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How suitable are TED talks for academic listening?

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A B S T R A C T

To investigate the suitability of TED talks for academic listening in EAP contexts, this research paper compares Academic Vocabulary List (AVL) representation (Gardner & Davies, 2014), lexical density, and speech rate in a TED talk corpus and a lecture discourse corpus, which were both compiled for this study. 28 lecture series (727 lectures total) and 49 TED talks were analysed for AVL representation. TED talks were found to have lower AVL representation than the university lectures ($t(75) = 4.95$, $p < 0.0001$). 43 one-minute samples from the Lecture Discourse Corpus and 47 one-minute samples from the TED Talk Corpus were analysed for lexical density, where no differences were found; and speech rate, which was found to be significantly faster in TED talks, in terms of syllables per second ($t(98) = 4.23$, $p < 0.0001$) and words per minute ($t(98) = 4.20$, $p < 0.0001$). A negative correlation was found between lexical density and syllables per second in the lecture discourse corpus ($r = -0.343$, $p < 0.05$), where none was found in the TED talk corpus ($r = -0.031$, ns), perhaps due to TED talks being a scripted genre. It is concluded that TED talk variation enables a range of academic listening applications.

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1. Introduction

There is evidence to suggest that TED talks are being increasingly used in ELT classrooms. In 2014, National Geographic Learning announced a partnership with TED (Cengage, 2014), which led to TED talks being included in the *World English* textbook series (Milner, Chase, & Johannsen, 2015). The logic that if TED is good, more TED must be better, was applied to the Keynote series (National Geographic Learning, 2017; Stephenson, Dummett & Lansford, 2015–2016), which shifted TED talks to be the primary focus in materials design and won the British Council ELTons award for excellence in course design in 2016 (English Agenda, 2016). As well as textbook partnerships, TED actively encourages the use of its talks as educational materials through the TED-ED initiative, which promotes and shares lessons online built around TED talks (Ted.com, 2016a). Even without TED's direct input, TED talks are shared in the ELT blogosphere (e.g. *ESL TED Talks* Evans, 2009–2013; *TEDxESL* Jones, 2014) which sometimes extends to EAP contexts (e.g. *EAP-Audio* Reynolds, 2011).

TED talks are sometimes used within EAP contexts for academic listening. This is encouraged by De Chazal (2014), who recommends TED talks for this purpose. Additionally, in some research TED talks are conflated with academic listening materials (e.g. Abdulrahmand & Gunawan, 2016; Elk, 2014; Takaesu, 2014). At face value TED talks appear similar to lecture discourse, and according to Watkins and Wilkins (2011) can be useful in EAP classrooms to develop academic skills such as note taking. However, the notion that TED talks are suitably equivalent to academic discourse to be considered academic listening materials is a widely shared assumption which has yet to face any real scrutiny.

To give some background information, TED, a non-profit organisation, was formed in Silicon Valley in 1984 as an annual conference covering Technology, Entertainment, and Design (Ted.com, 2016b). The talks are designed for online consumption, generally ranging from between ten to twenty minutes long. Today, the topics have expanded to include science, business, and global issues and the success of TED has boomed, being translated into over 100 languages (Ted.com, 2016b), and celebrating over one billion views (Ted.com, 2016c). As of September 2017, the most popular video on their website, *Do Schools Kill Creativity?* (Robinson, 2006), has over 47 million views, and according to Google Scholar (accessed September 2017), has been cited over 500 times.

But apart from the broad range of topics, short video length, and global success, what makes a TED talk? Amy Tan the novelist and Rives the poet, both TED speakers, report that when selected to give a TED talk, speakers are sent a stone tablet of ten TED commandments (Longhurst, 2008). The guidelines include six thou shalts and four thou shalt nots which encourage creativity, passion, and authenticity, as well as the reminder "Thou Shalt Not Steal the Time of Them that Follow Thee" (Rives, 2006). Additionally, in an interview with Trost (2010) TED curator Chris Anderson stated:

> I guess about 25% of the talks from each conference never go up on the website. They may be solid, but just lack, for want of a better word, the "wow" factor.

This comment is hard to ignore and serves as a stark reminder of the driving force behind TED's success, the ability to wow, inspire, and amaze an audience. As well as being able to search by tag, TED also allows videos to be sorted by rating: jaw-dropping, funny, courageous, inspiring, and so on. Within the media this approach has brought TED criticisms of pseudo intellectualism, elitism and corporatism (Hustad, 2014; Kelly, 2012; Bratton, 2013) as well as a range of parodies highlighting TED's style over substance delivery (The Onion, 2012–14; Oliver, 2016). TED appears to have taken these criticisms to heart and dedicates a webpage to countering some of these claims (Ted.com, 2016d).

Despite these concerns, the spread of TED talks into education appears to have gone unabated. This research paper takes a critical view of the suitability of TED talks for use as *academic* listening materials. To enable a suitable corpus linguistic comparison two corpora were compiled for this study, which will be referred to as the Lecture Discourse Corpus, and the TED Talk Corpus. The main aim of this research paper is to determine the suitability of TED talks as academic listening materials by comparing the following in the Lecture Discourse Corpus and the TED Talk Corpus:

i Academic Vocabulary List (AVL) representation; and
ii Speech rate and lexical density

2. Academic vocabulary, lexical density, and speech rate

2.1. Academic vocabulary

Previous research estimates that readers need to know 98% of a fiction text for unassisted comprehension (Hu & Nation, 2000). Nation (2006) states that to reach 98% coverage, knowledge of 8000–9000 word families are required for written texts and 6000–7000 for spoken texts. Schmitt and Schmitt (2014) argue that these word families can be divided into three bands: high frequency up to 3000 word families, mid-frequency from 3000 to 9000, and beyond 9000, categorised as low frequency. This has pedagogical implications, as Roche and Harrington (2013) discovered that knowledge of high frequency vocabulary correlated with academic achievement (GPA score) and written academic proficiency in an EMI tertiary education institution. Moreover, knowledge of word family frequency can help compose discourse specific word lists, such as academic vocabulary. However, academic English is itself broad and diverse, as English is now the global lingua franca of academia (Mauranen, Hynninen, & Ranta, 2010; Björkman, 2013), and across academic registers, genres, and disciplines major patterns of linguistic variation have been recorded (Biber, 2006; Biber & Conrad, 2009), which are further differentiated by discipline specific technical language. These factors threaten the viability of identifying overlapping linguistic features across academic contexts. Nevertheless, some attempts have been made to compose lists of general academic vocabulary using corpus linguistics.

The two predominant academic word lists are the Academic Word List (AWL) (Coxhead, 2000), which has since been used to inform materials design, for example, the *Cambridge Academic English* textbook series (Thaine & McCarthy, 2012), and the Academic Vocabulary List (AVL) (Gardner & Davies, 2014). Concerning the present paper, some prior research conducted using the AWL is particularly relevant: Coxhead and Walls (2012) analysed the representation of the AWL in TED talks to be 3.9%, under half of that found in written academic corpora, e.g. 10% (Coxhead, 2000); 11.17% (Vongpumivitch, Huang, & Chang, 2009); 10.6% (Hyland & Tse, 2007). Whilst these comparisons are useful indicators, unfortunately the comparison of a spoken discourse, TED talks, to written discourses is not an appropriate comparison, especially as written discourses contain relatively high proportions of lexical items (Halliday, 1989), which form the bulk of the AWL and other word lists. Moreover, the integrity of the AWL has come under scrutiny. Hyland and Tse (2007) upon exploring the distribution of the AWL in an academic corpus, found that due to discursive variability certain lexical items behaved differently in terms of range, frequency, collocation, and meaning, and conclude by suggesting a discourse specific pedagogical approach.