Using Videos to Promote Active Learning in Teaching Listening Skills

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Abstract

Listening is a dynamic and complex process which can be considered as one of the most difficult skills for various reasons. Research has found that using audio-visual (e.g. videos) can help learners engage in listening and develop better listening skills as they were exposed to a richer language context compared to using audio materials only. Drawing on these perspectives, this article reports a study investigating the effectiveness of using videos to facilitate listening comprehension and promote active learning in teaching listening skills. This action research study was conducted over one semester with second- and third-year undergraduate students majoring in English with a TESOL concentration in one liberal arts college located at southern Guangdong province. In this study, the students took a pre-listening test, watched five HTML5 Package (H5P) videos, and completed a pre- and post-questionnaire. The results from the pre-listening test and post-questionnaire showed that the use of H5P videos tend to facilitate listening comprehension in classroom based learning activities and promoted active learning to some extent. However, some students reported that viewing H5P videos was less effective in promoting active listening due to unfamiliarity of the format of the video. This article also offers insights to pedagogical and research implications of using H5P videos as a tool to teach listening skills to language teachers.

Keywords: listening, active learning, audio-visual

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Teaching and Learning Context

Listening is one of the four skills in English language learning. Although it is as important as the other three skills (writing, reading and speaking), it is often neglected or forgotten (Long, 1987). Due to this oversight, Flowerdew and Miller (2012, p. 225) described listening as the "Cinderella skill". Listening involves a dynamic and complex process which is considered as one of the most difficult skills by second language (L2) learners due to various reasons: speed of speakers, length of listening materials, different pronunciation, use of performance variables, and genre and/or topic unfamiliarity. Listening in the real world often becomes more challenging because of background noise, other people's conversations and other audible interference which are not found in classroom listening materials.

Vandergrift (1999) attributes this difficulty to its complex nature which requires coordination and mental process:

> [Listening] is a complex, active process in which the listener must discriminate between sounds, understand vocabulary and grammatical structures, interpret stress and intonation, retain what was gathered in all of the above, and interpret it within the immediate as well as the larger sociocultural context of the utterance. Co-ordinating all of this involves a great deal of mental activity on the part of the listener. Listening is hard work, and deserves more analysis and support. (p.168)

According to Handelsman and his colleagues (2007), active learning suggests that students are engaged in their own learning when they do or produce something in response to learning opportunities designed by their teacher, which can be used to measure their understanding. Active learning, in this context, is defined as activities, particularly involving higher order thinking, that students do to construct knowledge and understanding (Freeman, et al., 2014). Because listening is an "individual activity" (Field, 2008, p. 37), technology allows learners to engage in active learning as well as to develop their listening competence and cognitive ability of listening at their own pace and time. Classroom based listening activities are different from the kinds of listening in real life. In real world communication, we never just listen; we also always draw on multiple contextual clues to make sense of what

we hear. The use of multimedia technology in teaching and learning listening skill is not new. Research has found that using audio-visual can help learners engage in listening and develop better listening skills as they were exposed to a richer language context compared to using audio materials alone (Berk, 2009; Cakir, 2006; Rahmatian & Armium, 2011). These findings support Bezemer and Kress (2015) who commented that it is useful to apply approaches and methods that consider more modes (i.e. body movement and postures, gestures, gaze, sound, tactile senses, other materials resources) than just language. So by using audio-visual materials, students were able to reflect on what they watched and heard rather than passively receiving the information.

Listening activities have traditionally involved only audio materials (Rosselot, 1949). With the advancement of technology, the use of visual stimuli was made possible in the form of videos. Hence, the use of audio-visual materials provides a better emulation of listening practices outside the classroom as it not only presents a visual sense, it also decreases boredom and helps listeners get a better grasp of the information that they listen to (Pham, 2021; Rizkan, Mukhaiyar, & Refnaldi, 2019). According to Berk (2009), the use

of videos also aids long term memory retention because it engages both the left and right brain hemispheres. Thus, it further facilitates learning.

The benefits of using videos as an effective tool to teach listening skills are recognized by many researchers (Buck, 2001; Sydorenko, 2010). Buck (2001) suggests that visual representations help language learners, especially lower proficient learners, to process difficult texts. Providing students with multiple modes for processing information facilitates listening comprehension, especially in cases where auditory contextual cues fail in complex topics due to students' lack of vocabulary knowledge. It is then that students benefit from audio-visual contextual cues that offer multiple ways to facilitate comprehension. According to Lever-Duffy & McDonald (2003, p. 332), the use of audio-visual materials provides an additional mode for students who are "auditory, visual and kinesthetic-tactile learners" (Lever-Duffy & McDonald, 2003, p. 332). This finding echoes Vandergrift (1996) who opines that the use of videos encourages learners' use of meta-cognitive approaches, cognitive approaches and socio-affective approaches. So the use of multimodal approaches further increases students' engagement in the teaching and learning

process because they are able to see the speakers, the settings and situations, as well as the gestures and body language.

To investigate the impact of using videos in promoting active learning in teaching listening skills, an action research study was carried out with second- and third- year undergraduate students majoring in English with a TESOL concentration at BNU-HKBU United International College in the second semester of the Academic Year 2020-21.

Method

The participants of this study were thirty-five second- and third-year undergraduate students who enrolled in a TESL3043 course (Assessment and Evaluation). In this study, a mix-method approach was used. This included administering a pre-listening test and pre- and post- questionnaire, which examined the participants' listening ability and perceptions towards using videos in teaching listening skills respectively. The pre-listening test was administered using the conventional format, i.e. only video and worksheet/pencil. By conventional method, it means that learners were given a worksheet with a list of questions (for while-listening activity) before the video was played. The teacher played

the video once or twice, depending on the difficulty of the audio-visual material, so that students were able to answer all the questions on the worksheet. The pre-questionnaire consists of 10 closed questions where participants were asked to indicate their perceptions of using videos as a tool in improving their own listening skills using a 5-point Likert scale (1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Neither agree nor disagree*, 4 = *Agree*, 5 = *Strongly agree*) and three (optional) open-ended questions. The open-ended questions required the participants to provide reasons if answers provided were "strongly disagree" or "disagree".

The post-questionnaire was divided into five parts:

Part 1: Perceptions of using videos as a tool in improving their own listening skills (13 items)

Part 2: Difficulty level of five HTML5 Package (H5P) videos (6 items)

Part 3: Number of times/attempts (used to watch each video) (6 items)

Part 4: Interest toward each video (7 items)

Part 5: Overall assessment of learning experience (2 items)

Part 1 of the post-questionnaire aimed

to collect information about students' perceptions towards the effectiveness of using H5P videos to improve their listening skills. Part 2 and 4 of the post-questionnaire aimed to collect students' insights of the chosen videos in terms of difficulty level and attractiveness respectively. Part 5 of the post-questionnaire helped to identify the notion of active learning.

The students were also required to watch five videos created by the H5P authoring tool (a description of H5P authoring tool will be provided in the following paragraph). Two criteria were used to select the videos. First, the videos covered different genres and topics. Second, the length of each video should not be longer than 20 minutes. The visual input for the video format consists of context and content visuals. According to Ginther (2002), context visuals, i.e. title of the video, help to set the background of the visual. Brown and Lee (2015, p. 331) refer to these context visuals as a "schemata-activating process" that help learners to prepare for the listening activity.

H5P is a resource which offers free and adjustable sources to educators via its website https://h5p.org. H5P, an acronym of HTML5 Package, refers to a plug-in that requires an up-to-date web browser to operate and enables creators/ instructors to produce interesting contents such as quizzes, games, interactive videos and presentations. H5P allows a wide selection of content types to be added to a course as an H5P activity. Various types of questions and texts can be embedded into the H5P activity: multiple choice questions, single choice set of question, drag and drop, fill in the blanks, summary and true/false questions, to name a few. The H5P activity can be published on a Moodle Learning Management System for viewing when it is completed.

For the present study, H5P interactive videos were created. H5P video content type allowed the researcher to embed multiple choice questions, drag and drop questions, fill in the blanks, true/false questions and summary to five videos. The term "H5P videos" is used to refer to videos with embedded questions. These H5P videos were then published on iSpace (a Moodle Learning Management System) for students to view. This method of doing listening activities is different in its structure and approach as it is more self-regulated than classroom based listening activities and potentially encourages active learning. Due to the advancement of technology, it creates a change in literacy practice as part of listening activities in which technology

creates affordances for learners to better exploit the available resources. Questions embedded in H5P videos popped-up as the learners watched the videos. This made the videos more engaging because H5P allowed all question types to be configured to perform adaptive behavior. By adaptive behavior, it means that a correct answer will allow the learner to continue whereas an incorrect answer will require the learner to watch the video again from the exact location in the video where the answer to the question is presented. The main advantage of using H5P tool was it allowed the students to play the videos multiple times as the videos could be paused, rewound, fast-forwarded at any time. This not only gave the students opportunities to process, assess and reflect on the information they watched, it also helped in information retention.

Simple descriptive statistics was used to calculate the frequency and percentage of data collected from the pre-listening test, pre- and post-questionnaire. In analyzing the data collected from the open-ended questions from the post-questionnaire, I reflected on emerging themes (Braun & Clarke, 2006) to determine the perceptions of participants towards using H5P videos in teaching listening skills.

Findings

The use of H5P videos provided a change in the way students do listening activities. Quantitative results obtained from the pre-listening test and post-questionnaire showed that its use tended to facilitate listening comprehension in classroom based learning activities and promoted active learning to some extent. Even though some students reported that viewing H5P videos was less effective in promoting active listening since they were unfamiliar with the format and genre of the video, they were generally receptive of the idea of using H5P videos to enhance their listening skills. The students' negative perception was somewhat expected as students were used to the conventional method of doing listening tasks because they were able to read all the questions on the worksheet. On the contrary, H5P videos presented questions differently, i.e. questions popped-up on the screen as learners watched the videos. The results of the quantitative data are first presented followed by the analyses obtained from qualitative data.

Students were introduced to H5P videos for the first time in this course in Week 11. From Week 11 to Week 12, students were asked to watch five H5P videos of different genres and topics.

The chosen videos fulfilled the two criteria discussed in the Method section above. The length of two videos was about 20 minutes in length, and these were documentaries. The other three videos were under 6 minutes in length and were songs and a poem recital. Table 1 presents a summary of the videos.

Table 1

Summary of H5P Videos

Video No.	Genre	Length of Video (Minutes/Seconds)	Total Number of Embedded Questions
1	Documentary	16:25	10
2	Song	1:55	31
3	Song	4:11	21
4	Documentary	18:10	24
5	Poem	5:56	60

Before the students watched the five H5P videos, a pre-listening test was administered in Week 6 to find out their listening ability. Video 1 was used as pre-listening test. As previously mentioned, the pre-listening test was administered using the conventional method and it was played only once in class. In Week 11, the students watched Video 1 again in H5P format (i.e. questions were embedded in the videos). Table 2 below compares the average score on the pre-listening test with the average score of students using H5P videos.

Table 2

Average Score of Pre-Listening Test and H5P Video

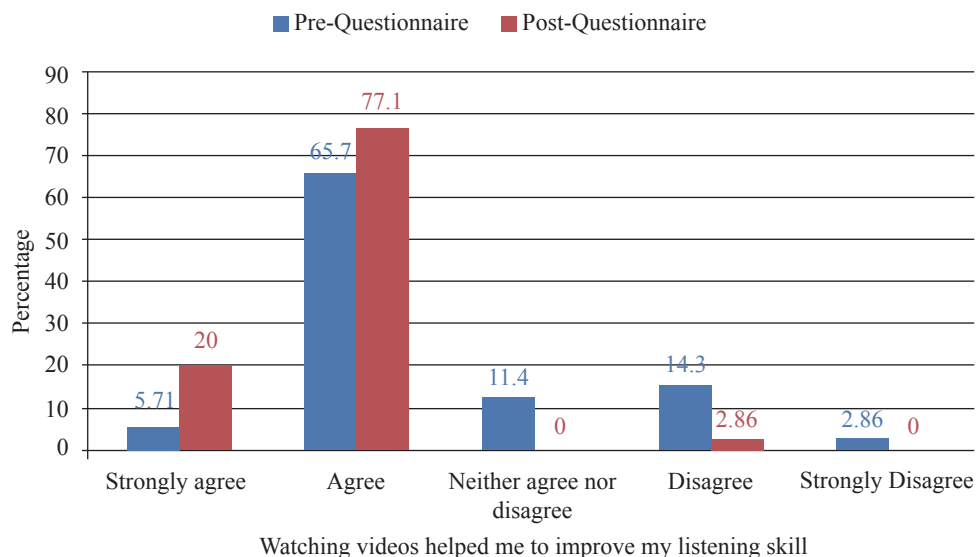|	Video 1 (10 Marks)	
	Pre-Listening Test	H5P Video
Average Score	5.5	9.6
No. of Students with Full Score	0	27 (77.1%)
No. of Students with Low Score (Below 5 Marks)	16 (45.7%)	0

In general, students' ability to answer the questions embedded in the H5P videos increased significantly. Referring to Table 2, the average score of the pre-listening test for Video 1 was 5.5, and there was an improvement in the average score (9.6) when students attempted the questions via H5P videos. Just over 45% of the students obtained less than 5 marks for the pre-listening test while none had below 5 marks when they watched H5P Video 1. On the contrary, 77% of the students scored full marks when they watched H5P Video 1, while none got full marks for the pre-listening test. The answers of pre-listening test were discussed in class and students knew their

marks immediately. Because H5P authoring tool allowed the creator to define the score for each question, students were able to view the score for each question and the final score at the end of the video. As stated in the Method section, due to its adaptive behavior, if an incorrect answer was given, the student would not be able to proceed to the next question but would be directed to the location in the video where the answer to the question is presented.

In Week 6, students were asked to complete a pre-questionnaire to find out their perceptions of using videos as a tool in improving their own listening skills. The results from the pre-ques-

Figure 1

Quantitative Results From Pre - and Post-Questionnaire

Watching videos helped me to improve my listening skill

tionnaire were then compared with the findings obtained from the post-questionnaire, administered in Week 13, which required them to reflect about their own learning experience after watching the videos using H5P. Figure 1 on page 8 compares the results collected from pre- and post-questionnaire for the statement: "Watching videos helped to improve my listening skill". The chart shows that 97.1% of the students reported that they "strongly agree" and "agree" that watching videos helped to improve their listening skills..

The findings of this study also suggested that students had both positive and negative perceptions about using videos in teaching listening skills. From the open-ended questions in the post-questionnaire, the following recurring themes were identified:

- The students stated that the videos provided images and the visual representations helped them to better understand the meaning of the content.
- The students stated that the videos were more interesting and closely reflect real life listening; thus motivated them to continue to listen/watch the audio-visual materials.
- The students liked the use of videos because they afforded multiple modes of input that enabled them to engage in different ways of cognitive processing of input which catered better to the learners' individual needs.
- The students felt that some videos, in particular, Videos 1, 4 and 5, were somewhat difficult as they contained words that were unfamiliar.
- The students noted that the speed and accent of speakers posed a challenge to them as they couldn't understand the content of some videos.
- The students commented that they were not used to the format of H5P videos and hence found it a challenge to complete all the questions.

Impact

The findings from this action research have been largely positive: they offer insights to pedagogical and research implications of using videos as a tool to teach listening skills to language teachers. Teaching listening with the use of H5P videos is deemed beneficial because multiple modes for processing information facilitated listening comprehension and provided scaffolding for learning. Students were motivated to take control of their own learning to a certain ex-

tent. The embedded questions in H5P videos as well as its adaptive behavior encouraged self-regulated learning. The high scores captured by the H5P videos showed that students' ability to listen had increased significantly. Two possible reasons for the higher scores achieved were: 1) visual representations provided richer input which potentially engages listeners more (Rost, 2016); and 2) H5P videos allowed students to play the video multiple times which aids in retention of information. On the flipside, students reported that they preferred the conventional approach because they were unfamiliar with the format of H5P videos. As discussed in the Findings section, students were only introduced to H5P videos in Week 11. So, one way to address this issue is to provide students with more opportunities to view H5P videos so that they will have adequate time to process the interactive features offered by this tool.

Reflection

As a practitioner and researcher, I have learnt a lot through carrying out this action research study. Based on my observation, for the successful use of videos to teach listening skills, teachers need to pay attention to the selection of videos. Some factors that need to be considered are appropriateness and acceptability of the video in a teaching-learning context, types of videos, length of videos, topics, speed/accent of speaker and real-world relevance of videos.

For students to appreciate the use of videos in acquiring listening skills, they need to be familiar with the format of the video, in this case, video with embedded questions. It is suggested that the activities should be built in accordance with a format that students are familiar with, i.e. providing a printable version of questions for students to refer to. It is also suggested that students could be exposed to H5P videos for a longer duration in order for them to be accustomed to the format.

To address the concern of students' preference for paper-based activities, as educators, it is important to note that individual learners engage with learning materials in their own ways. Each educational tool, either paper-based or technology enhanced learning (TEL) solutions, has its own configuration of affordances and constraints (Jones & Hafner, 2012). Therefore, learners should be taught to understand how to manage the affordances and constraints so that the tools used can benefit them rather than limit their potentials.

Lastly, in view of its many benefits,

the use of videos can also be implemented in different courses. I look forward to develop this further and extend the use of this teaching strategy to a longer duration to promote autonomous listening in students. According to Rost (2016, p. 185), autonomous listening refers to "a self-directed listening activity in which learners choose what to listen to, … and monitor their own progress" The idea of autonomous listening involves learners taking control of their own listening activities rather than solely responding to activities prepared by the teacher.

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