TED LECTURES FOR ESP: BEST PRACTICES META-ANALYSIS

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Abstract. The study aims at investigating incorporation of TED talks (TTs) in ESP classes with a specific focus on abundant opportunities TTs provide for teaching intensive and extensive listening. Although the importance of listening comprehension is widely admitted, a few scholars still claim that it remains the most neglected micro-skill of all, a “Cinderella of communication strategies”. This misbalance can be partly put down to lack of graded listening materials of appealing content for lower proficiency students and TTs might serve as a potential remedy for ESP learners. The nature of TTs (with TED standing for Technology, Entertainment and Design) is of great interest for learners due to engaging topics, motivating speakers, easy access and overall user friendliness. Therefore a few SLA instructors have been attempting to utilize TTs in various ways, which include, but are not limited to vocabulary development and retention, listening comprehension, translation skills, speaking assignments varying from guided discussions to oral presentations, reading comprehension skills, writing and summation, EAP, etc. A few integration models have been suggested and evaluated in past literature. The author attempts to draw on those and suggest a detailed account of advances that refer to teaching extensive and intensive listening comprehension.

Key words: ESP, listening comprehension, TED talks, meta-analysis

1. INTRODUCTION

TED (https://www.ted.com/) is a global community which gathers people of different disciplined to share ideas worth spreading, usually in the form of short powerful talks of 18 minutes and less. Having emerged in 1984 as a conference on Technology, Entertainment and Design, it has evolved into a non-profit organization for interaction and exchange of ideas worldwide. The topics covered by TED talks (TTs) include, but are not limited to technology, entertainment, design, business, science, global issues, etc. By 2022 the TED platform has accumulated over 4100 talks in 100+ languages delivered in a signature TTs engaging vibrant manner. Due to motivating and engaging nature as well as overall appeal to general public, there have been numerous attempts to utilize TTs in ELT classes. Some of the TED talks were included in textbook series, e.g. the Keynote by National Geographic learning (Stephenson et al, 2015-2016). Apart from that, the TED platform launched the TED-ED project, which features online lessons based on...
short comprehensive TTs (https://www.ted.com/). Past literature suggests a substantial bulk of research featuring utilization of TTs by ESL instructors to develop such skills as critical thinking (Allagui, 2021), higher level comprehension skills (Bianchi et al, 2016), translation and subtitling (Comas-Quinn et al, 2019), metacognitive skills (Stout et al, 2019), discourse analysis skills (Uicheng et al, 2018), (Ratanakul, 2017), academic writing (Hashimoto et al, 2015), (Howard, 2017), (Fitria, 2022), note taking (Siegel, 2019), speaking/presenting ideas (Hayward, 2017), (Karunakar, 2019), (Leopold, 2016), (Li et al, 2016), reading comprehension (Hsu, 2020), (García-Pinar, 2019), vocabulary acquisition and retention (Hsu, 2020), (Salem, 2019).

A considerable amount of research has been dedicated to teaching listening comprehension by TTs. Although a few studies have argued the importance of listening comprehension in SLA pedagogy (Feyten, 1991), (Wolvin, 2010), (Wolvin et al, 2000) it still remains a much neglected skill and has even been referred to as the “Cinderella” of communication strategies (Vandergrift, 1997). Therefore, SLA instructors worldwide have been offering TTs to language learners in order to increase their exposure to authentic contexts with engaging and appealing design. This is especially true for the ESP/EAP instruction, because of significant lack of graded pedagogic materials that could be offered to the learners of lower proficiency levels who might lack vocabulary range as well as listening comprehension skill to appreciate unabridged professional contexts. Thus past research indicates numerous attempts to integrate TTs-based listening comprehension tasks into the syllabi of general English courses (Wu, 2020), (Puspita et al, 2020), (Saputra et al, 2018), (Al-Jarf, 2021), (Tilwani et al, 2022), (Moijan et al, 2019), EAP courses (Madarbakus, 2021), (Abdurrahman, 2017), (Wingrove, 2017), (Takaesu, 2017) and ESP courses (Rudneva et al, 2019), (García-Pinar, 2019), (Humeniuk et al, 2021), (Kekelidze et al, 2021).

The benefits of TTs for teaching ESP listening are summarized in Fig. 1

![Fig. 1](https://example.com/fig1.png)

Speaking of content, the selection of offerings for ESP listening has always been a challenge for an instructor. Not being an expert in the major domain of the language learners, one might find it complicated to elicit trustworthy talks from the abundance of information available on the Internet. In this sense, ted.com is a reliable platform with renowned speakers and built-in search engine, which allows not only to select a major topic, but also align ESP offerings with the syllabi of the learners in their major line of study.

In terms of accessibility TTs are hard to match: they are free, can be viewed in a browser or in a downloadable app on any device in the classroom or off-site, any time of day and
night, with pauses or repeatedly. These features provide a tremendous opportunity for self-paced learning.

As for the design, the TTs are a combination of auditory and visual information arranged in an inspirational and motivating way. Web 2.0 technologies are appealing for the “digital natives” and foster better engagement as well as understanding through visual cues they provide (Milošević 2022)

The variety of TTs should not be underestimated, the ESP instructor can decide on many factors when selecting a talk, apart from its general topic, i.e.:

- the length of the talk;
- the speed of the talk;
- vocabulary range/complexity;
- whether the speaker is native or non-native;
- which accent they prefer.

The abundance of options provides an opportunity to implement bottom-up approach on many planes of ESP acquisition, increasing complexity of TTs offerings throughout the syllabus in terms of content, length, vocabulary and speed of speech.

Despite obvious benefits of TTs, their implementation in a consistent longitudinal perspective has been yet under researched by ESP community. However, past research in general SLA suggests a number of instructional models which can be adopted by ESP/EAP as well. Thus, the key research questions are:

1) What is the overall effect of integrating TTs into SLA syllabi on second language proficiency?
2) What is the attitude of the learners towards TTs?
3) What are the factors that influence the variation on effects of TTs integration?

This paper aims at providing an overview of best practices for teaching listening comprehension with TTs that can be adopted by ESP instructors.

2. METHODS AND OBJECTIVES

The meta-analysis was carried out in 3 stages:

- literature selection;
- coding of the study synopses;
- estimating the effects.

**Literature selection** was conducted based on the following assumptions: (1) the paper features an experimental or a quasi-experimental design, i.e. there are measurable outcomes suggested; (2) the paper is cited at least once, i.e. the academic community consider it a valid contribution; (3) the paper was published within the past decade, i.e. 2012-2022; (4) the findings are reported in English; (5) the paper is either an article in an academic journal or a thesis. The search was performed in Google Scholar, the key term TED Talks was combined with such keywords as second language acquisition, listening comprehension, reading, writing, speaking, vocabulary, grammatical, lexical.

**Coding of the study synopses** was preceded by the paper selection process, 48 papers corresponding to the research design criteria were found. Then they were read by the author and coded based on 13 study features, such as: the domain (ESP/EAP/GE), the skill or skills featured; research design; the number of students; EFL proficiency; the duration of the experiment; treatment of offerings (guided/autonomous); attitude
research, its outcomes; limitations; the topics of TTs offered; features of pedagogic design; any additional online tools and platforms used by the instructor.

*Estimating the effects* of TTs implementation was conducted based on the analysis of the features above and their contribution towards positive outcomes.

3. **DISCUSSION**

Out of 48 papers analyzed, only 10 feature the studies conducted with ESP/EAP students. García-Pinar (García-Pinar, 2019) and Himeniük et al (Humeniuk et al, 2021) suggest TTs to engineering students, Hashimoto et al offer TTs on technical topics (Hashimoto et al, 2015), Salem (Salem, 2019) utilizes business TTs to improve presentation skills of the BE students, Rudneva (Rudneva et al, 2019) focuses on the TTs dedicated to environmental issues, Stout suggests TTs to chemistry students (Stout, 2019). The scope of domains featured above reflect great demand for graded listening materials for the students who major in hard sciences. EAP instructors use TTs as authentic speech models (Leopold, 2016), extensive listening materials (Takaesu, 2017), a resource for academic vocabulary acquisition (Abdulrahman, 2017) and listening comprehension (Madarbakus, 2021). The GE instructors exercise flexible approach towards TTs topic selection which is best described as offering topics of general interest (Siegel, 2019). Some researchers introduce limitations, i.e. Islamic content TTs (Kusuma, 2017) or police-related ones (Alrefai et al, 2019). In most cases the TTs are suggested by the instructor, however, some researchers demonstrate more flexibility assigning the learners to watch TTs of their own choice (Hayward, 2017).

The participants of the study come from various locations, 9 papers feature projects implemented in Indonesia, the rest of the studies have been mostly conducted in the Eurasian region (Fig. 1).

![Fig. 1. Geographic distribution of TTs projects](image-url)

Speaking of the size of experimental groups, there is a broad range from 6 participants (Hakobyan, 2015) to 468 (Takaesu, 2017). However, the majority of papers feature...
groups of an average size of 50 learners, also usually divided into experimental and control groups. The age of learners varies from 12 (Hakobyan, 2015) to 29 (Tilwani et al., 2022). However, there might be learners of more senior age even though the authors do not specify it, e.g. the project of TTs for in-service police officers (Alrefai et al., 2019). The instructors offer TTs to the groups of learners whose target language proficiency is between A2 and C2, as indicated in Fig. 2

![Fig. 2. Distribution of learners re: CEFR](image)

The instructors offer TTs to the groups of learners whose target language proficiency is between A2 and C2, as indicated in Fig. 2. The absolute majority of projects feature learners of intermediate language proficiency. This goes in line with the recommendations by Hsu (Hsu, 2020) who claimed the vocabulary range of TTs is suitable for B1 and upper proficiency students. Few studies feature mixed-abilities groups of A2-C1 (Karunakar, 2019) and of A2-C2 (Puspita et al., 2020), there is no indication though of variation of offerings within a group based on language proficiency. The language proficiency was determined by IELTS (Allagui, 2021), (Salem, 2019), (Madarbakus, 2021), TOEFL (Leopold, 2016), (Takaesu, 2017) or in-house tests of similar format. The learners study at high school (Huang et al., 2014), (Damayanti et al., 2022), (Farid, 2019), college (Howard, 2017), (Karunakar, 2019), university (Comas-Quinn et al., 2019), (Li et al., 2016), (Nguyen et al., 2019) and other establishments such as air force school (El Haj Hassan et al., 2018) and UN police courses (Alrefai et al., 2019). In terms of duration of offerings three groups of projects can be outlined. The first one would be pilot projects where the learners were offered TTs once or twice. Allagui (Allagui, 2021) measured the impact of TTs on the learners’ critical thinking skills by eliciting their opinions before and after viewing a TED lecture. The intervention lasted 2 hours and the overall impact on critical skills was rated as positive. Hashimoto et al offered one short TED talk with a follow-up discussion and an off-site written assignment of summarizing the talk content. The learners reported increased confidence in summarizing strategies (Hashimoto et al., 2015). Nguyen (Nguyen et al., 2019) measured the impact of a TT on vocabulary acquisition induced by a particular sequence of input-output-input activities and report a significant improvement of word-meaning recall based on immediate and delayed post-tests. Overall, even a single encounter of TTs yielded a number of improvements in the learners. The second group of projects highlight a short sequence of interventions which lasted for 4-6 weeks. Comas-Quinn (Comas-Quinn et al., 2019) tasked students to translate the subtitles of a TED talk of their choice and review and provide feedback on two of their peers' translations.
covering linguistic, cultural and technical aspects they had encountered. Martínez Hernández (Martínez Hernández et al, 2018) designed 4 interventions based on TTs selected to meet students’ preferences. The offerings included pre-, while and post-watching activities which resulted in new coined vocabulary and increased motivation. Hassan (El Haj Hassan et al, 2018) offered 4 weekly assignments to Air Force School students and although the impact of TED talks on the overall language proficiency and their contribution into the overall score was not studied, the findings suggest increased engagement and motivation. The third group of projects employs longitudinal framework with TTs based sessions offered throughout one to six semesters. Hayward suggested consistent integration of TTs into a textbook-based course on public speaking (Hayward, 2017). The same strategy was supported by Leopold who made TTs an integral part of an EAP course on professional presentation skills (Leopold, 2016) as well as Lee (Li et al, 2016). Stout made TTs a part of a writing-enriched chemistry course, where the aim of TTs integration went beyond presentation skills towards critical assessment of learners metacognitive processes of writing and thinking (Stout, 2019). A few studies report significant improvement of learners’ listening comprehension skills based on pre- and post-test analysis and/or questionnaires (Kozińska, 2021), (Ratnaningsih et al, 2022), (Tilwani et al, 2022). In terms of instructor involvement, the projects can be divided into guided, semi-guided and autonomous. Guided approach suggests pedagogic design of the following stages:

- selection of TTs based on the topic, accent, pace of speech, duration (Martínez Hernández et al, 2018);
- pre-watching activities, such as explaining vocabulary (Karunakar, 2019), instructions on note-taking (Siegel, 2019);
- while-watching activities, such as discourse analysis (Allagui, 2021), note-taking (Siegel, 2019), listening journal (Schmidt, 2016);
- post-watching activities, such as oral or written summary, discussion (Hashimoto et al, 2015), role play, short speech, debate (Karunakar, 2019), preparing a TT-based or a TT format presentation (Leopold, 2016);
- follow up assessment, such as grading written and oral assignments (Salem, 2019), providing feedback on the listening journals (Puspita et al, 2020).

Semi-guided approach would offer certain level of flexibility on the learners’ side, usually independent selection of talks with follow-up assessment of written reports (Stout, 2019) or listening journals by the instructor (Gavenila et al, 2021). Past literature suggests that delegating material selection to students makes learning truly learner-centered and enhances one’s level of engagement in course activities and tasks (Choi, 2015).

An autonomous approach features projects which delegate the responsibility of selecting and studying TTs to the learners entirely, such framework demonstrates high dropout rates and humble progress (Comas-Quinn et al, 2019).

Several studies feature mixed approach to instructional design with an experimental group offered on-side guided tuition and control group tasked to study off-site independently (Mojgan et al, 2019), (Madarbakus, 2021). The comparative approach allowed to yield results which indicate significant difference in favour of on-site treatments. Few studies report on using additional tools and platforms apart from ted.com. Some instructors utilize in-house LMS systems (Comas-Quinn, 2019), (Hashimoto et al, 2015). Bianchi et al suggest using LearnWeb which integrates TED
talk videos and transcripts and enriches them with tagging features and a data logging system (Bianchi et al., 2016). Huang et al utilized TEDquiz – an in-house automatic system for TED based quizzes generation (Huang et al., 2014).

The overall attitude of learners towards TTs is summarized in Fig. 3

The learners report positive impact of TTs on their listening comprehension skills, vocabulary acquisition and retention, significant progress in presentation skills, enhanced confidence and anxiety reduction. The instructors highlight increased motivation and engagement as well as numerous benefits of TTs for linguistic and extra-linguistic skills.

4. RESULTS

According to the results of the analysis SLA/EAP/ESP instructors utilize TTs for developing a wide range of linguistic and extra-linguistic skills which are often combined and overlapped. The TTs have been successfully offered to small groups of learners (under 10) as well as large groups of hundreds of students. The age of the learners varied from secondary school students to seasoned in-service professionals. Based on the multiple findings TTs require B1+ level of language proficiency, the learners of lower proficiency levels might require additional instruction. The amount of TTs offerings varied from one-time occurrence to consistent exposure over a few semesters. In terms of integration framework TTs were offered as an integral part of a textbook-based course, a core element of the course and supplementary material. Most instructors suggest watching TTs on-site, however, a few studies report learner autonomy of various degrees in terms of selection, viewing and assessing the outcome of TTs exposure. Maximum
learner autonomy is usually paired with high dropout rate though. In terms of instructional design most studies feature activities prepared by the instructor, some utilize discussion questions offered by TTs and few feature free flow watching. Various types of assessment were discussed, i.e. written and oral follow-up assignments, TTs-based or inspired presentations, various vocabulary and listening comprehension tests. The assignments target all core language skills, such as speaking, writing, reading and in the majority of cases listening comprehension. Apart from that some studies feature sub-skills, such a summarizing or metacognitive skills, such as critical thinking.

The learners report multiple benefits of TTs claiming that they are fun, effective, building confidence, motivating, inspirational and supportive. Among potential challenges the instructors highlight technical problems of various nature, discouraging effect of TTs on lower-proficiency learners who struggle with tasks. Apart from that in every social group there might be a learner who is not keen on TTs in general, which might impede the instruction.

As for the factors which influence the variation of effects on TTs integration, the key one is accurately assessing the level of language proficiency of the learners to align the offerings to their capabilities. Lower proficiency learners require more scaffolding activities and more extensive instruction. Past research suggests that for mixed abilities groups watching the TTs before the class might be a potential remedy, because in this case the learners can watch the video as many times as they need. It has been suggested that although one TT to watch is an encouraging and motivating exercise, the impact on linguistic skills is minimal. Therefore, the instructor should allocate considerable time commitment as longer exposure yields better results.

5. Conclusion

Based on the past research several outcomes can be outlined. TTs are widely used by SLA instructors all over the world and demonstrate multiple benefits for the learners. These benefits however are only gained though proper instructional design and long-term commitment. Multiple opportunities provided by freely available and easily accessible TTs should be utilized by the instructors thoughtfully based on the language proficiency of the learners, their preferences, the syllabi and expected outcomes. Although it is hard to single out the exclusive effects of TTs on overall language proficiency of the learners, their contribution to developing language skills as well as enhancing engagement and motivation is undeniable.

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