

LETTER TO THE EDITOR

The EEG Talk experience: Lessons in e-teaching EEG

EEG Talk was created in December 2020 with a vision to bridge a critical gap in trainee EEG education in the United States and abroad.^{1–5} Inspired by the *Car Talk* radio show, *EEG Talk* was designed to deliver high-quality EEG education through pre-recorded video-based lectures (VBLs) combining structured teaching with conversational discussions and entertainment. In this Letter to the Editor, we share our experience teaching EEG through *EEG Talk*, reflect on the key lessons learned over the years, and outline our next steps.

EEG Talk's content consists of a library of VBLs, each covering a specific topic within EEG/epilepsy. Topics are selected by the creators (FAN, MBW) based on clinical relevance, particularly for the intended audience: medical students, adult and child neurology residents, EEG/epilepsy clinical fellows, and early-career attending neurologists. In each VBL, FAN and MBW engage in a partly scripted, back-and-forth discussion focused on high-yield information on a given topic. Most VBLs feature guests who are epilepsy and clinical neurophysiology experts and outstanding educators. Experts enrich the content by sharing their knowledge and experience on the topic being covered. All VBLs are edited internally using professional video editing software. While most VBLs are stand-alone (“episodes”), some are part of special “series” (e.g., the ACNS Critical Care EEG Terminology 2021 series and the Spike Operational Criteria series). All materials are hosted on YouTube (<https://www.youtube.com/c/FábioANascimento>), making the content freely accessible to a global audience.

Since 2020, there have been 25 episodes (Table S1) and several series in addition to “special” episodes. The *EEG Talk* YouTube channel has thus far attracted more than 4,000 subscribers with a total watch time of almost 11,000h. According to data available on YouTube, most viewers are 25–34 years of age (86%), and the top three viewing countries in descending order are the United States, India, and Japan. Viewers usually find *EEG Talk* content through YouTube’s “suggested videos” (28%) or its search engine (16%). The most common viewing devices are computers (51%) and mobile phones (34%). This data is measured by watch time and represents the best accessible estimates available on YouTube analytics.

The average view duration and average percentage viewed across all *EEG Talk's* VBLs are 4 min and 52 s and

31%, respectively. Considering only episodes and select series, the average view duration ranges from 4 min and 25 s to 6 min and 22 s, and the average percentage viewed from 28 to 34%. This data is summarized in Table 1.

Although we have not formally collected qualitative analysis of *EEG Talk*, we have repeatedly received very positive feedback about its content. Beyond the enthusiastic feedback we have received online (e.g., YouTube and social media), we have enjoyed the rewarding opportunity to meet many trainees worldwide who have used *EEG Talk* to complement their EEG training. We have also discovered that many academic institutions in the United States and abroad recommend *EEG Talk* as a valuable educational resource. Lastly, *EEG Talk* has served as an effective educational intervention in scientific projects in the field of electroencephalography.^{6,7}

We believe the success of *EEG Talk* derives primarily from three major factors. First, content development is guided by the principles of the cognitive theory of multimedia learning to enhance educational effectiveness⁸—including the casual and conversational tone characteristic of *EEG Talk*. This tone is complemented by humor from hosts and guests, and the use of sound effects during editing. Meanwhile, FAN and MBW adopt a trainee-mentor dynamic that fosters relatability—especially given that our audience primarily consists of novices and early-stage learners. Second, most VBLs feature guest stars, who are epileptology and education experts. Third, *EEG Talk* is globally accessible, free of charge, and offers learners flexibility and convenience that facilitate and motivate learning.

We aim to keep improving *EEG Talk* by incorporating viewer feedback, video analytics, and emerging technologies. Recently, *EEG Talk* merged with *EEG Hub* (created by DY), an online platform for processing, hosting, and displaying EEGs (www.eegtalk.com).⁹ This collaboration enables learners to gain foundational knowledge through VBLs on *EEG Talk*, then apply this knowledge on *EEG Hub*, where they can interpret EEG in a setting that mirrors real-world practice. Additionally, we plan to use the video-related metrics presented in this Letter to improve future content. For instance, metrics which show that the average *EEG Talk* viewer watches approximately one-third of each video have motivated us to shorten and condense future VBLs. Moreover, we will continue to tailor content

TABLE 1 Summary of video-related metrics for select *EEG Talk* content as of July 15, 2025.

	Number of videos	Avg duration, range (min)	Total views	Total watch time (h)	Avg view duration (min)	Avg % viewed
Episodes 1–25	25	14.3 (7.0–25.0)	59,649	5,069	5:05	34%
Select ^a series						
IED identification	2	13.8 (13.7–13.9)	6,589	485	4:25	32%
Encephalopathy	4	17.7 (10.4–26.0)	9,545	1,014	6:22	32%
ICU EEG	5	14.2 (6.6–23.9)	35,002	2,895	4:57	28%
Spectrogram	3	17.3 (8.4–24.2)	4,386	382	5:13	29%

Abbreviations: Avg, average; ICU, intensive care unit; IED, interictal epileptiform discharge.

^aSeries containing at least 2 videos.

for a young adult audience (Millennials and Gen Z) and develop multimedia optimized for computer and mobile phone viewing.

Ultimately, we believe *EEG Talk* and *EEG Hub* should be used as complementary tools alongside traditional EEG education. A hybrid approach—integrating digital learning platforms with traditional face-to-face training—has been consistently shown to be effective,¹⁰ combining the flexibility and scalability of online learning with the hands-on, interactive benefits of in-person instruction.

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CONFLICT OF INTEREST STATEMENT

F. Nascimento and I. Sheikh serve as Associate Editors of Epileptic Disorders. S. Beniczky serves as Editor-in-Chief of Epileptic Disorders. M. Brandon Westover is a co-founder, scientific advisor, and consultant to Beacon Biosignals and has a personal equity interest in the company; the company was not involved in this work. The remaining authors have no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Fábio A. Nascimento¹ 
Doyle Yuan²

Irfan S. Sheikh²
Lawrence J. Hirsch³
Sándor Beniczky^{4,5}
M. Brandon Westover⁶

¹Department of Neurology, Washington University School of Medicine, St. Louis, Missouri, USA

²Department of Neurology, University of Texas Southwestern Medical Center, Dallas, Texas, USA

³Department of Neurology, Yale University School of Medicine, New Haven, Connecticut, USA

⁴Department of Clinical Neurophysiology, Danish Epilepsy Center, Dianalund and Aarhus University Hospital, Aarhus, Denmark

⁵Member of the European Reference Network – EpiCARE

⁶Department of Neurology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, USA

Correspondence

Fábio A. Nascimento, Department of Neurology, Washington University School of Medicine, Campus Box 8111, 660 South Euclid Avenue, St. Louis, MO 63110, USA.

Email: fabion@wustl.edu

ORCID

Fábio A. Nascimento  <https://orcid.org/0000-0002-7161-6385>

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.