Can TED Talks help improve tertiary level EFL students’ listening, and speaking skills? A case study from a Thai university

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Research Article

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Abstract

Classroom evidence suggests that seventy-five percent of non-English major undergraduate students studying at the university where the current study was undertaken leave the university after four year’s study without acquiring the required proficiency of English. A condition such as this can deprive them of several social and educational opportunities offered to them both locally and internationally. Given the situation described above, this study was conducted to explore the effectiveness of an instructional intervention supplemented with contrived materials that included TED Talks videos to enhance EFL tertiary level learners’ listening and speaking skills in the context of Thai tertiary education. The study employed a pre-test post-test research design in which two study groups (Teaching Chinese as a Foreign Language (n = 44) and Teaching Elementary Education (n = 38) were chosen using a random purposive sampling technique. The study groups were instructed using TED Talks: Keynote 4 teaching materials for one semester and the study used two research instruments (pre-test and post-test). The data collected from the two research tools were analyzed using both descriptive and inferential statistical tests. The results revealed that both study groups improved listening and speaking skills after the intervention. Assuming the positive outcomes of the study, it can be concluded that the instructional intervention supplemented by TED Talks: Keynote materials are effective in enhancing EFL learners’ listening and speaking skills in the context of Thai tertiary education.

Full Text

Introduction

Mastering an international language like English in the 21st century can have several benefits to learners in that they can enhance cognitive and social growth on both the individual and national level to achieve economic development by being competitive across the world with an understanding of people belonging to diverse cultures. As we move toward a new century where worldwide interaction plays a crucial role in human dealings, our education system should equip students with skills, knowledge, and attitudes that help them face challenges in life as responsible citizens of a given community.

Being practitioners of English, we should be aware of how we can help our students to develop their skills in the target language. To this end, Krashen (2019) has informed us that we should provide our learners with comprehensible and compelling rich language input so that they can achieve competence in the target language. The insightful understanding gained in teaching English to undergraduate non-English major programs in the current university for a decade has prompted the researchers to investigate why a clear majority of non-English major students fail to communicate proficiently in English. A condition like this seems pathetic on behalf of Thai undergraduate students who spend 4 years studying different courses including English in a university before they graduate in their chosen majors. Unlike in the past, now English education has become accessible to most students across the world due to the advancement of technological innovations and the Worldwide Web. Regardless of these opportunities and resources, most of our undergraduate students still fall behind the required competence in
English (Khamkhien, 2011; Waluyo, 2019). Given the low proficiency problem of non-English major students, the researchers decided to conduct a study in which an instructional intervention (using video materials, textbook, audio materials, teacher prepared speaking activities) was implemented to help students enhance their English proficiency both in listening and speaking.

Research Problem

The researchers of this study have been teaching different English courses for non-English major undergraduate students studying at this university for the past few years and have found a clear majority of them in several English courses show low performance in examinations and real-world situations in that most students fail to communicate proficiently. In terms of speaking proficiency, most non-English major students are still below the required level (Jaiyai, Torwong, Usaha, Danvirattana, Luangthongkam & Piyadamrongchai, 2005). Speaking and listening skills play a crucial role in communication. Therefore, the ability to express students' ideas proficiently in most academic and social situations seems crucial. In terms of listening and speaking, undergraduate students in this university are expected to reach the B1 or B2 proficiency level as specified in the Common European Framework of Reference for Languages (2018). In addition, nowadays, effective communication skills are highly demanded public and private sector employment.

Analysis of prior English examination results and the available evidence from classroom instruction indicates that non-English major undergraduate learners’ language requirements should be addressed in the classroom as English is not sufficiently used in Thai social contexts. During the second semester of the 2020 academic year, this university introduced a new course namely English Through Edutainment for the first time. Therefore, given the English proficiency problem of non-English major students as described above, the researchers decided to conduct an instructional intervention to the students who studied English Through an Edutainment course to investigate the effectiveness of using TED Talks in promoting learners’ listening and speaking proficiency. The prescribed materials for this course were TED Talks: Keynote 4. (2017) compiled by Stephenson, Lansford, and Dummett and published by National Geographic Learning. This textbook includes selected TED Talks, listening, speaking, and presentation activities.

Given that English Through Edutainment course would help students improve their English proficiency in speaking and listening, researchers in this study implemented an instructional intervention with two groups of undergraduate students majoring in Teaching Chinese as a Foreign Language (TCFL) and Teaching Elementary Education (TEE) to examine whether TED Talks can have a positive effect on the learners’ English proficiency (listening and speaking).
With the premise that listening to and watching TED Talks videos and discussing the contents in the TED Talks in a classroom context will help learners improve their listening and speaking skills to a good level in which they can perform better in English in academic and social settings, the following research questions were formed:

**Research Questions**

1. Do listening to TED Talks and watching TED Talk videos and engaging in relevant class-based listening tasks lead to increased listening proficiency of non-English major undergraduate students as measured by the Keynote Advanced End-of-Course Listening Test A developed by the National Geographic Learning?

2. Do watching TED Talks videos and engaging in relevant class-based speaking tasks lead to increased speaking proficiency of non-English major undergraduate students as measured by the Keynote Advanced End-of-Course Speaking Test A developed by the National Geographic Learning?

**Literature Review**

The theoretical framework underlying this study can be ascribed to the view of listening, which assumes that the main function of listening in second/foreign language learning is to facilitate the understanding of spoken discourse (Richards, 2008). According to theorists, listening comprehension involves two distinct processes in which listeners use 'top-down' processes when they use prior knowledge to understand the meaning of a message. Moreover, listeners also use 'bottom-up' processes when they use linguistic knowledge to understand the meaning of a message. They build meaning from lower-level sounds to words to grammatical relationships to lexical meanings to arrive at the final message. Listening comprehension is an interactive and interpretive process where listeners use both prior knowledge and linguistic knowledge in understanding messages. The degree to which listeners use one process or the other will depend on their knowledge of the language, familiarity with the topic, or the purpose for listening (Feyten, 1991; Richards, 1990; Vandergrift & Goh; 2012). Cognitive psychology research has demonstrated that listening comprehension is more than extracting meaning from incoming speech. It is a process of matching speech with what listeners already know about the topic. Therefore, when listeners know the context of a text or an utterance, the process is enabled considerably because listeners can activate prior knowledge and make the proper inferences necessary to understand the message (Byrnes, 1984). Therefore, instructors must help students organize their thoughts, activate appropriate background knowledge for understanding and to make predictions, to prepare for listening. This considerably eases the burden of comprehension for the listener (Vandergrift, 2002).
In terms of speaking, the theoretical framework of this study is linked to methodological debate (Richards, 2008), where several authors have attempted to classify the functions of speaking in human interaction. To this end, it is worth discussing Richards's (2008) expanded three-part version of Brown and Yule's (1983) framework of speech in which he describes: talk as interaction, talk as a transaction, and talk as performance. Talk as interaction refers to conversations people normally conduct to establish and maintain social relations while talk as transaction refers to situations where the message is the central focus and makes oneself understood accurately rather than the participants and how they interact socially with each other. Talk as performance refers to public talks that convey information before an audience. As Richards (2008, p. 24) has observed that talk as performance is relevant to the study group because they could study some skills involved in talk as performance.

**Influence of technology in the modern classroom**

The teaching and learning context of the modern language classroom has undergone several changes due to the influence of technology and the world wide web for the past two decades across the world. Nowadays, most language classrooms are equipped with multimedia devices, which are considered viable tools for teaching and learning. Among multimedia teaching and learning tools, audiovisuals are assumed to contribute to deeper learning and knowledge transfer (Mathew & Alidmat, 2013). Furmanovsky (1996, p. 3) has stated, “At its best, the video can inform and stimulate students in a way that no lecture, however well delivered and thought out, can do” while Wood (1999) has observed that video and the right kinds of supporting materials, can activate the passive knowledge of language learners and assist with language assimilation and transfer, both in terms of that language presented and that which is implicitly suggested. Given the benefits of using videos in the EFL classroom, the current study also used TED Talks videos and other suggested activities in the *TED Talks: Keynote 4* to help students to improve their listening and speaking skills. TED Talks videos are authentic materials and can have several advantages in that videos motivate learners, bring the real world into the classroom, contextualize language naturally and enable learners to experience authentic language (Stempleski & Tomalin, 1995). By using authentic materials and different teaching methods, approaches, and classroom techniques, our goal is to help EFL/ESL learners develop their aural and oral proficiency in the target language because our students should be able to communicate their ideas fluently and accurately in speech. As discussed above, several studies have used video materials to enhance EFL learners’ listening and speaking skills in different teaching contexts across the world. The section that follows will report a few studies relevant to the current study and describe in what way the current study is different from them.

**Empirical evidence on using video materials in enhancing EFL learners’ listening and speaking skills**
A pre-and post-test design study by Kim (2015) in a Korean university with a group of non-English major undergraduate students has used video clips extracted from TED Talks, movies, songs, talk shows, news, and advertisements to help learners improve their proficiency in listening and speaking skills. At the end of the study, Kim reported positive results. In Kim's study, the participants were grouped according to their proficiency levels based on the TOEIC test (low, intermediate, and high proficiency), while the current study did not group participants according to their proficiency using any test, nor did it use video clips drawn from different genres except TED Talks. Moreover, Kim's study used 10 teaching sessions of the two-hour class over three weeks, but the current study employed two and a half hour teaching sessions. At the end of Kim's study, she found a greater increase in the posttest scores in intermediate and advanced proficiency groups than their scores in the pre-test. However, the low proficiency group did not show any significant increase in scores in the posttest.

Another study conducted by Woottingpong (2014) in the context of a Thai university with a group of first-year English major students has reported a higher mean score in the posttest than the pre-test. The study included one group that was taught using video materials for 20 hours to enhance their listening skills. The study used 10 short English language documentaries about culture, environment, and adventure activities with 3-5 minutes in length. A nonstandard listening test was used in both pre and post-tests in that the study group recorded a higher mean score in the post-test than the pretest. As the current study employed TED Talks, the following section will discuss their relevancy and effects on EFL learners’ listening and speaking skills relevant to the published literature.

**Why Ted Talks?**

TED Talk videos can be used as an appropriate tool for authentic English communication purposes. According to Field (2002), the authentic nature that features TED Talks provides students with opportunities to practice real-life talks and speeches.

As EFL learners struggle with English skills in educational settings, TED Talks can help such learners to increase their vocabulary, content knowledge, paralinguistic features inherent in natural speech, delivery techniques and generate discussions among students in an EFL classroom where they can learn and practice the art of public speaking with strategies on how to engage the audience (Mott, 2004; Pittenger, Miller & Zappa-Hollman, 2007). Another crucial element present in TED Talks is that they help teachers bring ideas into the conversation, debate, and critical thinking which are important skills that students should develop. The section that follows will deal with studies that have investigated the effects of TED Talks on improving learners’ listening and speaking skills.

In a research project, Takaesu (2014) integrated TED Talks into an L2 course in a college in Japan. At the end of the course, a survey was conducted and over two-thirds of the surveyed learners (N = 303)
reported that TED Talks helped them improve their L2 listening ability and familiarize them with a wide
variety of English accents. In a similar study, Salem (2019) has explored the impact of using TED Talks
on improving oral presentation skills of Business English students and vocabulary uptake/retention while
it also assessed the impact of improving students’ positive speaking anxiety levels. The findings of the
study indicated that oral presentation skills and vocabulary uptake/retention levels had improved due to
the use of TED Talks. A quasi-experiment study by Rashtchi and Mazraehno (2019) examined whether
TED Talks could improve the listening skills of Iranian EFL learners (N = 60) found positive results in that
they report the two study groups who used mobile phones, laptops, or audio tracks to listen to TED Talks
during the treatment improved their listening skills significantly at p=.001.

Participants of the Study

The participants in the current study were fourth-year Thai (undergraduate) students majoring in
Teaching Chinese as a Foreign Language (TCFL) and Teaching Elementary Education (TEE) at a Thai
university. The study sample included 82 students of whom were 18 males and 64 females whose ages
ranged from 20 to 22 years. All students had completed their formal schooling for 13 years before they
were selected to study at the university. Given the participants’ age, existing English knowledge,
educational and social backgrounds, they were homogeneous in the current study. Upon graduation, the
students in the study groups (TCFL and TEE) will be posted to remote schools where they should teach
the language in which they have majored. In addition to teaching the major language, they also have to
teach basic interpersonal communicative skills in the second/foreign language.

Research instruments

This study employed listening and speaking pre-tests and post-tests to collect data. Pre-tests were
conducted before the instruction started for the study groups to determine the participants’ existing
abilities in speaking and listening. Researchers used the Keynote Advanced End-of-
Course Test A developed by National Geographic Learning (https://ame.eltkeynote.com/teacher-
resources/end-course-tests).

The listening pretest included 4 parts with 30 questions. In each part, the candidates can hear the
recording twice and while listening, candidates must choose the best answer from the options given. The
duration of the listening pretest was 30 minutes, and it was scored out of 30. At the end of the listening
pretest, the scores obtained by each candidate were recorded for later analysis.

The speaking pre-test consisted of 4 parts and each part is scored out of 5 for 20 marks using the
speaking test evaluation criteria based on a 0–5-point scale (Grammatical resources 0-5, Lexical
resources 0-5, Discourse management 0-5, Interactive communication 0-5). The duration of the speaking test was 15 minutes for each candidate. The first part consists of general questions (Where are you from? How long have been learning English? If you could travel to one country in the world, where would you go? ....... Why?) including one open question about a specific thing related to the candidate. In part 2, the examiner provided the candidates with two pictures and ask the candidate to compare two of the pictures, and say why the people might be doing these activities together, and how the people might be feeling (Picture 1 included 5 people ice skating together outdoors while picture 2 showed 3 young girls prepare some food together at home. In part 3, the examiner gives different 2 pictures in which some incident depicts (For example, in one picture, two teenage boys see a motor bicycle catches fire instantly) and the other picture shows a house owner seeing a robber in his house through a surveillance camera. The examiner says, “Now, I’d like you to talk about what people might have to consider when making decisions concerning these situations”. Part 4 is an extension to the topic spoken in part 3 and the examiner asks a few questions so that the candidate can answer questions. For example., Is it best for people to make decisions on their own or to ask others for advice? ..... Why? / Why not?). In this test, the first examiner acted as the interlocutor while the second examiner performed as the observer who recorded marks for each candidate. At the end of the speaking pretest, the scores obtained by each candidate were recorded for later analysis. The agreement between the two raters was calculated using Pearson's Product Moment ($r = 0.93, n = 82, P < 0.01$). The statistics showed that the general agreement between the two raters concerning speaking scores of the study groups (82) was 0.93, which was a high agreement.

After the intervention, the Keynote Advanced End-of-Course Test A, the same tests which were used as the pre-test was administered as the final test. At the end of the final tests, the scores obtained by each candidate were recorded for statistical analysis.

**Intervention tools**

*TED Talks: Keynote 4* textbook and audio and video materials by Stephenson et al. (2017) were used as the main instructional materials. However, some exercises and activities including scripted dialogues were adapted according to students’ language proficiency and linguistic needs. *TED Talks: Keynote 4* consists of 12 units based on different themes and only the first six units (Embrace stress, Media influence, Development, Secrets, and lies, To the edge, and Money matters) were selected for teaching during the second semester. Each unit comprises vocabulary, grammar structures, language focus, scripted dialogue for speaking practice, reading passages, writing activity, listening, and a TED Talk relevant to the topic of the unit. After the intervention, the researchers examined whether there was any effect of the treatment instrument on the dependent variables (listening and speaking skills).

*The instructional procedure used in unit one of the Ted Talks: Keynote 4 is explained below.*

(One unit was taught for 2 weeks each with two and half hour’s sessions)
1. As a warmup, the class watch a part of the assigned TED Talk and answer a few questions with a partner, and then students do a vocabulary exercise related to the topic of the unit (Embrace Stress!).

2. Next, students watch a short video clip in which different expert talks on stress management, and while listening to the short talk, students do a listening activity suggested in the textbook.

3. After that, students deal with a critical thinking question for which they should express their views critically. Students discuss their answers with their partners and are ready to respond when the instructor invites them. For example, which of the activities suggested by Dr. Edginton do you think would work best for you? Why? *(Keynote 4, p. 15).*

4. Then, students do a speaking activity. Students talk about stress using the scripted dialogue in the text. However, students can adapt it to suit their needs. They should speak the same dialogue (Pair work).

5. Following the speaking activity, students listen to a recorded talk. The instructor asks some open-ended questions from the class.

6. Next, they listen to a conversation and answer the questions in the textbook.

7. After the listening activity, students learn the grammar elements used to talk about jobs and stress, followed by a grammar activity.

8. Students engage in a speaking activity- a pair work (How do you deal with stress?).

9. Then, students read a passage that is relevant to stress (The stressed-out generation) and do the reading activities set on it.

10. It is now the students listen to part one of the TED Talk and complete the activities given. Next, they listen to parts two and part three of the TED Talk and complete the assigned activities.

11. They talk about what presentation skills/techniques the speaker used in his/her TED Talk (How to involve the audience)

12. Finally, they do a writing activity (Students write a letter advising someone how to manage stress (guided writing) they do it as group work.)
The unit ends and subsequent units also follow the same procedure with some adaptations where necessary.

**Analytical tools**

The researchers used both descriptive and inferential statistical tests to analyze the data in this study and to determine whether there were any observed differences between the pre and post-tests within and between the study groups (TCFL) and (TEE). Paired samples t-test was performed to compare the mean difference within and between the study groups in the pre and post-tests. In addition, the effect size for each skill was calculated using an online effect size calculator (https://www.socscistatistics.com/effectsize/default3.aspx) and their Cohen $d$ values are reported, respectively.

**The data collection procedure**

As described in the research instruments above, the current study employed two data collection instruments, including a pre-test and post-test of listening and speaking. On the third day of the first week, the pre-tests were administered to all the participants. After the pre-tests, listening was scored objectively using the answer key of the Keynote Advanced End-of-Course Listening Test A, while two examiners scored the speaking pre-test of which the first and the second researcher were involved. Once the scoring procedure was over, pre-test marks were entered in a Microsoft Excel sheet and saved in a file as the pre-test marks. Following the post-tests, the same procedure, as applied to the pre-test, was followed to score, and save, data and later the pre and posttests data were analyzed using descriptive and inferential statistics.

**Ethical Consideration**

The researchers obtained permission to conduct the current study from the Ethics committee of the university in which this study was conducted. During the first session of the class, the researchers requested the students to participate in the study and informed them about the purpose of the research and the data that are collected from them. Moreover, the researchers discussed what materials (*TED Talks: Keynote 4*) and activities that the intervention groups were to do during the study. The researchers informed the participants that they were required to do the pretests on the following day of their English class. Lastly, the researchers collected the consent letters signed by students on the same day.

**Data Analysis**

*Descriptive statistics of the two study groups*
The descriptive statistics, as shown in Table 1 sum up the number of participants per group, the number of males and female students in each group, the mean scores gained of each group in the pre and posttests, with the standard deviations and error of the mean corresponding to the tests in each group.

Table 1 Descriptive statistics of Groups A and B across the Pre and Post tests

<table>
<thead>
<tr>
<th></th>
<th>Group A (TEE)</th>
<th></th>
<th>Group B (TCFL)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sex: 3 (M), 35 (F) N = 38</td>
<td></td>
<td>15 (M), 29 (F) N = 44</td>
<td></td>
</tr>
<tr>
<td>Listening</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>SE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main score</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Max score</td>
<td>12</td>
<td>15</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Mean</td>
<td>10.07</td>
<td>12.94</td>
<td>10.78</td>
<td>14.57</td>
</tr>
<tr>
<td>SD</td>
<td>1.14</td>
<td>1.27</td>
<td>1.64</td>
<td>1.67</td>
</tr>
<tr>
<td>SE</td>
<td>0.18</td>
<td>0.20</td>
<td>0.26</td>
<td>0.27</td>
</tr>
</tbody>
</table>

As noted above, to answer the research questions, the matched sample t-test was performed. The test outcomes (Table 2) show that the test measurements produced non-significant p-values on the two tests. Given these outcomes, it can be accepted that the data originated from ordinary dispersion.

Table 2. Pretest group comparison

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>St. Deviation</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPRE (A)-LPRE (B)</td>
<td>.02</td>
<td>1.53</td>
<td>.10</td>
<td>37</td>
<td>0.916</td>
<td>0.02</td>
</tr>
<tr>
<td>SPRE (A)-SPARE (B)</td>
<td>.23</td>
<td>2.36</td>
<td>.61</td>
<td>37</td>
<td>0.541</td>
<td>0.23</td>
</tr>
</tbody>
</table>

LPRE (A)=Listening pretest (Group A), LPRE (B)=Listening pretest (Group B), SPRE (A)=Speaking pretest (Group A), SPRE (B)=Speaking pretest (Group B), PPRE

The performance of the pretest and within-group gains in listening and speaking skills
As indicated in Table 2 above, the matched samples t-test was executed to measure the mean variation (0.5) between groups A and B before the intervention began. The outcomes demonstrated that the means between group A (TEE) \((M = 10.07, SD = 1.14,\) and group B (TCFL) \((M = 10.06, SD = 1.16);\) \(t(37) = 0.10, p = .916\) were not unique in relation to one another in the listening pretest. Correspondingly, the outcomes suggested that the means did not differ between the groups \((M = 10.78, SD = 1.64);\) \(t(37) = 0.61, p = 0.541\) in the speaking pretest.

Given the statistical results, it can be assumed that the listening and speaking skills of the two study groups were not different at the start of the study indicating that both the TEE and TCFL groups were similar in listening and speaking proficiency before the intervention started.

<table>
<thead>
<tr>
<th>Pair</th>
<th>Gr: A</th>
<th>Gr: B</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error</td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>1</td>
<td>L PRE</td>
<td>L POST</td>
<td>-2.86</td>
<td>1.41</td>
<td>.22</td>
<td>-3.33</td>
<td>-2.40</td>
</tr>
<tr>
<td>2</td>
<td>S PRE</td>
<td>S POST</td>
<td>-3.78</td>
<td>1.80</td>
<td>.29</td>
<td>-4.38</td>
<td>-3.19</td>
</tr>
<tr>
<td>3</td>
<td>L PRE</td>
<td>L POST</td>
<td>-1.09</td>
<td>1.44</td>
<td>.21</td>
<td>-1.52</td>
<td>-.65</td>
</tr>
<tr>
<td>4</td>
<td>S PRE</td>
<td>S POST</td>
<td>-0.50</td>
<td>1.98</td>
<td>.29</td>
<td>-1.10</td>
<td>-1.67</td>
</tr>
</tbody>
</table>


Table 4. paired samples test (pre and posttests of Group A and B)
<table>
<thead>
<tr>
<th>Pair</th>
<th>L PRE (A)</th>
<th>L PRE (B)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% CI of Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L PRE (A)</td>
<td>L PRE (B)</td>
<td>0.02</td>
<td>1.53</td>
<td>.24</td>
<td>-0.47 to 0.53</td>
<td>0.10</td>
<td>37</td>
<td>0.916</td>
</tr>
<tr>
<td>2</td>
<td>SPRE (A)</td>
<td>SPRE (B)</td>
<td>0.23</td>
<td>2.30</td>
<td>.38</td>
<td>-0.54 to 1.01</td>
<td>0.61</td>
<td>37</td>
<td>0.541</td>
</tr>
<tr>
<td>3</td>
<td>LPOST (A)</td>
<td>LPOST (B)</td>
<td>1.76</td>
<td>1.63</td>
<td>.26</td>
<td>1.22 to 2.30</td>
<td>6.64</td>
<td>37</td>
<td>0.000</td>
</tr>
<tr>
<td>4</td>
<td>SPT (A)</td>
<td>SPT (B)</td>
<td>3.31</td>
<td>2.18</td>
<td>.35</td>
<td>2.59 to 4.03</td>
<td>9.36</td>
<td>37</td>
<td>0.000</td>
</tr>
</tbody>
</table>

LPRE (A) = Listening pretest, group A, LPOST (B) = Listening post-test group B, SPRE (A) = Speaking pretest group A, SPT A = Speaking post-test A, SPT B = Speaking post-test group B.

As indicated in Table 2, Matched Samples t-tests were performed to measure the differences between the scores which group A (Elementary Education (TEE), and group B (Teaching Chinese as a Foreign Language (TCFL) received for the pre and posttests. According to the comparison of the first pair, (the scores of the pre and posttests of listening), there was an increase in scores between the pretest \( M = 10.07, SD = 1.14 \) and the posttest \( M = 12.94, SD = 1.27 \); \( t(37) = -12.47, p = .001 \). The effect size for this analysis \( d = 2.37 \) was found to exceed Cohen's (1988) convention for a large effect \( d = 0.80 \). The second matched samples t-test revealed that there was a distinction between the speaking pretest \( M = 10.78, SD = 1.64 \) and the posttest \( M = 14.57, SD = 1.67 \); \( t(37) = -12.95, p = .001 \) in the TEE group. The effect size for this analysis \( d = 2.28 \) was found to exceed Cohen's (1988) convention for a large effect \( d = 0.80 \).

Concerning the TCFL group, the fourth Matched Samples t-test results demonstrated that there was a contrast between the listening pretest \( M = 10.06, SD = 1.16 \) and the listening posttest \( M = 11.15, SD = 0.98 \); \( t(43) = -5.01, p = .001 \) in the TCFL group. The effect size for this analysis \( d = 1.05 \) was found to exceed Cohen's (1988) convention for a large effect \( d = 0.80 \). The fifth Matched t-test demonstrated that there was a contrast between the pretest of speaking \( M = 10.75, SD = 1.51 \) and the posttest of speaking \( M = 11.02, SD = 1.48 \); \( t(43) = -1.67, p = .102 \). The effect size for this analysis \( d = 0.33 \) was found to be small as per Cohen's (1988) convention.

Given the matched samples t-test results, it is evident that the participants in both the Elementary Education and Teaching Chinese as a Foreign Language group improved in listening and speaking skills.
after they were instructed using *TED Talks: Keynote 4* in the classroom context. The mean scores gained by both groups (TEE and TCFL) in the posttest (at $\alpha = 0.05$) were greater than the mean scores they got in the pretest.

**Findings related to the first research question**

The first research question posed in this study was the following.

*Do listening to TED Talks and watching TED Talk videos and engaging in relevant class-based listening tasks lead to increased listening proficiency of non-English major undergraduate students as measured by the Keynote Advanced End-of-Course Listening Test A developed by the National Geographic Learning?*

**Listening skills development of EET and TCFL groups**

Tables 3 shows the paired samples t-test results for the TEE and TCFL group and the main Matched t-test indicated a contrast between the listening pre-test ($M = 10.78$, $SD = 1.64$) and the posttest ($M = 14.57$, $SD = 1.67$); $t(37) = -12.95, p = .001$ in the TEE group in speaking. Moreover, the fourth Matched t-test, likewise, showed a distinction between the pretest listening ($M = 10.06$, $SD = 1.16$) and the post-test of listening ($M = 11.15$, $SD = 0.98$); $t(43) = -5.01, p = .001$ in the TCFL group. These positive results indicated that both groups enhanced listening proficiency. It can be concluded that both groups (TEE and TCFL) improved in listening skills after they had studied with the prescribed textbook and the teaching method suggested in it. As noted above, both groups showed significant increases in listening mean scores with large effect sizes ($d = 2.37$ for LEE and $d = 1.01$ for TCFL).

**Findings related to the second research question**

The second research question examined whether watching TED Talks videos and engaging in relevant class-based speaking tasks lead to increased speaking proficiency of non-English major undergraduate students as measured by *the Keynote Advanced End-of-Course Speaking Test A developed by the National Geographic Learning?* Concerning the speaking skills, the second paired samples t-test demonstrated a contrast between the pretest ($M = 10.07$, $SD = 1.14$) and the post-test ($M = 12.94$, $SD = 1.27$); $t(37) = -12.47, p = .001$ in speaking skills in the TEE group, while the fourth Matched Samples t-test additionally showed a distinction between the pre-test ($M = 10.06$, $SD = 1.16$) and the posttest of speaking ($M = 11.15$, $SD = 0.98$); $t(43) = -5.01, p = .001$ in the TCFL group indicating that both groups improved in speaking proficiency after the instructional intervention. However, concerning the TCFL group, the effect size ($d = 0.33$) was small.

**Discussion of the findings related to the first research question**
The first research question inquired whether listening to TED Talks and watching TED Talk videos and engaging in relevant class-based listening tasks lead to increased listening proficiency of the undergraduate students as measured by the Keynote Advanced End-of-Course Listening Test A. To answer the first question, the researchers hypothesized that the use of TED Talks videos and other relevant listening tasks included in the teaching materials will help these undergraduate students improve their proficiency in listening after the instructional intervention. It needs to be emphasized that the participants’ proficiency levels in listening and speaking skills were not determined before the instructional intervention began. According to the descriptive statistics, as shown in Table 1 for both study groups (TEE and TCFL) there is a measurable contrast (α = .05) between the mean scores of the TEE and TCFL groups’ listening skills over the two tests (pre and post). As clarified above, this distinction of mean scores can be ascribed to the instructional techniques used with the two groups (both groups were instructed in English and not Thai was used). The outcomes indicate an impact of the instructional intervention on the listening skills of the two groups over the two tests. According to Hunsaker and Allesadra (1986) and Newkirk and Linden (1982), the highest and most effective level of listening is active listening. Given this assumption, the students in both study groups had a chance to improve active listening skills through watching and listening to the TED Talks videos in which the learners paid close attention to both the verbal and body language of the speakers. When a TED Talk speaker speaks, he/she tends to use paralinguistic features to get his/her message forcefully crossed to the audience. Such listening helps learners listen to not only the content of the speaker’s message but also to the intent and feelings of the message since the speech is authentic. As noted in the review section, the current study supports Takaesu’s (2014) study that integrated TED Talks into an L2 course and found that TED Talks helped them to improve their L2 listening ability.

Another reason is that the study group participants could choose where, when, and how many times they listened to the TED Talks in addition to classroom listening. The researchers asked the participants to watch the TED Talks whenever and wherever possible to improve their listening proficiency. Some participants confirmed that they watched the TED Talks several times and the researchers believe that if participants had the option to listen when they were ready, they would be able to focus better on the speeches and be more cognitively prepared to learn.

Another factor contributing to the success of both groups could be that the TED Talks transcripts which are appended at the back of the textbook. When students find any difficulty in understanding some ideas expressed by a particular speaker, they can refer to the script and get it clarified. Apart from that, the Keynote series provides learners with online practice facilities where they can do more activities after listening to the TED Talks at their own pace. Once learners start doing online learning with this website, their progress is recorded in percentages from 0 to 100% and this can be a motivating factor that drives them towards completion of all assigned online activities with the specified duration. This kind of learning can be attributed to self-directed learning (Lai, Shum, & Tian, 2016). Similarly, the current research backs up previous research that has emphasized the relevance of self-directed learning in terms of student progress and satisfaction (Joo, Kim, & Cho, 2008; Lee & Lee, 2006).
Discussion of the findings related to the second research question

The second research question dealt with whether watching TED Talk videos and engaging in relevant class-based speaking tasks lead to increased speaking proficiency of the undergraduate students as measured by the Keynote Advanced End-of-Course Speaking Test A. As the descriptive statistics are shown in Table 1 for both study groups (TEE and TCFL), a statistically significant difference ($\alpha = .05$) is reported between the mean scores of the TEE and TCFL groups’ speaking abilities across the two tests (pre and post). This kind of variation of mean scores can be attributed to several factors. First, the teaching method that was employed with both groups. According to Krashen and Terrell (1998), listening (or reading) comprehension proceeds to speak (or writing) abilities. Given this premise, it can be stated that the learners in this study were exposed to adequate authentic listening and speaking activities (TED Talks and other classroom activities) in which learners interacted between and among learners including the instructors. Scripted dialogues in the textbook contain long expressions that are too difficult for learners to speak out. Therefore, such long expressions were modified into manageable and meaningful chunks so that students could speak them out with ease. Second, as students practiced dialogues as pairs or groups, they became aware of their roles and wanted to perform best in their chosen roles. Such activities led even the low proficient learners to improve their listening and speaking abilities to a satisfactory level. At the beginning of the intervention, some learners had vocabulary and pronunciation difficulties. After a few weeks of instruction, learners overcame such difficulties as they heard and saw how TED Talk speakers (native) pronounced words and sentences with stress and intonation to express emotions, intentions, and attitudes. Third, watching a TED Talk covers most aspects of what an EFL teacher takes a week or two to teach about speaking as lessons in a normal classroom teaching. Moreover, when students watch TED Talk speakers talk to an audience, they can observe how speakers transfer information to the audience through the use of body language that includes eye contact, facial expressions, and gestures. Most importantly, the unwritten message that lies behind TED Talks is that they are powerful enough to motivate learners intrinsically in that learners may tend to feel that they also want to speak like the TED speakers one day. This was observed when they were making mock presentations in the classroom using *PowerPoints*, short video clips, posters, and pictures relevant to the topic of their presentations. These presentations were short approximately 5 minutes long, but they helped the students to practice and use some techniques they had learned from watching TED speakers. As described in the introduction, learning activities included in the textbook has been designed in line with two principles as proposed by Ortega (2007); 1). Practice ought to be intuitive with the goal that students can rehearse either in pairs or in groups. 2). Practice ought to be effective in such a manner that students can occupy in practice activities both personally and cognitively. Students practiced speaking activities in pairs and groups where they had a chance of helping each other to complete a given task collaboratively and getting feedback from their peers and the instructors concerning each other’s performance ultimately led them to achieve proficiency in the presentation skills. Given positive outcomes that emerged from descriptive (Table 1) and inferential statistics (Table 4) as well as the advantages that the learners in the study gained by watching TED Talks, it can be concluded that TED
Talks are a unique source that can be exploited by EFL instructors at the tertiary level to help their students to develop confidence in speaking.

**Limitations of the Study**

Even if the results of the study were positive, there are several limitations of which the first one is sample selection. The investigation was restricted to 82 participants. In this way, it cannot be inferred that the population sample is illustrative of the whole non-English major undergrads either in Thailand or outside Thailand. Subsequently, the outcomes of this study cannot be generalized to a more extensive population of non-English major EFL undergraduates. The third limitation is that the researchers could not control all the social factors that could have impacted the results of the study. Further research in other teaching contexts is necessary to make more informed decisions about the success of using TED Talks: Keynote 4 materials in promoting tertiary level students’ skills in listening, speaking, and presentations.

**Implications and Recommendations**

The main objective of this study was to help non-English major undergraduate students improve their proficiency in listening and speaking in the target language for both academic and social purposes. Judging from the efficacy of using materials such as *TED Talks: Keynote 4*, this study suggests that using TED Talk: Keynote materials are more effective in tertiary level English programs conducted to promote EFL learners’ listening and speaking skills. The proof from the current investigation recommends that students will be increasingly intrigued and occupied with class-based exercises proposed in the TED Talk, Keynote materials. Generally, students become exhausted and uninvolved in an EFL class where there is no inclusion of contextually appropriate activities delivered through digital technology. As Mayer (2021) has stated that learners can better understand and remember information when it is delivered in multiple modes, modalities, and media than it is transmitted using only one mode, modality, or medium. However, further research in different teaching contexts is needed to make an informed decision about the efficacy of using TED Talks to enhance EFL tertiary level learners’ listening and speaking proficiency.

**Conclusion**

This study investigated the effectiveness of using TED Talks to promote EFL non-English major undergraduate students’ listening and speaking skills in the context of tertiary education in Thailand. The study groups were instructed using *TED Talks: Keynote 4* materials and the statistical analyses confirmed that the study groups’ listening and speaking skills had improved significantly through the intervention. Based on the results of the current study, it can be assumed that TED Talk materials are effective in improving EFL tertiary level students’ listening and speaking skills in the target language.
Declarations

Conflict of interest

No conflict of interest

References


