DIY Podcasting

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Project Objectives

The Applied Creativity team have been tasked with creating a DIY Podcasting booth and training material as part of NAIDOC week in 2019.

The parameters include;

- Under $200 in costs for booth & recording equipment
- Workshop in the basics of Podcasting (2 hours)
- The booth to be portable and sit at the right height for table use or standing use

Podcast Training Session

What is a Podcast?

Discuss the history and popularity of podcasting currently, how is it different to traditional media like radio.

"*Podcast*" *is a blend of words, formed by combining "iPod" and "broadcast". The term "podcasting" as a name was first suggested by The Guardian columnist and BBC journalist Ben Hammersley, who invented it in early February 2004 while writing an article for The Guardian newspaper.*

Podcasts are audio files that can be downloaded automatically to a computer or mobile device. The revolutionary aspect of the podcast is that listeners simply subscribe (usually free of charge) to a podcast, and then as new audio files become available (episodes), they are automatically downloaded to our phone or computers to listen to on our own time.

- The audience has the freedom to listen on the go (e.g on smart phones, in the car)
- They can listen whenever they want
- They can be very topic specific, niche content that can connect a community around the world

Some of the most popular podcasts such as Serial and S-Town attract audiences in the tens of millions around the world. In fact, it is Serial, made by the same people who produce the popular radio program This American Life which is attributed with the rise in popularity of podcasts - especially due to its attracting a traditional radio audience and introducing them to the format.

Many major media organisations (newspapers included) see that the podcast platform has a lot of potential to engage new and younger audiences and many have a "podcast first" policy on some stories, an example of this was the Australian newspaper's Bowraville and The Teacher's Pet podcast series.

A podcast is just another form of **Storytelling,** but the beauty is in the easy access for most people,

as using our mobile devices we can listen anywhere and anytime.

Basic requirements

There are several things you will need to create a podcast, we'll cover things in more detail as we go but here's the basics;

- Content – engaging content is central to podcasting
- Recording equipment or access to - audio quality is still key even with beginner podcasting
- Editing software – for piecing together the recordings and optimizing for online hosting
- Host server – an internet server where you load your podcast audio episodes
- Host web page – this is usually a page on the on the host server's website where your audience finds your podcast and subscribes to it
- A digital strategy – also could be called a marketing or promotional plan to ensure that you are getting your podcasts out so you can gain listeners and followers. There are a huge amount of podcasts out there, you'll need some good strategies to cut through the clutter

Listeners also need a way to receive a podcast.

- Most importantly they need to be connected to the Internet to download podcasts
- They need a podcatcher (such as iTunes, Google Podcast, Spotify). Once they have subscribed, most podcasters automatically download the new episodes to their devices.
- They will also need a computer or mobile device to listen back to the episodes once they are downloaded.

Subscribing to a Podcast

Let's talk more about podcatchers so you can get an idea of how the general podcast consumer is accessing. You may be familiar with RSS feeds if you've ever followed an online news service, but podcasts also use RSS feeds to keep subscribers up to date.

Just like any media that is hosted online, we need a way to track and listen to podcasts. Let's talk about some of the options for subscribing to a Podcast, this will help you understand how best to distribute your own.

Here's a few apps you can use to subscribe and listen;

- Apple's Podcast app or iTunes
- Google Podcast app
- Google Play Music app
- Spotify
- Pocket Casts ($)
- Podcast Addict

An **activity** the facilitator might want to do here is to get participants who are very new to podcasting, to find and subscribe to one using one of the free apps. Getting to know how people are

consuming podcasts is very helpful before you start producing your own!

Podcast Content

Let's talk about the content side of things, do you already have an idea for a topic? Share with the group and let's think about how broad or narrow the idea might be, how can you focus or extend the idea to capture a dedicated audience.

Some key things you might want to think about initially are;

- Is this for fun or will you be looking to make money at some stage?
- Are there other podcasts that cover similar (or identical!) topics, how will yours be different?
- How long will an episode of your podcast run for (will each week be the same or will you intersperse with extras or 'minisode' eps)
- Have you thought of a name that will stand out from the crowd? (Making sure to check if it's already been used before you get too attached!)
- How often will your podcast run, weekly, monthly, intermittently? Will it be seasonal or continuous etc.

Great presentation skills, recording and editing skills along with good editorial skills (knowing what works in audio) will help you dive straight into producing a podcast, but you can also learn these pretty quickly and we'll cover the basics of these during our workshops.

Activity; Ask participants to spend some time writing down some answers to the following (use text edit or paper if they prefer);

- What kind of podcast do you want to create?
- How long? How often?
- Who is your target audience (Lay audience or industry specific? Vocab and level of explanation will be important for how you communicate based on the level of expertise you expect listeners to have)
- Tone: serious or light-hearted?
- How will you record it and edit it? (don't worry if you haven't thought about that yet, we'll go into this later)
- How will you promote it?

Podcast Styles

You can have your own style of podcast, but generally they will fall into one of the below broadcast formats, having a think about which style you might prefer for your own podcast may help you focus on the structure and content.

- The Interview style; usually featuring regular guests and interviews and may include a few hosts
- The Solo Podcast; run by one person and possible covering specific topics
- The Panel Show; a group of hosts discussing different topics relating to the podcasts main focus
- Conversational/Co-hosted podcast; similar to interview format but more casual

- Audio drama: similar to old-fashioned radio plays featuring sound design, multiple characters etc.

Episode Preparation

For great sounding audio content, preparation is key! Even if it's a loose idea for structure of the ep, but using a runsheet is super helpful to keep you organised and on track.

Some things you might need to think about when putting together the podcast;

- Scripting; will you have dot points to refer to, no script at all and totally wing it, or fully scripted. Be mindful of fully scripting or winging it, you can sound like you're reading direct from a piece of paper - or with no notes can lose track of what you want to talk about.
- Interviews; will you have anyone guest on your show? If you do, you may want to prepare a list of questions.
- SFX & music (licensing); if you want to make your content engaging, you may want to think about sound effects and backing music.
- Stings/pre-recorded elements; Creating an appealing podcast intro will help you start each show with a formula and introduce new listeners to who/what you cover.
- Perhaps content warnings if your show is not suitable for younger audiences or features explicit/difficult content.

You can download a template

here

Activity Let's run through this to get an idea of how you might be able to use it for your podcast preparation. Spend some time filling out on the computer with a word processing program (Pages on Mac) with your idea for an episode of a podcast.

Legalities and Copyright

Because Podcasts are globally accessible, opposed to traditional media like radio and TV, they aren't bound as strictly to ACMA (Australian Communications and Media Authority) codes of practice, so rules around swearing and offensive material do not apply. However, all other broadcast laws and regulations do apply – such as defamation, copyright, racial vilification and so on, as podcasting is a form of publishing.

Different podcasting platforms have their own requirements when it comes to copyright material, read the fine print about copyrighted material in the terms of service as you begin to use a new platform to distribute your content.

Including music in your podcast can cause a bit of a headache, you need permissions from the artist or the right to broadcast via licensing, in Australia you would need to be covered by APRA AMCOS and PPCA. Best to just use copyright free music or get written permission from any friends who may let you use their music.

Creative Commons Licensing

Free Music Archive has a good breakdown of licensing and copyright, plus music and soundtrack audio you can search for - http://freemusicarchive.org/License_Guide

Places to find copy-right free music:

- http://music.podshow.com/music/producers/registration.php#
- http://ccmixter.org/
- http://wiki.creativecommons.org/Content_Curators
- http://www.freesound.org/

Audio Editing Software

We're showing you the basics of Audacity as it is a free and open source software, there are many other multi track software or DAWS (digital audio workstations) you can use and in the Digital Media Lab you have access to;

- ProTools (Paid)
- Logic Pro X (starting from $600)
- Ableton Live ($99 upwards)
- Adobe Audition ($30 per month subscription)
- Audacity (Free)
- Garageband (Free with Mac)

Another paid option is a new program called Hindenburg which has been created especially for journalists in radio and podcasting, as it's a very clean and easy program to layer and organise audio (cost is $95EU) https://hindenburg.com/

Audio Editing Basics

Understanding Decibels, Gain and Levels Resources;

Probably the best one to go through - https://transom.org/2015/podcasting-basics-part-3-audio-levels-and-processing/

- https://www.audiodraft.com/blog/audio-levels-101-all-you-need-is-lufs/
- http://www.adobepress.com/articles/article.asp?p=2171314&seqNum=2
- https://www.tcelectronic.com/brand/tcelectronic/loudness-explained#googtrans
- https://ehomerecordingstudio.com/decibels/

-16 LUfs is generally the suggested loudness output, Hindenberg software makes this very easy to output at this level.

Audacity

We have chosen Audacity to showcase as it is a Free and Open Source software available on all OS platforms.

Let's go through a basic Audacity software induction so we can understand a few more of the basic tools and what we need to get our new Podcast Intro up to scratch;
https://wiki.edgeqld.org.au/doku.php?id=facilities:fablab:software:audacity

Soundbed

Main advice for any audio interviewing is to make sure you record a bed of room tone or atmosphere sound to undercut the whole ep so it sounds even.

For your show intro editing, let's find some free backing music and sound effects and edit our vocal recording to piece together a fun podcast sting!

Free music and sound effects resources;

- http://freemusicarchive.org/
- https://www.melodyloops.com/music/free/
- https://freesound.org/browse/
- http://soundbible.com/free-sound-effects-1.html
- https://www.zapsplat.com/sound-effect-categories/

Output File Formats

We always suggest that you record using the WAV format (high-quality, no data compression) even though for the purposes of a podcast your file will be converted to an MP3 or AAC format (lower-quality, data compression). When setting up your session in your audio recording and editing program, the best standards at the lowest size to use are: WAV, 16-bit, 44.1 kHz. (You can record at higher quality but the difference is mostly negligible by the time you export the file as an MP3 or AAC).

Podcasts need to be distributed as data compressed files, and the most widely accepted formats are MP3 and AAC. The quality settings are up to you, but as a guide:

- Music and/or much creative sound? Stereo MP3 at 320kbps
- Essentially just voice? Mono MP3 at 128kbps or even lower can suffice

Smaller file sizes are preferred, so do some tests and go with the lowest encoding rate that still sounds good enough to you. However lower rates will effect much musical material, so if it's music heavy you should aim for a higher rate.

If your podcast will sound fine in mono (if it is just spoken word), export, and encode, in mono: the

resulting file will be only half as big as a stereo version. It's a good idea to keep the file at 16-bit and 44.1 kHz, and experimenting with different compression settings in your MP3 or AAC encoder, but some voice-only podcasts can sound OK at lower sample rates or bit depths. The most common file format is MP3, and that's still the most widely supported by all devices that can play podcasts. AAC is becoming increasingly popular, and those files can be played on the vast majority of devices. AAC offers better audio quality at smaller file sizes, so it's more efficient to store and to distribute, and it offers some additional metadata that MP3 does not, such as Chapter Markers, embedded links and images. These add-on features are not widely used by podcast listeners though.

Apart from audio quality, the main thing to take into consideration in relation to the size of the file that you are uploading for podcast is bandwidth. Bandwidth, the amount of data used to deliver your audio to the end user, probably won't be a big problem until your podcast becomes very popular. If you have a few hundred, even a few thousand subscribers, the bandwidth used to send out that audio will likely be covered by the basic contract with your web host or podcast host (depending on where you are putting your audio). It is definitely worth checking to see what your hosting service provides, and what happens if you do exceed the agreed-upon bandwidth. Costs can increase considerably if you start getting hundreds of thousands of downloads but if you are so successful with your podcast hopefully you will be able to attract advertising!

It's always a good idea to export and save a full-quality version of your production as an uncompressed WAV file. You may want to make simple changes or updates to your program and in some cases it might be easier to tweak a mixed version than to go back and re-adjust the elements of your original multi-track project. Also, the technology of audio delivery changes, so at some time in the future, you may want to re-encode your production.

The actual encoding of your files can usually be done directly from your editing program: most of them will have an option to export your final mix in a few different formats. Or, you can always export the mix of your show as a WAV file, and use a separate encoding program to convert it to MP3 or AAC.

Distribution

One of the main things people get stuck on when they get started in podcasting, is how to get it out to listeners. There's a few steps to distributing your podcast, and you might want to know straight away how to I get it on iTunes or Spotify, we'll cover this a bit later but the 2 key things are RSS feeds and a hosting service.

Metadata

Metadata is is useful information about your podcast and makes it easier to find your podcast when searching.

You may already know about Metadata as it's displayed in your media playing software (such as iTunes) or on the screen of your MP3 player - such things as Track title, Album, Artist. When you bounce/export audio, software like Audacity will ask you to fill in these fields.

RSS Feeds

RSS stands for "rich site summary" and is a simple way of staying up to date with the delivery of

content, for example, tracking episodes of podcast releases. Wiki entry

More on RSS Feeds; https://rss.com/how-to-create-an-rss-feed/

https://www.podcastinsights.com/podcast-rss-feed/

Hosting

There are a variety of hosting services out there, it mainly comes down to cost and ease of use for most people. We've chosen to show more of Whooshkaa as it's free and a simple system for beginners but some others include;

- Podbean
- Buzzsprout
- Libsyn
- Transistor
- Simplecast
- Soundcloud
- Podomatic

Resource;

https://www.thepodcasthost.com/websites-hosting/best-podcast-hosting/

https://www.podcastinsights.com/best-podcast-hosting/

Promotion

Once you have a podcast set up, it's not as easy as just waiting for listeners and followers to find you, you need to get out there and promote the podcast and new content.

Think about creating a website, even if it's a free Wordpress or Blog site.

Think about social media, create a Facebook page, Instagram and Twitter account - but only if you'll use them regularly, as social networks and their algorithms are about continuous engagement. You can't just create a page and then not post regularly, as your audience may not as engage with your content if they don't know what's coming up on the podcast.

Make a media contact list (see if you can find someone who works in a similar area who has one prepared)

Organise cross promo with other podcasts of similar size, plug each others' shows.

Join facebook groups for fellow podcasters

Have a launch party. Physical events in the real world help to build excitement around your show's release, and to connect community.

Some more info on effective podcast promotion;

https://buffer.com/library/promote-a-podcast

That's it!

So that's a run down of creating and producing a podcast!

DIY Recording Booth

As part of the DIY podcasting project, Andrei Maberley from the Applied Creativity team fabricated a recording booth made from cardboard and using inexpensive microphone, android tablet, headphones and foam.

The booth can be used to help isolate vocal recording and dampen any outside sounds.

This video shows the process of constructing the booth from flat pack design and also how to record and playback audio.

Video

You can access the fabrication files here;

https://wiki.edgeqld.org.au/doku.php?id=workshops:prototypes:recording_booth:start