



# *Podcasting Basics*

**Discovering and Distributing Digital Content**

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# Overview

iPods are optional.

- What is, and what is not, a podcast?
- What do I need to experience podcasts?
- How does podcasting work?
- How does one create a podcast?
- Educational Implications
- Resources



# Getting Started





# Podcasts



Podcasts can be thought of as a *show*. What's a show? Like television programs, radio shows, or even a YouTube channel, it's the concept of multiple media experiences organized into episodes. Podcast episodes can vary in length. You'll find that some podcasts, meaning, the actual series, may have a fixed length for each episode like a television program. Others may not.

Many podcasts are audio only. Which makes sense, considering podcasting's genesis with the iPod, Apple's now famous MP3 player that could initially put 5,000 songs in your pocket.

But strictly speaking, a podcast can be any media file—in theory you could podcast Word files—that gets distributed using a common set of protocols and conventions. Let's think about podcasting's origins, first.

It was nearly a few years after the new millennium and dial-up speeds were too slow to distribute big files across the internet. The late 1990s had seen the rise of file sharing apps like Napster, to share music. These services used a distributed mechanism to get files to you from across multiple computers. You could check-off a number of tracks you wanted and maybe by morning, some had downloaded to your computer.

When MP3 players like the iPod came about, some enthusiasts were dismayed to learn that they were stuck putting already-purchased music onto their new devices. But what about new music? Bands were distributing new music and adopters of this new tech envisioned an easier way to get it onto their MP3 players. Thus, podcasting was born.

Podcasting was a way to put digital files on the internet on one end, and a program on your computer would connect to that server to download the files. In addition, it would copy those files over to your MP3 player. In the morning, presumably, you could head off to work with fresh content in your pocket.

And thus was born the need to have some of that fresh content available.

The earliest podcasting programs used a technology to ping servers you'd added to your "podcatcher" program. It was like calling up your Uncle Rick. "Any new tunes, dude?"

If Rick had new tunes, your podcatcher would initiate a download. If not, you'd check back with him later, and move to the next source on your list.

In 2004, seeing the popularity of podcasting, and the name associated with Apple's own device, Apple updated iTunes to accommodate podcasts. Overnight they made iTunes the #1 podcaster program out there.

People with iPods could plug in their new MP3 player to charge, re-load, and iTunes did a good job at helping you manage all of your content on your device.

Now, Apple had a way for you to rip your own music legally, and download free content from others. All of this pre-dated music streaming services like Spotify or Apple Music.

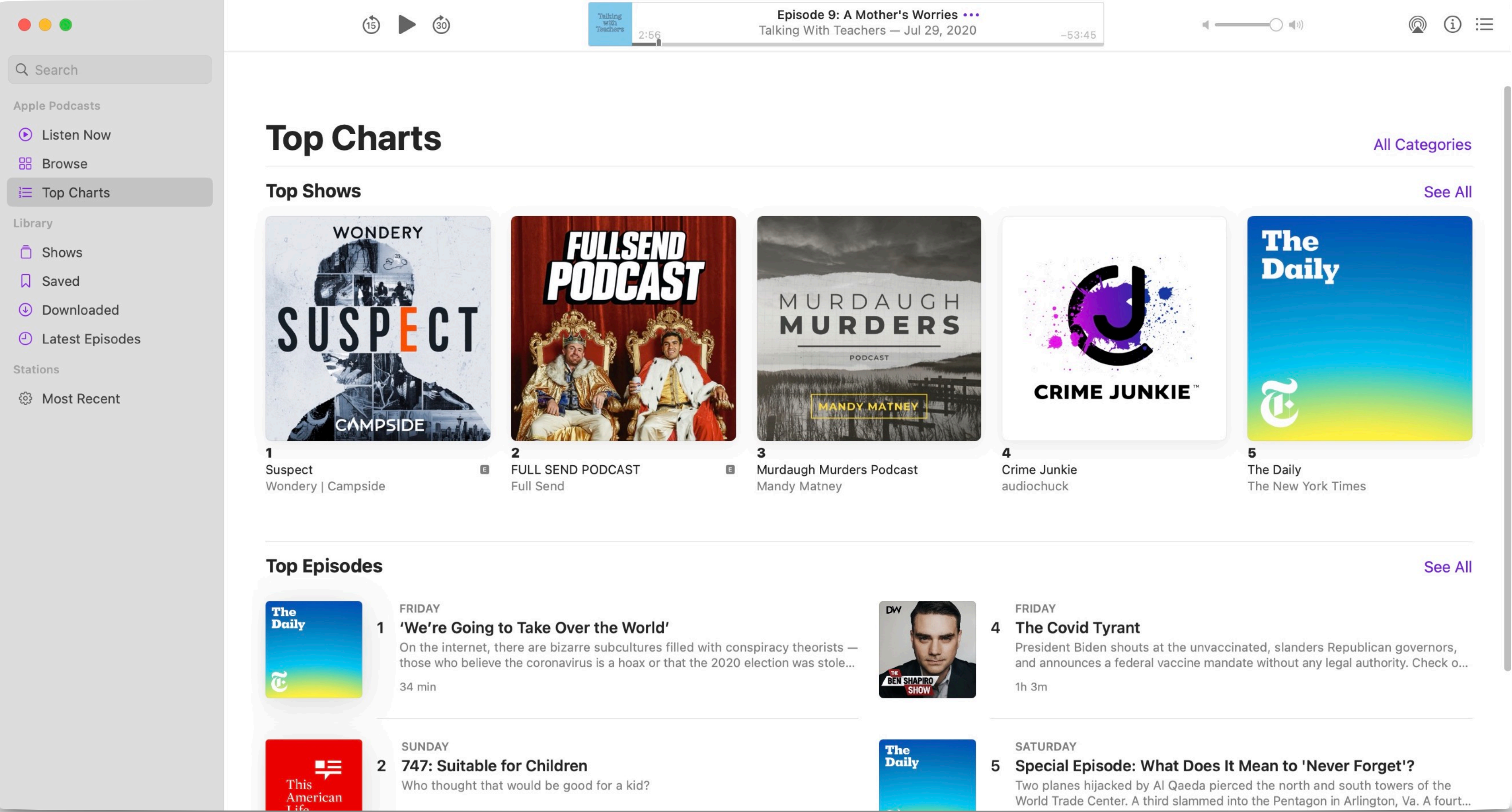
Just this year Apple went the next step in accommodating paid podcasts. For fifteen years, podcasts for the most part have been free, and many remain free. But the popularity in podcasting in the past five years has shown the public's maturity with the format and self-publishing just got more interesting with the ability for anyone to make a little extra money by selling their premium content.

Today Apple is not the only player in town. Multiple services provide the catalog and apps to be able to find, listen, and download podcasts. We will explore some of the more popular ones in this guide.





# Podcasts



## Apple's Podcast App

Apple makes its own podcast app for Macs and iOS devices which present a catalog of available shows. You'll notice familiar media names behind some of the better podcasts: *This American Life* or The New York Times, in this picture. By using this app, you can stream podcast episodes to your device on the fly, or subscribe to the podcast. A *subscription* is not referring to, say, a magazine subscription or a Hulu subscription, where you're paying money (although Apple and others are trying pay-for podcasts, coming soon!).

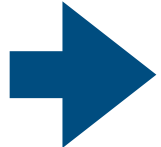
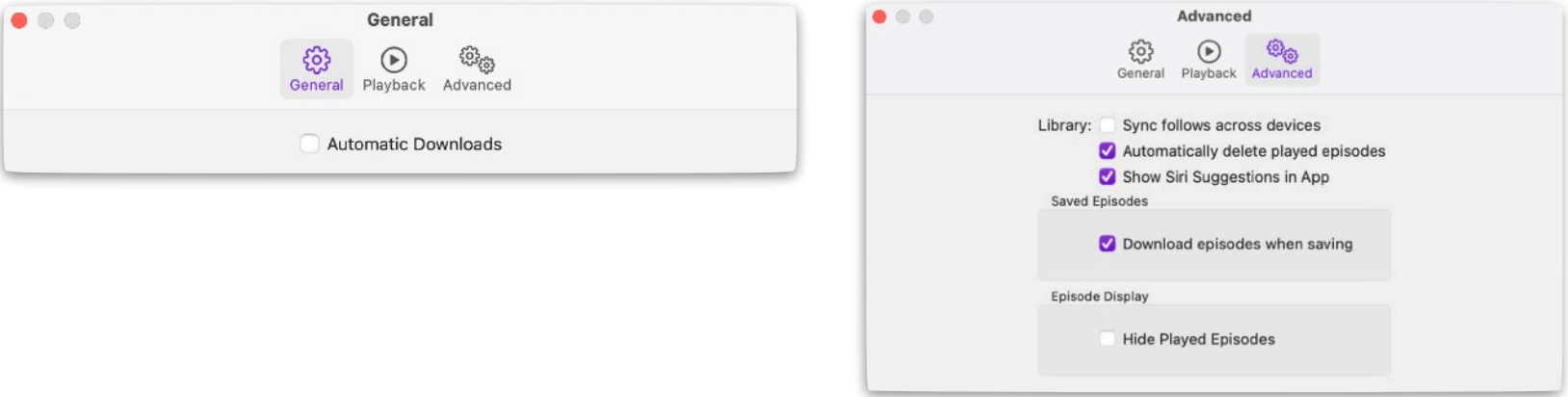
Instead, a subscription means you like this series and the program (in this case, Apple Podcasts) will download future episodes for you.

Many podcast apps share common features:

- read show notes or deep descriptions about the episodes
- shuttle controls (play, fast-forward, pause)
- speed-play (popular for spoken word podcasts as you can get through the content faster)
- show subscriptions
- metadata, such as when the podcast was originally published

No matter which program you use, they can be handy for building up a library of podcast episodes. Be sure to check out how the app will handle downloaded recordings. Because podcasts can take up storage space, having a program working in the background to constantly download new content as it's produced can eventually lead to a storage conundrum.

In the case of Apple Podcasts, the settings reveals options to automatically download new episodes, and to delete played episodes to help you manage your storage.

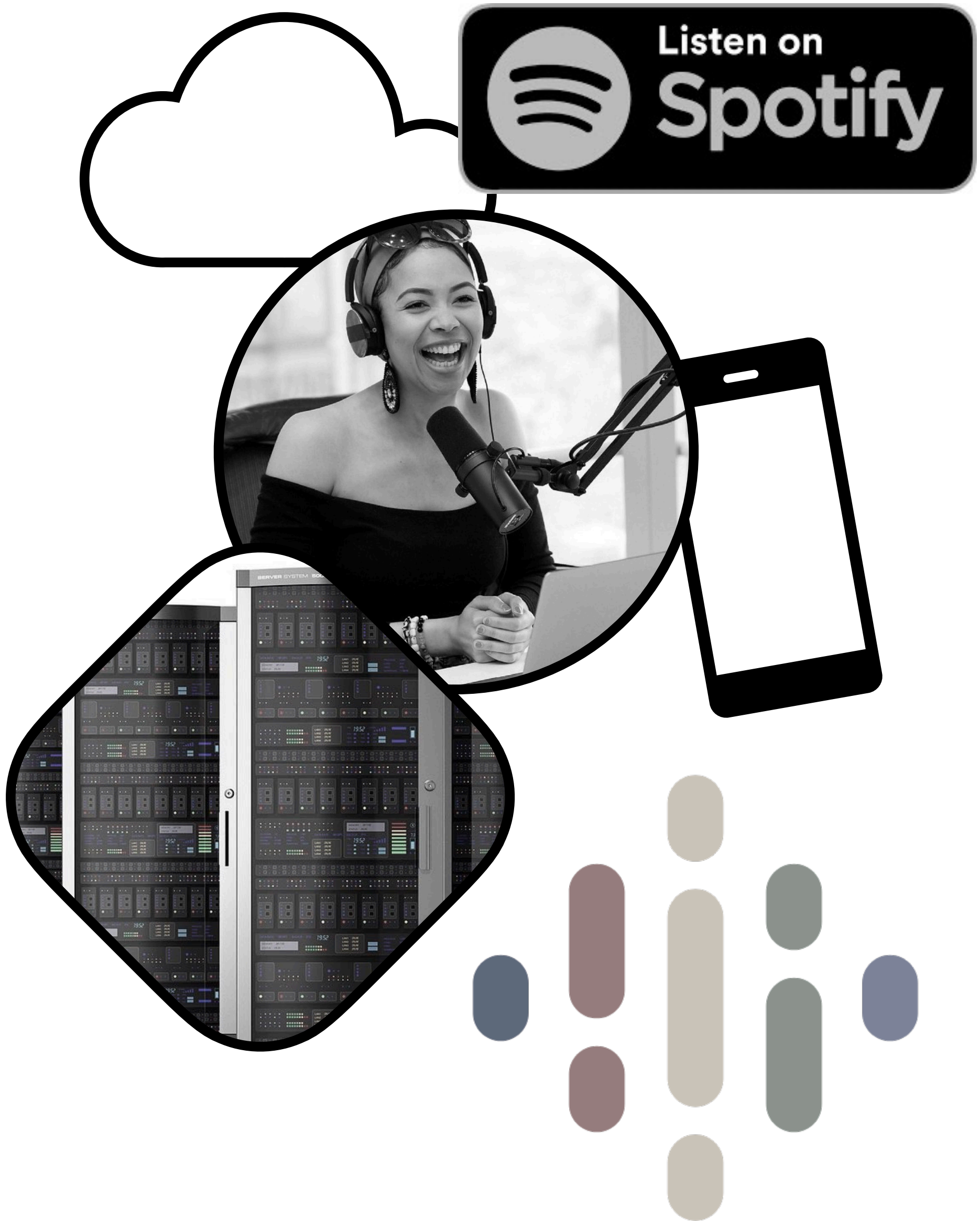


*Basics:*

What do I need to get started?







# What do I need to listen?

As someone interested in listening to podcasts, you simply need an app, a device, and internet. Content creators are storing their podcast episodes on a web server (either on their own, or through a service) and those files sit there similar to webpages that we see when we surf over to our favorite websites.

The apps (in this case, Spotify), creates an index of shows and the uniform resource locator (URL or web address) of each show episode. These apps take the technical side of hosting and serving podcast episodes out of our view so instead it's more like choosing which show to watch on Netflix.

While podcasting seemed to have emerge because of mobile devices such as an iPod, the original model of using a home computer to download and organized the episode files is not as prevalent today.

Streaming apps such as Spotify make it possible to simply stream the episodes to your mobile device over wifi or via your carrier's data plan.

If you have a limited data plan, be sure you understand how to control your podcast app's preferences of whether or not they will download or stream content while you are using your cell phone's data connection.

You will also need an account of some type to work with these services and apps. Let's say I want to listen using Google Podcasts. Your Google Account will be used to sign into the app so that your preferences can be tracked. If you choose a number of podcasts you're interested in, then sign into another device, the Podcast app's data travels with you.

Finally, you'll probably not want to just listen to a podcast with the built-in speakers with your device.

Keeping track of which episodes you've listened to, or how new or old they are can be confusing. Look for many podcasters to use a numbering system for episodes (i.e., Episode #17, or Season 2, Episode 9). I also find knowing the date of publication to be important. One of the podcasts I listen to is newsworthy, and I do not want to waste time listening to outdated content.

Your podcasting program will likely allow you to organize episodes by the date, if you've subscribed to a show and have multiple un-watched or un-listened-to episodes available.

Check out:

- [Spotify Podcasts](#)
- [Google Podcasts](#)
- [Apple Podcasts](#)





# What do I need to create?

While many of the great podcasts you can find are produced with high production value that is typical of broadcast material, the tools to create your own podcast are inexpensive and relatively easy to use.

Just as we'd use an app to find and listen to podcasts, the apps on our computers or mobile devices can be used to record and export audio files.

One of the best apps for editing audio on iOS devices is **Garage Band**. Apple offers this app for free. While originally created to create music, it has easy to use audio editing controls for multiple track recording. What's better, you can use the app right on your iPhone or iPad for truly mobile recording options.

Another longtime used app for free audio editing is **Audacity**. This program works on across multiple computing platforms and allows for editing with multiple tracks as well.

More professional users may want to use a program such as **Adobe Audition** to record their audio. No matter which app you use, the main idea is to record, edit, and export your audio into a compressed format that can then be distributed to listeners.

Like our podcaster in the image, you may want to invest in additional audio equipment to enhance your game. Both USB digital microphones and XLR-style microphones are popular choices for podcasters, whether you are connecting to a computer or to your mobile device. Good headphones will help you in your editing process as well.

In addition, you'll want some other creative content to enhance your production. You'll likely want artwork created for your show, to help with its identity, and having theme music or sound effects can help with the overall quality of your production.

For audio content, these will be combined with your recordings using software such as GarageBand or Audition.

Finally, you'll need a platform to house your audio files and at least one platform to list your podcast so that fans can find your content. In the next section we discuss podcast hosting services.

- [Check out this guide on starting a podcast](#)





*Beyond Basics:*  
How does this work?



# How Podcasting Works

Sometimes I think it’s helpful to understand how things work. Thus far, we’ve discussed podcasting platforms, iPods, podcast directories, and XLR microphones. For someone new to this—especially someone interested in creating and publishing podcast episodes—it’s a lot to take in.

Hopefully by dipping our toes into the technical sauce just a bit, everything will come into focus.



Let’s say you have some audio software on your computer and you’ve made a recording. Great.

The first step is to place that file where others can access it. This is a web server—a computer that is on the internet and can send files to other machines that request those files. In theory, we could park these files on the [doe.virginia.gov](http://www.doe.virginia.gov) server in a single directory (or folder).

Imagine we had the following files parked there:

episode1.mp3  
episode2.mp3  
episode3.mp3

MP3 files are among the most popular compressed audio files. They’re great for music, and for spoken audio as well.



While webpages typically can link to files, in this case we have to create a special text file that points to those files on our server. This file is called an RSS Feed. Think of this in most simplistic terms as hyperlinks on a webpage. But this isn’t a webpage, it’s more of a directory of items with descriptive information and the URL of where to access the file.

RSS feeds include titles, descriptions, and publication dates. They can also include the length of the episode (such as 43 minutes).

This file would include the full URL to your podcast files. If they were on the DOE’s server, it might look like this:

<http://www.doe.virginia.gov/podcasts/episode1.mp3>

Of course, I could link to this file in multiple ways. But the RSS file is used to assist your podcast episode to organize the files by title, to include descriptive information, and to assign a date to each file.

Using this RSS Feed file, the program can organize your episodes in chronological order.

Your RSS feed then has to be placed on a server. It could be the very same server where your episode files are stored.



So how do we access the RSS file, and how do we get episodes to download?

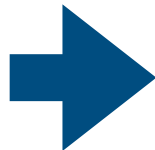
While subscribing to a podcast does not technically require any further services, many folks today are not pointing to RSS files manually. Instead, they are submitting the details of their podcast, including the RSS file’s URL on your web server, to a catalog, whether that’s Spotify Podcasts, Google Podcasts, or Apple Podcasts, as three popular examples.

These catalogs use the RSS File to check for updates to your show. Each time you produce a new episode, you add it to the RSS text file and place your episode on the same server. But you do not need to keep telling, say, Apple Podcasts, that you have a new episode.

You do not need to tell your mom’s copy of Apple Podcasts that there’s a new episode.

The point of an RSS Feed is to allow your programs to reach out to your Feed at regular intervals. If the file is the same, the program goes back to sleep. If there is a change, it downloads the newest content using the web address in the RSS feed file.

The same goes for these services. They reach out to your web server, say, every hour and re-download the RSS file. The technique works as if to ask “Anything new?” If there is no change, it hibernates for another hour. If there is, it downloads the show information and then presents this so its users know there’s a new show they can download.





# RSS Feed File

There are multiple ways to create an **RSS Feed**. Of course, you can code yours manually. Or use a tool to do the same thing. But it might be less abstract to understand RSS files if we take a look at a simple example.

RSS looks like HTML because both are XML formatted languages.

There are some basic tags that you will see, opposite:

- Channel (your entire podcast series)
- Title (of each episode)
- Link
- Description (what is this episode about? or outside the <item> tag, what the whole podcast is about

You will notice that these **tags** (channel, title, link, description, item, etc.) have corresponding closing tags (/channel, /title, etc.). In RSS Feeds, each tag needs to be closed.

Do you need to write your own RSS feed files? No. As many beginning podcasters want a place to host their files, and a website associated with their podcast, using a blogging engine is a popular way to publish your podcasts. Blogs, by nature, also use RSS feeds. Therefore, many podcasters can use popular tools like WordPress to devote a “blog post” to each episode. The RSS feed takes the podcast title from the blog title, the description as the actual blog post, and WordPress has plugins to enter the URL of the podcast MP3 file.

Then, when it’s time to submit your RSS feed to the catalog service (i.e. Spotify Podcasts), you give them the URL of your blog’s RSS feed. For WordPress sites, this is often your main URL with /feed added at the end. [Check out this guide on using WordPress](#) to publish your podcasts.

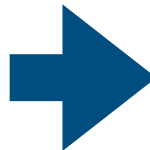
I have also used the app [Feeder from Reinvented Software](#) to create podcast RSS feeds. It allows me to view each entry in a cleaner way than editing my own text file. When I’m done editing, it can push the file via file transfer protocol (FTP) to my web server. This was my preferred method without using a blog engine to publish the podcast.

There are also solutions for those of you who are less technically savvy to publish podcasts. This is done through a **podcast hosting service**. Check out this [review of a number of different operators](#). All you have to do is upload your media files and off you go. The service provides you with your RSS file and will even show you, in some cases, how to submit the file, or help you register your podcast with the catalog services. Of course, all this convenience comes at a cost. But they are a great solution if you don’t have access to a blog or your own web server.

```
<?xml version="1.0" encoding="UTF-8" ?>
<rss version="2.0">

<channel>
  <title>John’s First Podcast</title>
  <link>http://johnhendron.net/podcast1/</link>
  <description>John discusses the power of podcasting.</description>
  <item>
    <title>First Episode</title>
    <link>http://johnhendron.net/podcast1/episode1.mp3</link>
    <description>John discusses his favorite podcast apps.</description>
  </item>
  <item>
    <title>Second Episode</title>
    <link>http://johnhendron.net/podcast1/episode2.mp3</link>
    <description>John discusses his favorite crime podcasts.</description>
  </item>
</channel>

</rss>
```



# Podcast Hosting

## Choose Your Plan

All plans include a free no-obligation 7-day trial.  
You'll get unlimited access to all features from day one, with no need to upgrade (ever!)

Monthly

Yearly

Personal

\$17 USD

/ month, paid yearly

Up to 12,000 downloads/month  
Unlimited Podcasts  
Unlimited Uploads/Storage  
Extensive Distribution List

Professional

\$44 USD

/ month, paid yearly

Up to 60,000 downloads/month  
Unlimited Podcasts  
Unlimited Uploads/Storage  
Extensive Distribution List

Business

\$90 USD

/ month, paid yearly

Up to 150,000 downloads/month  
Unlimited Podcasts  
Unlimited Uploads/Storage  
Extensive Distribution List

See all features

For Custom Plans or need over 150,000 downloads  
per month, please email [support@captivate.fm](mailto:support@captivate.fm)  
who can help.

First Name

Last Name

Email Address

Password

Confirm Password

1234 1234 1234 1234

MM / YY

CVC

Have a promo code?

Start Free Trial →

Podcast hosting services help podcasters by providing the server space for hosting their content, by providing tracking analytics, and by assisting with some production and editing. Some work with tools such as WordPress, and others can work independently. These services are ideal for those who have no interest in RSS feeds, setting up blogs, and the such. They can be, however, more expensive, over a period of time than more home-grown options.

The signup page for **Captivate** is listed opposite to give you an idea of what podcast hosting is all about. They are basically a web hosting service optimized for podcast files. Their pricing tiers are based on how popular your podcast is, because it costs more to fill up their pipes with your content. The add-on benefits for this service, specifically, are that they'll help you register your podcast with a ton of those catalogs (Apple Podcasts, Google Podcasts, etc.), and give you helpful analytics about how many people are accessing your content, and from where.

For advertisers, and yes, some podcasts have ads, you'll need to show them your statistics before they sign-on. You can negotiate better rates based on these numbers as well.

## Easy and Powerful Tools

Everything you need to have a successful podcast

3,331 downloads in the last 30 days.

LAST 7 DAYS

LAST 30 DAYS

LAST 90 DAYS

ALL TIME

OVER TIME

CUMULATIVE

Powerful Reporting

Easy to understand stats

Podcast Directories

Get Listed Everywhere

Publishing Made Easy

Easily create and publish episodes

Promotion Tools

Tools to promote your podcast

This screenshot comes from **Buzzsprout**, another pay-for service. As you can see, they're marketing their reporting tools, the ease of getting your podcast advertised "everywhere," and ease of use. They also have tools to enhance your sound and to design your podcasts' visual identity.

There is nothing wrong with these services, but it is remarkable to see so many options pop-up for podcasters given the platforms recent history (~ 2004-2021). What was originally created as a techie's hacked way to get new music onto iPods overnight into a service-based industry for new content creators, their business model is assuredly fixed on our desire to be heard.

Podcasts today are the new blogs of a decade ago. Blogging has waned since that heyday, so it will be interesting to see if podcasting stays as popular has it had grown over the past 3-4 years.



# Educational Implications



Old Wine in New Bottles?

I first presented on RSS feeds in education at ISTE in June 2005.

# Podcasts are packages of content.

Just in the same way that audio books are a convenient way to explore books while taking a walk, or commuting to work, with most podcasts being audio formatted, they can be enjoyed in the same environments.

As working professionals, we might listen to podcasts while ironing clothes or making dinner, as examples. While some podcasts are designed to entertain, others may go more deeply at engaging us in different ways—whether it’s a disparate viewpoint or learning something new.

For those we are teaching, podcasts—even our own—can work as a distribution medium for making content available to students.

As an example, in 2015, we were in our third year of our 1:1 deployment with iPads in Goochland County. We had parents who complained that they needed help to understand how to use their student’s new iPads so they could support them at home. The challenge became how and when to train parents. During the first two years, we required parents to come to school, but in the third round of our deployment, we’d made the decision not to require parents to undergo a training session with us. And our solution was to create short, informative videos that parents could access, on demand.

While asking parents to go, say, to YouTube to watch videos might work in some communities, we had an issue about how to get these videos to parents. Not everyone had broadband, and we realized the best place to access the videos would be on the iPads themselves.

At the time, we used an app called iTunesU from Apple. iTunesU was an app that allowed teachers or professors to create digital courses. New content would then be pushed to the devices as it became available. iTunesU was nothing more than a fancy podcatcher application. Within the course, we fed iTunesU our RSS feed.

Because we setup each iPad to be subscribed to our course, every iPad was pointing to our web server and our list of video podcasts.

During iPad pick up night, parents came in, learned about internet safety from our parents, then switched on the iPads for literally a fifteen minute session. We asked students and parents to sit side by side, to explore some new apps, and to launch iTunes U.

Once the app had launched, all the training videos were instantaneously downloaded onto each iPad. After we’d checked that parents had all ten videos, families were good to go.

When new content got pushed out, teachers could instruct students to launch iTunes U in class and download the new videos.

While iTunesU never had the richness of an LMS such as Canvas or Schoology, it did offer us a convenient way to distribute content especially around the challenge of a community with limited internet.

## When the Pandemic Hit

Some years later, at the time of school closures across Virginia, we were challenged once again about the methodology to leverage our 1:1 investment. While the Internet had gotten better in those five years, we still had challenges within our rural community.

While we were using Schoology as our LMS, such a tool requires always-on Internet access. We therefore faced a similar challenge again. How do we get content out to kids that they can work on independent of having an always-on Internet connection?

Our initial solution turned once again to the podcast paradigm.

The mechanics were the same: get families to check in once a week to exchange data. If they could drive by one of our schools, and connect to Wifi, they’d use that time to download new content from teachers and upload work that was due.

While we did not leverage iTunesU this time, it would have automated the download process for families. Considering that we were sending data in both directions, however, students utilized the Schoology app on their iPads. The Assignment tool was used to collect completed work, and new workbooks were posted for manual download.

What’s important I think about this example is that we weren’t just sending out audio or video files to students. And that’s important, too, I think, in understanding the potential of a podcasting as a distribution medium. You can podcast nearly any kind of digital file.

In our case, we developed a template using Apple’s Numbers app, which is a spreadsheet app. Because Numbers allows for the inclusion of rich media, such as video, audio, and graphics, we showed teachers how to design a week’s worth of activities for their middle school classes using the tabs in a Numbers file. Each day of the week was a tab, and students could work ahead, if they chose. Numbers documents don’t have a fixed page size, so you can scroll in all directions. And unlike Excel, your pages didn’t need to have tables of numbers.

What we then distributed was a weekly workbook. It was a week’s worth of learning—even if it contained an hour’s worth of video content—all in a single file. Had we published it with an RSS feed, it would have appeared on iPads once the appropriate app was launched when students could get onto Wifi.





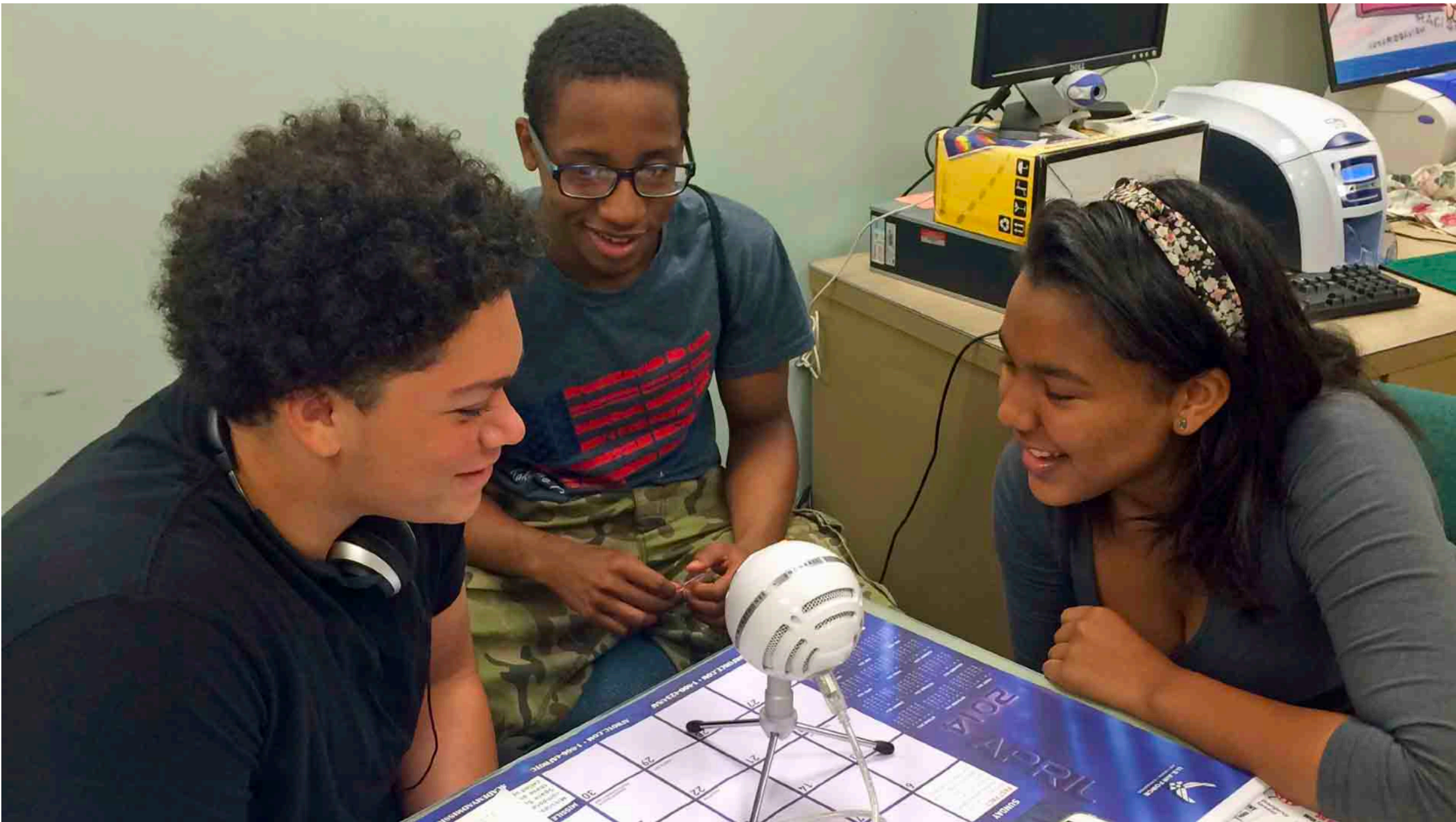
# Creating podcasts is educational.

So let’s put aside this whole thought for a moment that podcasts are something other people make so you can consume free content. As the last page highlighted, you can make and distribute your own podcasts for educational purposes.

But did you know that actually creating a podcast can be a method for supporting deeper learning?

The mechanics of creating podcasts was already covered. What I wanted to discuss was something else entirely: the act of creating a podcast, from planning, writing, recording, and finally publication, can be a type of educational project. And unlike projects that are intended for an audience of one (the teacher), these podcast episodes can be distributed to a potentially wide audience.

School age students can create and publish podcasts on a local area network or on the Internet. When a blogging engine is used for the podcast, students can comment on each other’s episodes for a more social context.

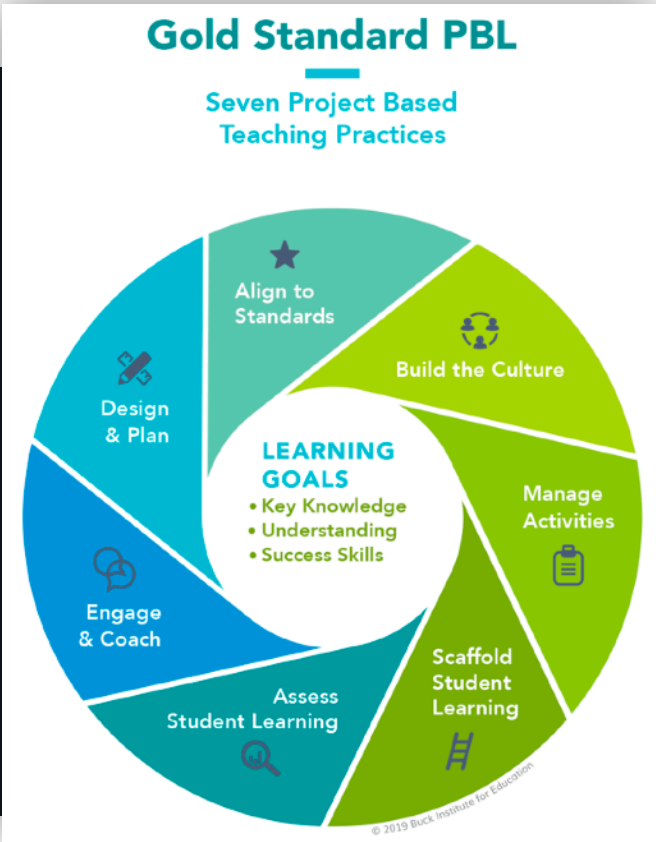


Students should be reminded that podcasts that are found on online directories gain popularity because they are sticky: people want to listen to them either because they’re entertaining, they are relevant to the intended audience, or they contain factual information that others find useful.

Students should therefore start the enterprise of creating a podcast or podcast episode by knowing their audience and their needs. They’ll want to be sure the presentation within the podcast is at least semi-professional using good software tools. And finally, the information contained within the podcast episode is accurate and original.

Finally, students will come to understand that with available tools, nothing is holding them back from becoming authentic content creators. With podcasting, they’ll be able to combine any number of potential elements together in software that be accessed by familiar and unfamiliar listeners.

And yes—podcasting is a real business in 2021. Prolific creators can make money through advertising or direct payments.



While there are multiple ways of thinking about, and planning for using project-based learning in the classroom, keep in mind that many PBLs include some kind of output to be made by students. In my book, *RSS for Educators*, I provided a number of model lessons where students could create podcasts as a means to gain to understanding and expertise about a particular topic.

Great or “Gold Standard” PBLs (to use Buck Institute speak) wouldn’t necessarily force students into making a podcast. One could easily go down the wrong route by requiring all students to create a podcast episode that followed a rigid set of guidelines, not terribly different, than say, the 1988 book report that I was assigned in the eighth grade. Instead, view podcast creation as a potential solution to a problem students are trying to address.

I have always advocated that after we expose students to what a podcast is, and isn’t, to allow them the creative freedom in designing a podcast for a particular audience. When assessing that media, then, we could use a design-based approach to guide students on how well they hit the mark.

Many times I worked with older students who would produce original content for the benefit of younger learners in our elementary schools. These included books, videos, and yes, podcast episodes. In the best situations, our older students got to know the younger students, they had to understand what they liked, and the content had to be at the right level for their younger peers.

Seeing students in the end speak to the design decisions they made was always gratifying and a sign that the experience was a deeper one by the time the episodes had been written, recorded, and shared online.



# Planning for a podcast-based lesson.

So I've convinced you that students could produce a podcast and would learn something through the experience. How does one even start?

As a teacher, you will need to make a number of decisions about your podcasting: practical ones, logistical ones, and what you, when all is said and done, want this to look like.

Will each student produce one episode for a classroom series? Will students work in groups to each start their own series? Will it be a station in your classroom? Or will it become a school wide endeavor?

I am a fan of allowing students to work in groups on podcast series. For one, it will give them an opportunity over time to become better writers, producers, and publishers. Second, it's a great opportunity for students to develop a team-based work skillset. And third, they can each take different roles in the production of their podcast. This is a great way to encourage social learning. (In this case, let's say the main host who has the main speaking roles trades places the next time with another team member—students can share their experience in the production of their podcast episodes.)

Students will also need planning documents in order to stay organized. I'd always encourage students to write out their scripts and practice their diction before recording. Working on the elements of a podcast can develop pride in students, especially so then they take their work seriously.

To encourage that serious attitude, I can't say enough about ensuring that you provide students an audience. This can be class peers, another classroom, another school, or invited adults to give them feedback on their production. Students can even be responsible for developing the questions they ask their listeners.

While you may imagine that elementary students can find creating a podcast series interesting and motivating with the appropriate instructional design, what about older learners? What about you, as an adult? Is there learning potential in creating your own podcast?

While media production seems to be the specialized domain of our communications team, look beyond the high quality microphones, flashy theme music, or a theme-packed website that comes along with all the professional podcasts out there. Let's consider the basics. What's the potential?

Writing papers in college classes is a mainstay of university courses. Why? For one, it's an ask for you to produce original content. Second, it's preparation for future work in academia, where writing papers, articles, and books is the way we publish and disseminate knowledge.

What would have been different if your professor had asked you to produce a podcast episode rather than a ten-page paper?

Don't get me wrong, I actually enjoy writing papers. But I also recognize I'm odd that way. But being able to hear yourself (or other talent) express your viewpoints is admittedly a different experience. It's more personal. And again—by design—it's probably going to be experienced by more than just the professor.

I think podcasting as an educational vehicle—either part of a fifth grade lesson or an extended professional learning workshop—can be equally powerful for the thirty-nine year old learner as it is the ten year old one.

If you can find and listen to podcasts, you can make them!

## Planning for Success

Whether your students are adults or school-aged, it is always a good idea to chunk up the production tasks for making a podcast into steps that you can assess along the way. We always encouraged teachers to ask students to have all the planning elements completed and checked-off by teachers ahead of actually recording and editing their media.

As it turns out, the media production has value, but the real learning of new content typically takes place in the synthesis of words, drawings, and planning an episode. If I'm planning a podcast episode, say, to discuss the moon cycles, I am going to want to know if students know their labels before making a recording of the wrong information. Right?

Some teachers may feel they need to provide real structure for some students. If possible, see if you can delegate some of that planning to students themselves. Talking for fifteen minutes about moon cycles may prove to you that they knew the phases, but it may not equate to something people are going to want to listen to. And that authentic feedback of the final product is an important element to assess as well.

Should the production value of the podcast count in the grade? Sure. While knowing about the moon phases is an instructional aim, you're also hopefully planning to develop student collaboration and creative thinking skills; you'll want them to exercise social skills and problem-solving when the team can't make a decision.

And just as important as voice is a part of great writing, the quality of the voice in our media production carries the same value to those consuming that media.

Which is to say—you'll also want to plan for how to evaluate student-produced podcasts. I've often advocated for the use of rubrics for these types of learning projects. They can provide deep insight into the multiple elements that make a good podcast with the appropriate levels of feedback on how students can improve given the next opportunity.





# Planning the episode.

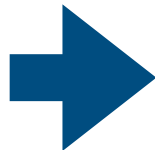
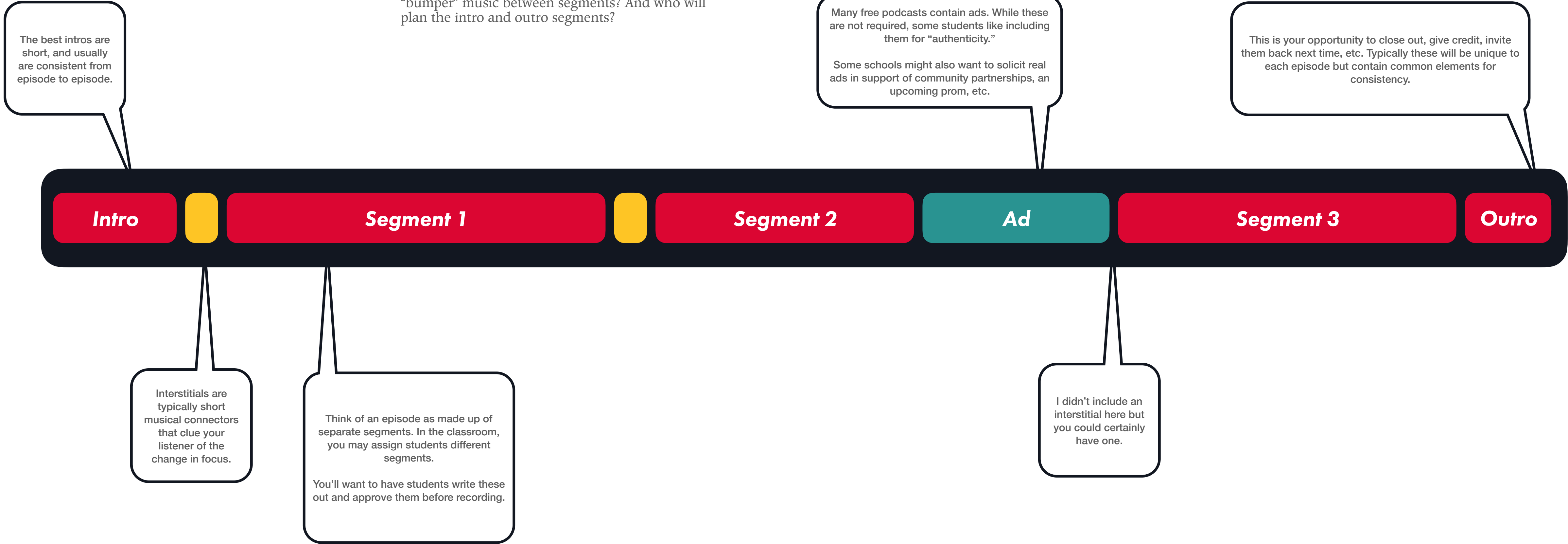
Podcast episodes have a structure to them, and it may be helpful to use visuals to help you or your students plan your podcast. Here's a high-level look at an episode where the length of each section generally relates to their relative time.

If you listen to professionally created podcasts, you will find they do not all fit a pattern exactly like this, and many variations are possible.

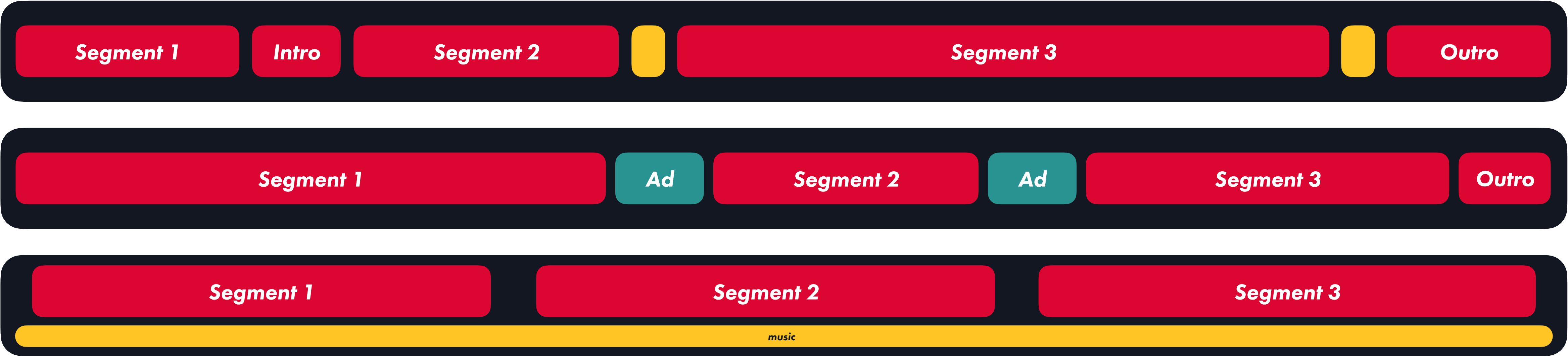
You can provide students a slide like this to plan their own episode and plan out the episode. For instance in this example, who will write out each segment? Who will prepare the interstitial or "bumper" music between segments? And who will plan the intro and outro segments?

If you give students some creativity in the planning of their episode, you may implore them to consider their formal structure and how to optimize it for their audience.

For instance, some podcasts now start with content with no intro; others might start with content before the intro, etc. Do people really like or need long introductions?



# Consider some options.



So the point I'm trying to make here is that you have options. And none of these are a single segment recorded over time without stopping; it's not you ruminating to yourself with a voice recorder on a walk around your neighborhood (trust me, people have done this!).

Instead, if you're trying to engage your audience, you need to give your show structure. Some folks will even help people out with chapter markers. So if Segment 3 in the first example was about climate change, and that's all you wanted to hear about in the episode, you'd allow them to jump ahead to segment 3.

YouTube now has this capacity with videos. If I don't care about how to repair my iPhone's internals and want only to skip ahead to the total cost enumerated at the end of the video, I can skip ahead.

These visual diagrams are also important because they visually are very close to the look of audio samples in our editing software. Not so much about color, per se, but you can see the audio waveforms and the length of the clips represent linear time.

If you've ever edited video, you'll recognize the visual representation when moving clips around and editing them.

And speaking of options, you'll have to decide how you will record and how you will edit your podcasts.

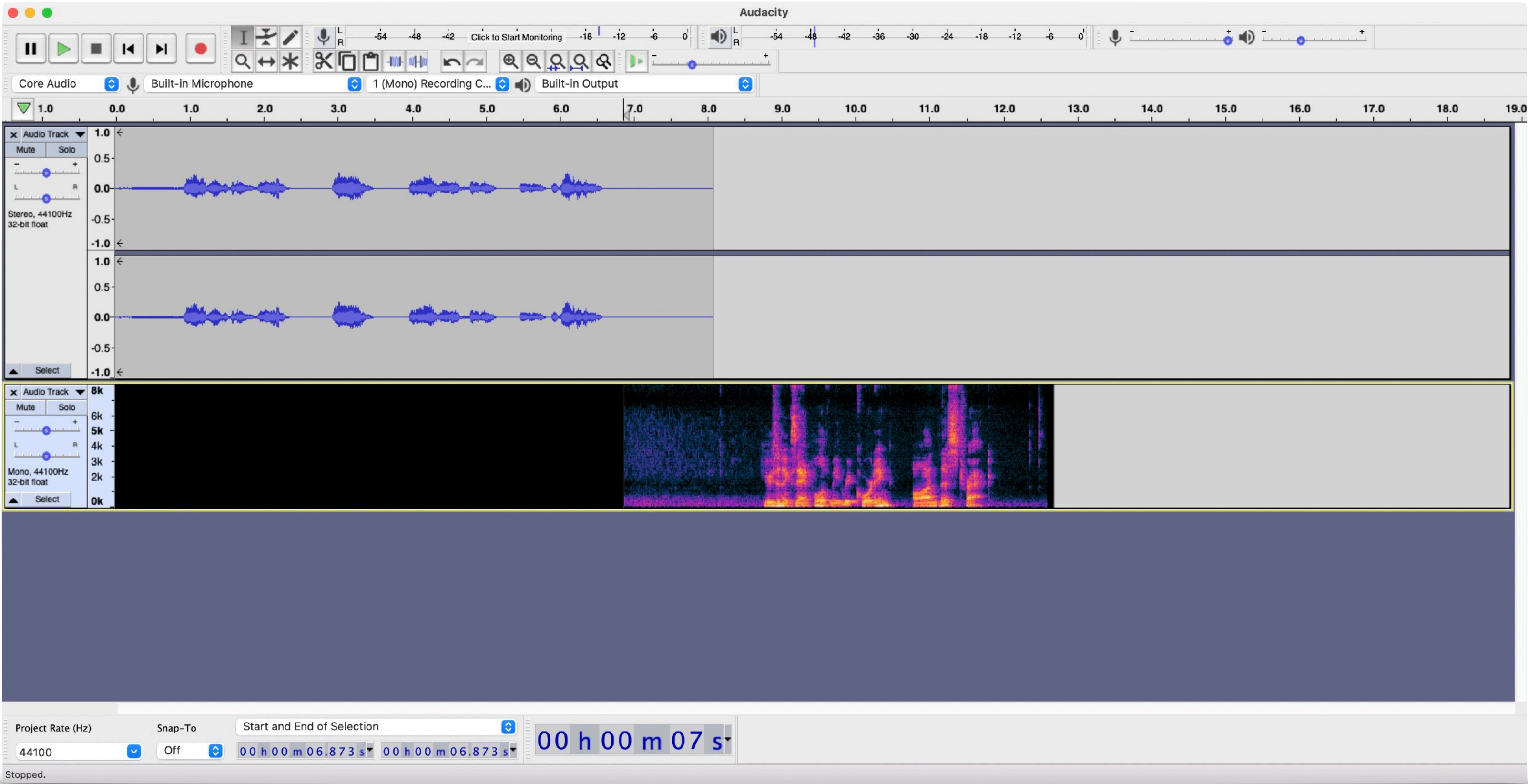
There are options. While the paid options like Adobe Audition have all the bells and whistles, you can still manage to edit a nice episode with free options like Audacity or Garage Band (Apple iOS).

From left to right:  
Audacity (free, Mac/PC), Adobe Audition, Garage Band (Mac), and Ferrite (iOS)





# Audacity



This tool’s popularity is due to its price tag (free), its availability on Linux, PCs, and Macs, and its longevity.

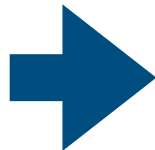
With Audacity’s tools, you can move the clips around, cut them, change the volume, and perform fade-ins and fade-outs.

In this example, opposite, I’ve recorded one short clip in stereo and a second in mono. Typically, you’ll want your production to be in stereo, but there are some uses for monaural tracks.

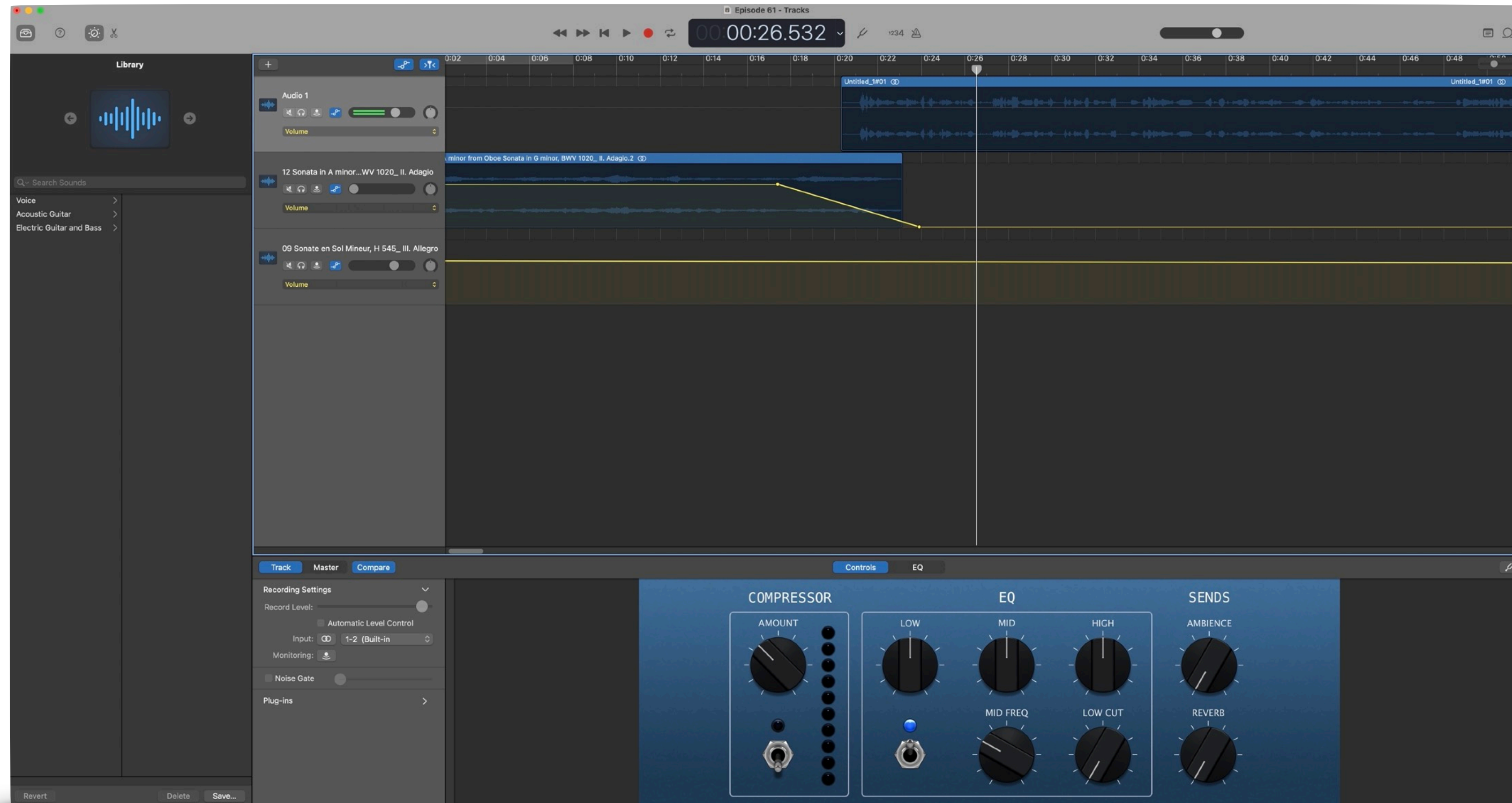
Let’s say I am recording two people, each with their own microphone, appearing on their own track. I could push one person to the left channel, and another to the right.

The third track is displayed in a different format with a spectrogram. I don’t find this useful for editing podcasts, but I simply wanted to show off.

- Check out their online resources for all the details on [getting started and editing with Audacity](#).



# Garage Band



While I do think editing with Garage Band is easier on a Mac, the tool on Apple's mobile operating systems, iOS and iPadOS, is nevertheless still very powerful.

In this example, I am using three tracks. The top track contains my recorded audio (talking about music), and I use my second and third tracks to hold the music (imported MP3 files). The yellow lines you see are the interface for fading in and out with volume. In this way, I can let one musical clip fade out while another fades in, and then have my audio on top, if I so please.

The blue controls at the bottom are effects for the selected track; these enhance the sound.

When setting up Garage Band for podcasting, you'll want to be sure to set it to time mode (instead of counting in musical measures), turn off the metronome, and only use audio files (not software instrument-style tracks).

This is probably one of the easiest tools to use.

- [Check out this guide](#) on using Garage Band (on Mac) for recording and editing your podcast.
- [Editing \(music\) in Garage Band on iOS](#)
- [This guide does a good job at covering the major editing functions on iOS](#)





# Taking it Mobile



I can't speak to any recommendations for recording and editing on Android. There are many options, of course, but in my quick research, I did not find a clear winner. Some of these apps are free, but others have costs associated with them.

**Garage Band** is Apple's free editor and they make it for both Macs and their iOS and iPadOS platforms. I personally have been using this app for podcast editing for over a decade. While the software was envisioned as a music recording app, you can disable elements such as the metronome, beats-per-minute, and use it to both record and edit audio from your phone, iPad, or Mac.

**Ferrite** is a newcomer that I've recently become aware of that is a paid app that sings on iPad. Its gestures use the Apple Pencil to quickly edit your recordings. Unlike Garage Band, it doesn't contain any music cruft and is well-positioned just for recording and editing audio clips, making it an excellent editing tool.

While these solutions thus far have allowed you to both record and edit your audio in one place, note that you can also capture audio in a number of ways separate from editing.

For instance, you could use the Voice Recorder app on your iPhone to record your clips, then export these into a desktop computer app such as Audacity.

I recorded my first podcasts using an iPod, third generation, with the plug-in microphone from Griffin. I recorded my thoughts about my trip to Hong Kong in 2007, walking around and capturing the city's sounds using this mobile setup.

Just because you're using a mobile solution doesn't mean you have to sacrifice on quality. You can also purchase today USB microphones for your phone or tablet to enhance the audio fidelity that goes into your recording app. For those who may also have an investment with XLR microphones, you can also use a USB-enabled mixer to take non-digital sources and feed them right into a computer or even a high-end tablet like an iPad.

For most of us, using a good pair of earbuds with an included microphone will probably suffice to get us started.

While software can help reduce background noise, know that the more quiet environment you can record in will be most helpful.

## Talk is cheap. How does this work?

"But John!" you say. "How do I use these tools?" It's 2021 and if you haven't already figured it out, there's a YouTube video for everything. I curated a few for you to help you get started.

- [How to make a podcast on your iPad with GarageBand](#)
- [How to start a podcast on your iPhone](#)
- [How to edit a podcast in Audacity](#)
- [Podcast Editing with Ferrite and Apple Pencil on iPad](#)
- [Do I have what it takes \(to podcast full time\)?](#)
- [Cult of Pedagogy: How to Podcast](#)

## What if I only want to listen?

- [Good Housekeeping Best Podcasts 2021](#)
- [50 Most Listened-to Podcasts](#)
- [Time Magazine: Best Podcasts So Far 2021](#)
- [10 Best Podcasts for Teachers](#)



# Conclusion





# What’s the why?

So, why podcasting or podcasts or any of this?

Leading up to 2010, there was a lot of chatter in education about the power of the so-called Read/Write Web, which included blogs, podcasts, and wikis. All of these technologies allowed everyday people—like you and me, and our students—to publish content online that mimicked more traditional forms of media.

Wikis were editable web pages. Blogs were akin to newspapers or magazines. And podcasts had a similarity to radio shows.

In 2021, the important story is that this medium has not gone away or faded. In fact, more people today know about podcasting than ever before. It’s easier than ever to get started, and there is a great deal of variety when it comes to content and topics.

If you ever read *The Long Tail*, you’d remember that Amazon’s success is not because they offer only the best things for sale, but it was because they offered so much stuff that wasn’t overtly popular. They could do what Walmart could not—sell esoteric things that might be interesting to only a handful of people.

Podcasts offer something to everyone when we consider the variety of content.

Creating media of any type can be an educational experience. Using podcasts in your pedagogy means you’ll be asking students to create original content that is focused on getting listened to by a real audience.

The experience can be motivational.

Learning about podcasting today may have raised more questions than you had when we started. Which is a good thing. You’re interested in the potential for yourself.

I’d start with planning. Plan an episode. Forget the technology. Think about what you want to say and how you plan to say it.

Then play with the tools. I’ve given you glimpses about what’s possible and a lot of links to follow for additional information.

Practice recording and editing. Hopefully my live examples provided context for how these tools work.

Next, listen to some podcasts by others. Get a sense of what works for you. And then decide: am I going to do this? Would someone like you want to listen to your content and make it a part of their commute or bedtime ritual?

You may wonder why I podcast. I don’t do it for money. I do it because it can be fun. Knowing other people download my content and listen to it is fulfilling. Knowing I can spread my love for classical music is empowering.

Will creating a podcast empower you?



