

# A Novel Student-Driven Q&A Podcast as a Tool for Medical Student Learning

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## Introduction

- Traditional anatomy education in medical schools primarily relies on didactic lectures and cadaveric dissection. While these methods are well-established, the effectiveness of newer, innovative learning formats has not been extensively studied.
- As medical education evolves, exploring alternative teaching strategies may enhance student engagement, retention, and overall comprehension of complex anatomical structures.
- This study examines the efficacy of an Anatomy Q&A podcast in anatomy education and its potential role in supplementing traditional methods.



Figure 1. Authors hosting the podcasting.

## Aims and Objectives

- Engage with M1 students to understand common challenges and areas of difficulty in AFCEP.
- Develop thoughtful, targeted questions to address these challenges in partnership with anatomy faculty at OUWB.
- Record Q&A podcast episodes featuring OUWB anatomy faculty to clarify complex topics and reinforce foundational knowledge.
- Share podcast episodes with M1 students as an accessible and engaging tool for supplemental education.
- Conduct research to assess the effectiveness and student satisfaction of the podcast as a supplemental learning resource

## Approach/Process

Two pilot episodes (60 minutes duration/episode) were recorded with two segments: 1) Q&A Segment, and 2) Case Presentation. Scope of pilot episodes was limited to Head & Neck anatomy sessions. Q&A questions were developed and refined based on high-yield topics and complex concepts identified through student body survey responses. Case Presentations were drafted based on high-yield clinical correlates that often appear on instructor-written exams and USMLE Step 1 board examinations.

**Q&A Segment Format (~45 minutes):** A student asks anatomy faculty (Dr. Barremkala & Dr. Gemechu) questions on complex topics. Faculty provide detailed responses, clarifying high-yield concepts and common confusions. Students may ask follow-ups or new questions.

**Example:** *How do the branches of the facial nerve proper differ from other components of the facial nerve, like the chorda tympani and greater petrosal nerve?*

**Case Presentation Format (~15 minutes):** A student presents a clinical case (e.g., Coloboma, Thyroidectomy) with history and exam findings. Faculty answer 3-5 related questions asked by student, reinforcing anatomical correlations.

**Example:** *What are the visual field deficits commonly associated with coloboma, and how are they tested?*

The pilot episodes were distributed to M1 students at OUWB for supplemental learning. The number of students who engaged and listened to the podcast was tracked. A survey study is currently underway to assess student ratings of the effectiveness of using a podcasting format for medical student anatomy education.

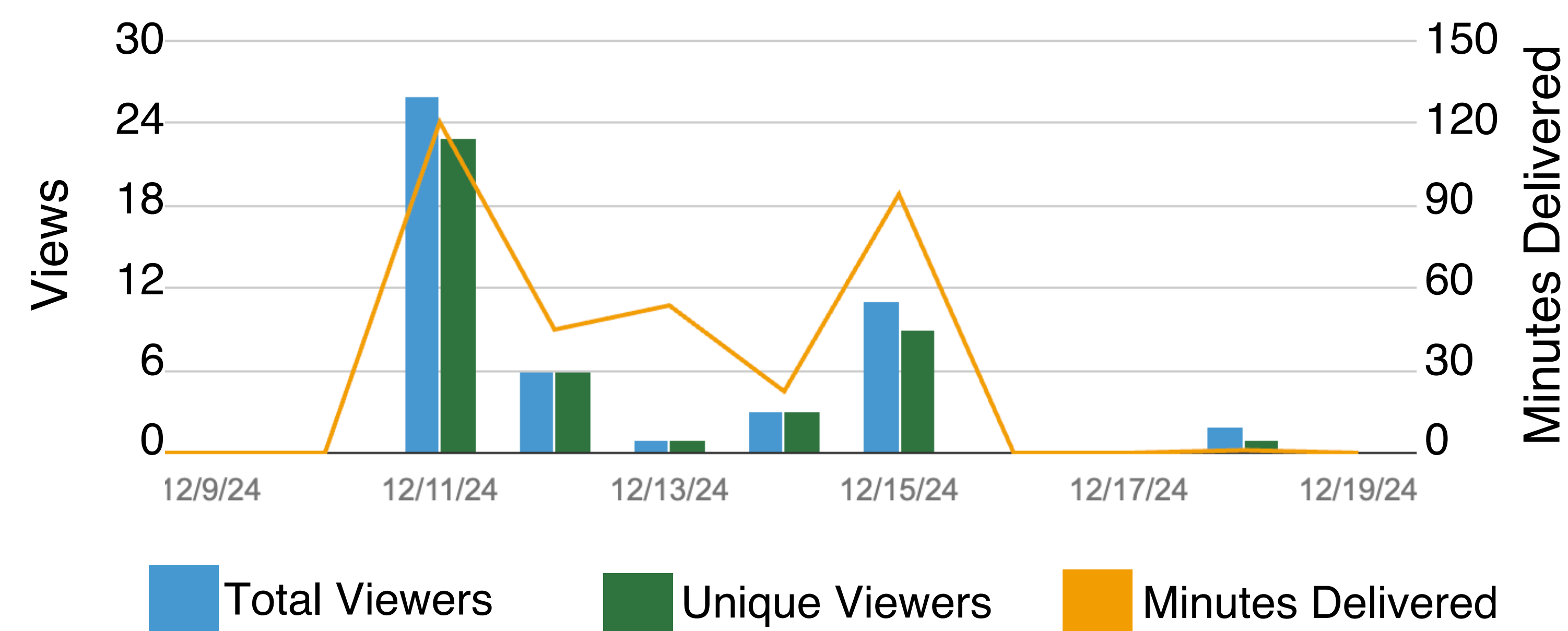


Figure 2. Total number of views and minutes delivered. The graph illustrates overall engagement, including total views (49), unique viewers (37), and total minutes of content delivered (336.6 minutes).

## Evaluation Plan

- Our current research focuses on obtaining feedback from M1 students at OUWB.
- We devised 9 survey questions that ask students to report their listening experience.
- The results from this research will help us refine our methods as we continue to develop the podcast.

## Discussion

- When compared to written material, residents and fellows rate recorded podcast material as more interesting and enjoyable.<sup>1</sup>
- Our podcast offers information in an audio-only format, which allows students to engage with material in a flexible manner.
- The conversational-style dialogue reflects how students can expect to engage with material in a clinical setting.

## References

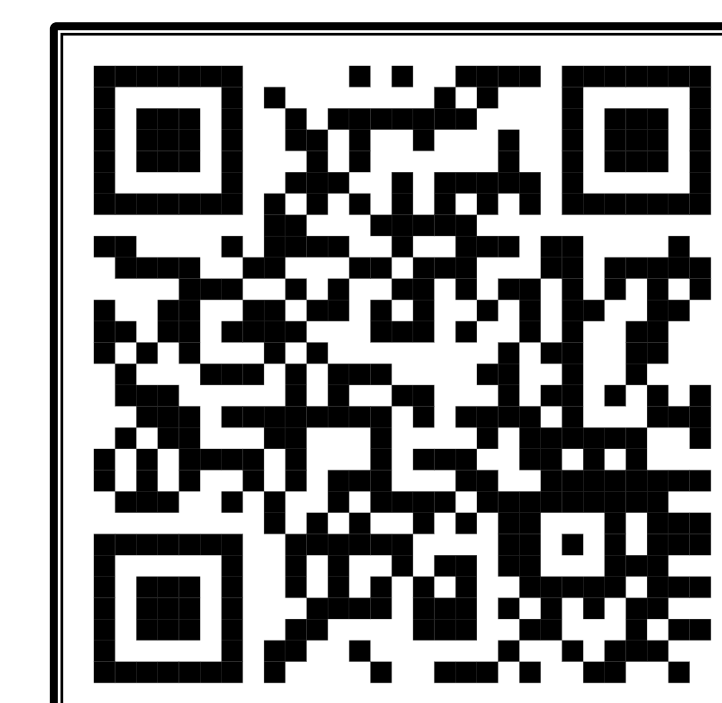
Roth J, Chang A, Ricci B, Hall M, Mehta N. Why Not a Podcast? Assessing Narrative Audio and Written Curricula in Obstetrical Neurology. *J Grad Med Educ.* 2020;12(1):86-91. doi:10.4300/JGME-D-19-00505.1

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Anatomy Q&A Podcast E01



Anatomy Q&A Podcast E02