

Podcasts: Accessing, Choosing, Creating, and Disseminating Content

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The Challenge

Learners are faced with the challenges of a constantly growing knowledge base, combined with multiple, competing information sources. These problems are exacerbated by increased work intensity related to duty hour limits. Web 2.0, the era of user-generated content, has heralded multiple resources and tools that allow for creative solutions, including podcasts.

What Is Known

Podcasts are audio files distributed via the Internet to share information asynchronously. Users can subscribe to podcasts (for automatic download), which offer highly customizable learning materials ideal for graduate medical education (GME). Users can now dictate the “who,” “what,” and “when” of their learning experience. Podcasts can vary in length and their episodic release can occur daily to monthly. Podcast use has grown exponentially relative to other asynchronous resources,¹ with learners devoting the most time to podcasts and perceiving podcasts to be a more beneficial resource over traditional books and journals.²

Whether assigned by a faculty member or selected by a resident, podcasts enable trainees to acquire information at their own pace, are usually free of charge, and afford users immediate access to expert educators. For instructors, podcasts can deliver content to learners in advance of scheduled curriculum sessions to support application of knowledge through interactive learning activities. By recording key topics as downloadable content, educators can create podcasts that reach learners on the local, national, or international level. High-quality podcasts can also advance faculty careers and promote one’s program beyond its home institution.³

How You Can Start TODAY

Accessing, Choosing, and Using Podcasts in GME

1. *Search for and ask for podcast recommendations.* The iTunes Podcasts store, Podcasts.com, Podcast Directory.com, and Digital Podcast are popular directories. Use specific search terms (eg, “high-risk pregnancy,” “psychiatry,” “cardiology”) to display podcasts of interest.

2. *Select podcasts based on relevance and quality indicators*, including credibility (eg, author, editor, publisher transparency; absence of bias or potential conflicts of interest; and clear distinctions between fact/opinion) and content (accurate and appropriate for intended audience/purpose).⁴
3. *Subscribe to podcasts* after becoming familiar with the content and creators. On Apple devices subscribe to and receive podcasts from your device by using the built-in iTunes and Podcasts applications. Podcast Republic and BeyondPod applications can be used for Android devices. Single podcasts can also be downloaded from these sites. Streamline the acquisition of podcasts to ensure that listening becomes a lifelong learning habit.
4. *Listen to podcasts.* Many individuals modulate the listening speed of podcasts: 1.5× speed with intervals of normal speed when complex information is presented.
5. *Integrate preexisting podcasts into the GME curriculum.* Podcasts can be used as an asynchronous learning material or, in a “flipped classroom” approach, in efforts to augment an existing curriculum.
6. *Curate the downloaded material by topic.* By organizing material within a framework, educators and learners are able to systematically digest, remove, or recommend podcasts.

What You Can Do LONG TERM

Create Podcasts to Meet Educational Needs

1. *Choose a niche that meets your program’s educational needs.* Begin by exploring topics of interest and looking for related podcasts. Identify needs that are not currently addressed to choose a niche that can be developed into an area of expertise.
2. *Develop a plan* for your podcast. Determine the appropriate format, length, and frequency of the podcast. The format can be a simple lecture or a discussion between individuals that may provide realistic and engaging dialogue to the listener. To avoid losing the audience’s attention, plan for short, 10- to 20-minute presentations. Within your plan, segment recordings by topics to make it easier to update and edit. Consider recording multiple podcast episodes at a time, but releasing them at

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prescheduled times to maintain your audience's interest.

3. *Create a recording environment.* Pick a quiet place with little ambient noise. Use a high-quality microphone with a headset or a microphone with a pop filter to minimize the popping sound heard when recording sounds such as the letter “p.”
4. *Record then edit* your podcast. There are multiple programs you can use to record and edit a podcast. Contact podcasters to ask for recommended programs. Check with your local colleagues and institution to determine what is already available and supported that meets your needs. Edit your podcast to remove any unnecessary sounds, pauses, and content. Use software to add sound effects and overlay music tracks to create a more professional sound.
5. *Host* your podcast. Check for local hosting options or consider external hosting websites easily found by searching with keywords such as “podcast hosting.” Consider sites that have features that will automatically upload podcasts and interface with podcast directories to keep content updated.
6. *Share your podcast* on podcast directories and other social media sources such as blogs, Facebook, and Twitter to increase your audience and potential impact. Podcasts are a valuable method for sharing ideas—join the “Free Open Access Medical Education (FOAMed)” movement.¹

Resources

1. Cadogan M, Thoma B, Chan TM, Lin M. Free Open Access Meducation (FOAM): the rise of emergency medicine and critical care blogs and podcasts (2002–2013). *Emerg Med J*. 2014;31(e1):e76–e77.

Rip Out Action Items

Program directors should:

1. Identify a learning gap or need for trainees or faculty, and ask colleagues for podcast recommendations.
2. Select and listen to podcasts that are relevant and meet established indicators for podcast quality.⁴
3. Integrate podcasts into the graduate medical education curriculum, using classroom time to support trainees' application of content.
4. Create podcasts to meet the needs of the program and share them.

2. Mallin M, Sclein S, Doctor S, Stroud S, Dawson M, Fix M. A survey of the current utilization of asynchronous education among emergency medicine residents in the United States. *Acad Med*. 2014;89(4):598–601.
3. Sherbino J, Arora VM, Van Melle E, Rogers R, Frank JR, Holmboe ES. Criteria for social media-based scholarship in health professions education. *Postgrad Med J*. 2015;91(1080):551–555.
4. Lin M, Thoma B, Trueger NS, Ankel F, Sherbino J, Chan T. Quality indicators for blogs and podcasts used in medical education: modified Delphi consensus recommendations by an international cohort of health professions educators. *Postgrad Med J*. 2015;91(1080):546–550.



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