maybe a company that has only done sports shows wouldn't be the best fit, I'm not going to say they wouldn't be a fit, but again in the same realm.

Ask them to walk you through their process so you understand what to expect at each step. There is no assumed, like no obvious here is what goes through. This is kind of a still a wild, wild West in terms of free-lance editors and producers and production companies, everyone is going to have their own process, everyone will have their own system so ask them to walk you through and make sure that you know where your staff and your organization will fit in. And then get a few quotes if one stands out for being much less and much more ask why. I think I'm out of time. I want to talk a bit more about collaborative models but if someone has it as a question, maybe we can go into that. You can always email me as well. If more questions come up I would be happy to help kind of direct you to kind of get that sorry I'm stumbling on my words here, I would be happy to help. You can download the slides by going to TinyURL.com/hhpod and that is my webinar. I will turn it back over to the team.

>> : Okay, thanks Hannah. You went through a lot of material here today and we actually have a lot of questions and I know we are not going to get to all of them, but just to remind everyone that what we will do is try to take the questions and write them out in the museum hub community and Hannah maybe can help with some of the answers. The first batch of questions seem to be around specific software models and a couple questions for you about Descript in particular, which is sort of a very intriguing software product. Just to be clear, Descript transcribes the audio from the files that you use right? It's not your script so in other words it will show you it will -- will it capture

people's verbal tics, ums, you knows, that kind of thing? Can you do a global replace? Take out all ums and it removes all ums?

>> : I think you can. I haven't done too much fine editing in there. But what you can also do it you can go through and strike out something and then once you're done go remove all strike out and it will go brrrr there. Yeah. So play around with that, look at the tutorials, I'm not sure exactly that capacity but yes it transcribes the audio and you might have to fix it, correct the audit in places, it's an AI transcript. But it's pretty cool.

>> : That's cool. Hannah, do you know if Hindenburg is a one-time fee or a monthly subscription?

>> : You can do either one, you can rent it for three months, six months, or a year. Or you can buy it one time. Hindenburg journalist is only purchase, it's like \$100 and you purchase it once. Hindenburg journalist pro has some slightly added capacity that I don't think it's worth paying if you're going to buy one-time but they offer the three month, six month, and 12-month rental which can start you out if you just want to drop \$40 and try it for three months. But try the 30-day trial and I think after that you will kind of get a sense if you want if it's worth paying for.

>>: I know I get emails all the time from them and they have special offers too.

>> : Yeah, get on the email list for sales as well. Yeah.

>> : Are there tools and apps for recording phone conversations and suggested products for iPhone, Android and so forth, does that make a difference?

>> : Phone conversations, blegh, I have tried so many ways to do that. There's not a lot of good tools. If you want to record a phone conversation I would say try and get someone onto Zoom, try to get someone onto you can pay what I would do is pay for the Zoom upgrades so that you can have someone call in to a Zoom call. And record

from there. Or if you have someone older who really can't do it can someone go over and record them talking on the phone to you and you record yourself on your end? And so on. If they have a second device they can talk on. Unfortunately there is no easy tools for recording phone calls.

>> : Okay. A related question is on use of mics, whether you use two mics if you have you and an interview subject or whether it is okay to keep doing this back-and-forth I suspect your Icelandic interview was doing this right which was the phone bumps and the bumps is it easier to set up and I guess the question is postproduction you can make anything happen but it seems to be a little bit easier if you've got two going at the same time -- at the beginning, right?

>> : Yeah, if you are doing two, if you are sitting somewhere if you're in a stable situation, two mics for two tracks is absolutely ideal. That is the big mistake I made in that audio but I was walking around on a windy farm while driving around Iceland. So I used one mic and I went back and forth. I used in the wrong type of mic in that interview so I talked in the last one about a recorder-style mic or a shotgun mic and I would go back and forth with that if you are walking and talking, if you are mobile and then when I do in editing afterwards is take my track in Hindenburg or whatever and cut out second person and drop them down to a second track so that I can then edit that on separately and if for some reason you run the whole thing through auphonic and it does not sound good it doesn't come out even like one person sounds okay one person sounds bad what I like to do is separate them out export the unedited stuff and run that back through auphonic as a separate set track.

>> : So it will level out, it will level out the volumes and so forth in case you were talking and your mic was over here and vice versa. Right?

>> : Yeah. Hopefully to kind of play around with that so again if you can do two mics that is ideal. If you're walking and talking and mobile, one will have to do.

>> : Right.

>> : Make do with what you got.

>> : Okay so there's a question here about making the digital content accessible, let's see, is it my responsibility to make sure digital content is accessible or 508 compliant? Do you have shortcuts to make transcripts faster or software subscriptions that are pretty accurate? So asking I guess after the fact do you actually provide a transcript of the entire thing on your website and whatever how do you do that?

>> : Yeah you absolutely should provide, now I have some old episodes and places that don't have, but for professional productions and for museums you absently should have a transcript. To make it accessible. When I usually do is have that in a PDF and link to it from the description either in the app description or point people to a website we can find the transcript. Make it obvious. You're going to draw people in, it's going to help you who want to listen to podcasts or enjoy podcasts but can't do it without a transcript for whatever reason. Again, so your options are a cheaper automated AI transcription like Temi, TEMI, that you correct yourself depending on the audio quality. Temi is not great with some accents. Like even I know it is much better with American accents than even British accents like let alone going to non-native speakers. If you want Rev I think it is 1.25 a minute for human transcription and that is going to get you almost perfect. You can put in a glossary, you can make notes of your speakers, and you might just have to scan through and correct one or two things. It is 1.25 a minute, but it can save you a lot of time. But otherwise there is no shortcut.

>> : I would assume that keeping an archive file of the actual interview, the raw tape is a good thing though just in case you need to compare with what the transcription looks like versus what they said or even if the person that was interviewed says hey wait I did not say that you have some something to go back to, right?

>> : Yeah I would say I kind of talked about having the transcripts and then copying into

a new document for my working file. So save the original transcript. That it's great to have. You never know when you might need it. I like to back up my original audio files as well. Sometimes you've got to delete those but I keep them for a while. But keeping the transcripts can be a great way if you have to delete your audio files for some reason. To keep that interview as well.

>> : Just a warning they are big files so make sure you have plenty of space.

>> : Audacity is worse so if you are using audacity it is going to take up a huge amount of space. Hindenburg files are much smaller and more manageable but get yourself an external hard drive yeah.

>> : Okay cool. Time for one more question. Here is one that is interesting about editing workflow. So which is better in editing your workflow, editing the audio and then writing and recording transitions between? Or editing the text writing the transitions and then using the script so to speak to create the final audio piece? Any thoughts on that?

>> : I would say the former. You want to write to the tape so you want to listen to what is being said and write from that. Write what feels like a natural transition out of the audio that you already have. So if you do it the other way it might sound a little -- I have done it the other way and it sounds a little "ch, ch, ch" it can be a little choppy. So yeah, write to the tape and listen as you are writing your script, have your audio editor open. Listen to the clip, write the script. Listen to the clip, write the script. So that way it sounds -- it sounds like -- it sounds intentional. And natural. It flows there.

>> : Okay last question it's on everyone's minds I am sure what does better lemon mean?

>> : It means nothing. I just want something that sounded like it sounded something. But didn't actually mean anything. I just, I wrote nonsense words until I got two that I liked.

>> : It sounds terrific. All right, that is all the time we have today. Thank you everybody for attending today's program and of course thank you very much Hannah for your expertise today and throughout the month in guiding us through the wonders of podcasting. If you all enjoyed this program then please do us a favor and share it with your networks. We really appreciate your participation and hope to see you again in a future program. After each module all four videos will be available on our website as well as a complete toolkit of resources provided by our presenters. Stay tuned to museum-hub.org for more information on upcoming events. Please join us on October 7th as we introduce our next module on video production. See you then. Thanks, Hannah.

[end of webinar]