

Original Paper

Enhancing Foreign Language Learners' Listening Skills through Technology: A Sample Lesson

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Abstract

In recent years, technology has become an integral part of language education, and its potential in supporting listening skills has been widely recognized. The use of technology allows language teachers to incorporate a range of authentic materials and interactive activities that can enhance learners' engagement and motivation. Furthermore, the availability of multimedia resources and software tools has made it easier to design effective listening activities that can cater to learners' different needs and preferences. This article aims to provide language teachers with practical ideas and strategies to design technology-enhanced listening activities that can help foreign language learners develop their listening skills more effectively. The article begins with a brief literature review, which highlights the benefits of using technology in language education, particularly in enhancing listening skills. The article then presents a sample lesson designed to demonstrate the potential of technology in supporting not only learners but also teachers. Finally, the article concludes with a discussion of the implications of the study and provides suggestions for further research in this area.

Keywords

technology, listening skills, language education, multimedia resources, software tools

1. Introduction

Listening skills are a crucial component of language learning, as they allow learners to comprehend and respond appropriately to spoken language. However, many foreign language learners struggle with developing their listening skills, which can hinder their ability to communicate effectively in the target language. Traditional approaches to teaching listening skills, such as textbook exercises and scripted dialogues, may not be engaging enough for learners, especially in the case of younger learners. This is where technology comes in as a powerful tool to enhance the learning experience by providing

interactive and authentic activities that can motivate learners and improve their listening skills. In this article, we aim to provide language teachers with practical ideas and strategies to design technology-enhanced listening activities that can help foreign language learners develop their listening skills more effectively.

Technology has become an integral part of language education, offering new opportunities to develop learners' listening skills in engaging and interactive ways. The use of technology enables teachers to incorporate a range of authentic materials, such as TV shows, movies, and podcasts, into their lessons, providing learners with exposure to natural language use and culture. Moreover, the use of software tools and multimedia resources makes it easier to design effective listening activities that can cater to learners' different needs and preferences.

In recent years, there has been growing interest in the potential of technology to enhance language learning, particularly in developing listening skills. Several studies have demonstrated the effectiveness of technology-enhanced listening activities in improving learners' listening comprehension, motivation, and engagement (Mulyadi, Wijayatiningsih, Singh, & Prastikawati, 2021; Ramos & Valderruten, 2017; Peixoto, Pinto, Krassmann, Melo, Cabral, & Bessa, 2019). For example, podcasts have been found to be a useful tool for developing learners' listening skills, as they provide authentic language input and opportunities for learners to practice listening independently. Similarly, video-based activities, such as watching TV shows or movies, can help learners develop their listening skills by providing exposure to different accents, intonation patterns, and cultural references.

However, incorporating technology into language teaching is not without its challenges. Teachers need to carefully select and design technology-enhanced listening activities that are appropriate for their learners' level, interests, and goals. Moreover, teachers need to have the necessary technological skills and resources to design and implement these activities effectively.

In this article, we aim to provide language teachers with practical ideas and strategies to design technology-enhanced listening activities that can help foreign language learners develop their listening skills more effectively. We begin by reviewing the literature on the benefits of using technology in language education, particularly in enhancing listening skills. We then present a sample lesson designed to demonstrate the potential of technology in supporting learners' listening skills and providing support to teachers. Finally, we discuss the implications of our study and suggest directions for future research in this area.

2. Literature Review

The literature on technology and language learning has shown that the use of technology can have a positive impact on language learning outcomes (Chapelle, 2017; Stickler & Shi, 2016; Ware & Hellmich, 2014). In particular, the use of multimedia resources such as audio and video materials can improve learners' listening skills (Gökçe, 2022; Darwin, Muliastuti, Setiadi, & Anwar, 2021). YouTube is a particularly valuable resource for language teachers, as it provides a vast library of authentic audio

and video materials that can be used in the classroom (Muratova, 2023).

In addition to YouTube, there are also a number of software tools available online that can be used to create and share audio and video materials. These tools include Audacity, a free audio editing software, and Flipgrid, a video discussion platform that allows users to share short video clips. These tools can be used to create custom listening materials that are tailored to the needs of specific learners and classrooms.

The use of technology in language learning has become increasingly prevalent in recent years, with a growing body of literature exploring the benefits and drawbacks of its integration in the classroom. Vitta and Al-Hoorie (2020) conducted a meta-analysis of 56 reports on the use of technology in language learning, finding that technology had a positive effect on learners' language proficiency, particularly in areas such as reading and listening comprehension. Similarly, Lan (2022) conducted a study with Taiwanese university students and found that the use of multimedia materials such as audio and video clips improved their listening skills and motivation to learn.

More specifically, several studies have explored the use of YouTube in language learning. Almurashi (2016) conducted a literature review on the role of YouTube in teaching English as a foreign language, finding that it offered a range of benefits including exposure to authentic materials, increased motivation, and opportunities for learner autonomy. Husna, Purnawarman, Suherdi and Lubis (2019) conducted a systematic review of 14 studies on the use of multimedia in EFL classrooms, finding that YouTube was one of the most commonly used resources and that it had a positive impact on learners' language proficiency.

In addition to YouTube, there are a variety of software tools available online that can be used to create and share audio and video materials. Ian (2011) conducted a study with Japanese university students, exploring the use of Audacity to create listening materials. They found that the use of this software had a positive effect on learners' listening comprehension and pronunciation. Flipgrid is another software tool that has gained popularity in recent years, particularly in the context of online learning. It allows users to create short video clips and share them with others, providing opportunities for learners to practice their listening and speaking skills in a more interactive and engaging way.

Some recent studies have shown the effectiveness of using technology in teaching listening skills to young learners. For example, a study by Yaacob, Amir, Mohd Asraf, Mohd Yaacob and Zain (2021) found that using interactive videos in language learning can significantly improve young learners' listening comprehension ability. Another study by Rosell-Aguilar (2007) showed that using multimedia materials such as videos and podcasts can improve learners' motivation and engagement in language learning.

Overall, incorporating these technology and multimedia resources in language learning can lead to improved listening comprehension abilities. Specifically, utilizing platforms such as YouTube and software tools like Audacity and Flipgrid can provide language teachers with more diverse and engaging materials to create tailored listening activities for their students.

3. Methodology

In order to investigate the potential of technology in supporting foreign language learners' listening skills, the study will be structured as follows: First, an overview of the available technology tools will be presented. Second, the principles that must be taken into account when integrating technology tools to improve the listening skills of foreign language learners will be discussed. Third, the study will examine the best practices and common challenges faced by teachers who use technology to teach listening skills. Finally, the potential benefits and drawbacks of using technology in comparison to traditional teaching methods will be investigated. The following research questions will guide the study:

1. What technology tools are available to improve the listening skills of foreign language learners?
2. What principles and strategies must be considered when integrating technology tools to enhance the listening skills of foreign language learners?
3. What are the best practices and common challenges faced by teachers who use technology to teach listening skills?
4. What are the potential benefits and drawbacks of using technology to teach listening skills to foreign language learners, and how do these compare to traditional teaching methods?

To demonstrate the practical application of the research questions, a sample lesson will be provided and analyzed. This lesson is designed for intermediate level learners and focuses on improving their ability to comprehend spoken English.

3.1 Technology Tools for Enhancing Listening Skills in Foreign Language Learning

Overall, the literature suggests that the use of technology, particularly multimedia resources and software tools, can have a positive impact on language learning outcomes, particularly in the area of listening skills. YouTube and software tools such as Audacity and Flipgrid offer a range of benefits for language teachers, allowing them to create custom materials that are tailored to the needs and interests of their learners. Table 1 provides examples of technology artefacts that can be utilized to enhance listening skills.

Table 1. Technology Artifacts for Developing Listening Skills

Technology Artifact	Description
Audio recording software	Software that can record audio, such as Audacity or GarageBand. These tools can be used to record lectures, presentations, or other audio content to listen to and practice comprehension.
Podcasts	Audio programs, typically in a series, that cover a variety of topics and interests. Podcasts can be a great way to practice listening skills while also learning about specific subjects.
Video conferencing	Platforms like Zoom, Skype, or Microsoft Teams can be used to participate in

software	virtual meetings, webinars, or conferences. These tools can be used to listen to speakers or presenters and engage in discussion.
Language learning apps	Apps like Duolingo, Babbel, or Rosetta Stone can help learners improve their listening skills in a foreign language. These apps often have listening exercises and activities that help learners practice comprehension.
Speech recognition software	Speech recognition software like Dragon Naturally Speaking or Google Voice Typing can be used to practice listening skills by transcribing spoken language. This can help learners better understand spoken language and improve their own speaking skills.
Audiobooks	Audio versions of books can be used to practice listening skills while also improving vocabulary and comprehension.
Language exchange apps	Apps like Tandem or HelloTalk connect language learners with native speakers for language practice. These apps often have features that facilitate conversation and help learners practice listening skills in a foreign language.
Online lectures and webinars	Many universities and organizations offer online lectures and webinars that can be accessed for free. These resources can be used to practice listening skills while also learning about specific subjects.
YouTube	A video-sharing platform with a vast range of content. Learners can use YouTube to practice listening skills by watching videos in their target language, listening to podcasts or TED talks, or following instructional videos for various subjects.

Technology tools can be highly effective in improving listening skills for foreign language learners. Audio recording software, podcasts, video conferencing software, language learning apps, speech recognition software, audiobooks, language exchange apps, online lectures and webinars, and YouTube are some of the technology artifacts that can be used for this purpose. These tools can help learners practice comprehension, engage in discussion, improve vocabulary, and connect with native speakers. By utilizing these resources, language teachers can create custom materials that are tailored to the needs and interests of their learners, and enhance the overall language learning experience.

3.2 Principles and Strategies for Integrating Technology in Listening Classes

The use of technology in listening classes can greatly enhance the learning experience for foreign language learners. However, it is important to consider certain principles and strategies in order to ensure that technology is being used effectively to improve listening skills. The following principles should be considered when preparing efficient listening activities and lessons:

- Warm-up activity: Before listening to any audio or video content, learners should participate in a warm-up activity to activate their prior knowledge and vocabulary related to the topic of the content. This can include a short discussion, brainstorming, or a vocabulary matching game.
- Pre-listening activity: A pre-listening activity should be provided to help learners focus on the key

vocabulary and grammar structures that they will encounter in the content. This may include a vocabulary list, a fill-in-the-blank exercise, or a sentence completion activity.

- Interactive listening comprehension tasks: The content should be divided into shorter segments, and after each segment, learners should complete an interactive listening comprehension task. These tasks may include multiple-choice questions, matching exercises, or gap-fill activities.
- Post-listening activity: After listening to the entire content, learners should participate in a post-listening activity that will focus on developing their speaking and writing skills. This may include a discussion or debate on the topic of the content, or a writing task such as a summary or a reflection on what they learned from the content.
- Feedback and reflection: Finally, learners should receive feedback on their performance and should be encouraged to reflect on their listening and language learning strategies. This can include a peer review, self-evaluation, or a teacher-led discussion on effective listening strategies.

In addition to these principles, the following strategies can be implemented to effectively integrate technology in listening classes:

- Multimedia resources: Teachers can utilize multimedia resources, such as videos, podcasts, and audiobooks, to engage learners and provide them with authentic listening materials.
- Custom materials: Teachers can use software tools, such as Audacity and Flipgrid, to create custom materials that are tailored to the needs and interests of their learners.
- Language learning apps: Apps like Duolingo, Babbel, or Rosetta Stone can help learners improve their listening skills in a foreign language. These apps often have listening exercises and activities that help learners practice comprehension.

By considering these principles and strategies, teachers can effectively integrate technology in listening classes and help their learners improve their listening skills in a foreign language.

3.3 Best Practices and Common Challenges Faced by Teachers

Incorporating technology in language learning can be a powerful tool for teachers to enhance their students' learning experience. However, with the increasing availability of technology and software tools, teachers may face a number of challenges in effectively integrating these resources into their classroom instruction. This section will focus on identifying best practices and common challenges faced by teachers when using technology in language learning.

3.3.1 Best Practices

- Define learning objectives: Teachers should clearly define learning objectives and design instructional materials that align with these objectives. This will ensure that the technology resources used in the classroom are relevant and beneficial for students.
- Select appropriate technology: Teachers should choose appropriate technology resources based on their students' needs and the learning objectives. For example, if the goal is to improve listening skills, teachers can use audio and video materials available on YouTube or other software tools like Audacity.

- Provide adequate training and support: Teachers should provide students with adequate training and support to use technology resources effectively. This can include providing tutorials, offering opportunities for practice and feedback, and troubleshooting technical issues.
- Create engaging and interactive learning experiences: Teachers can use technology to create interactive and engaging learning experiences that promote student participation and motivation. For example, teachers can use Flipgrid to create video discussions or quizzes to assess student learning.

3.3.2 Common Challenges

- Technical difficulties: Teachers may face technical difficulties when using technology resources, such as internet connectivity issues or software malfunctions. This can disrupt the learning experience and cause frustration for both teachers and students.
- Lack of access to technology: Students may not have access to the necessary technology resources at home, which can limit their ability to participate in technology-enhanced learning activities.
- Integration with curriculum: Teachers may struggle to integrate technology resources effectively into their curriculum, leading to a mismatch between learning objectives and instructional materials.
- Overreliance on technology: Teachers may over-rely on technology resources, leading to a neglect of other important aspects of language learning, such as communicative practice and feedback.

In conclusion, incorporating technology resources in language learning can provide many benefits for teachers and students. However, in order to maximize the potential of these resources, teachers should carefully consider best practices and common challenges when designing instructional materials and activities. By doing so, teachers can provide their students with engaging and effective language learning experiences.

3.4 Potential Benefits and Drawbacks

There are potential benefits and drawbacks to both technology-based and traditional teaching methods for teaching listening skills to foreign language learners. We will explore some of these factors in the following.

3.4.1 Benefits of Technology-based Teaching Methods

- Authenticity: Technology can provide learners with access to authentic listening materials that represent the target language in real-life situations. For instance, learners can watch news broadcasts, listen to podcasts or interviews, or watch movies in the target language.
- Flexibility: Technology provides teachers with a range of materials and resources to use in their lessons. This can enable teachers to tailor listening activities to their students' interests, abilities, and learning styles.
- Interactivity: Technology can facilitate interactive listening activities that can be engaging and motivating for learners. For instance, students can listen to audio recordings, watch videos, and complete comprehension activities that involve different media.

- **Individualization:** Technology can enable teachers to create personalized listening activities that cater to the individual needs of their students. For example, learners can work at their own pace, replay audio recordings, or adjust the speed of the audio to suit their own preferences.
- **Assessment:** Technology can provide teachers with tools to assess learners' listening skills more accurately. For instance, teachers can use software tools to grade students' performance and provide feedback on areas where students need improvement.

3.4.2 Drawbacks of Technology-based Teaching Methods

- **Technical difficulties:** Technical issues such as slow internet speed, compatibility issues, and device malfunctions can disrupt the learning process and negatively impact learners' motivation and engagement.
- **Overreliance:** Overreliance on technology can hinder learners' ability to develop independent learning strategies and essential listening skills, such as note-taking, summarizing, and predicting.
- **Accessibility:** Some learners may not have access to the necessary technology or resources required for technology-enhanced listening activities.
- **Quality control:** Not all materials available online may be of high quality, and it can be challenging for teachers to vet the authenticity and accuracy of listening materials.
- **Lack of face-to-face interaction:** Technology can limit face-to-face interaction between learners and teachers, which can negatively affect learners' motivation and engagement.

3.4.3 Benefits of Traditional Teaching Methods

- **Social interaction:** Traditional classroom settings provide opportunities for social interaction and collaboration, which can enhance the learning experience and provide additional support for learners.
- **Contextualization:** Traditional teaching methods can provide more contextualization, allowing learners to better understand the nuances of spoken language use.
- **Flexibility:** Teachers can adapt their teaching methods to meet the needs of individual students, providing a more customized learning experience.
- **Reduced technical difficulties:** Traditional teaching methods require fewer technological tools, reducing the potential for technical difficulties.

3.4.4 Drawbacks of Traditional Teaching Methods

- **Limited accessibility:** Traditional classroom settings can be inaccessible for students who are unable to attend in person or who do not have access to a classroom setting.
- **Reduced engagement:** Traditional teaching methods may not be as engaging or motivating for students as technology-based methods.
- **Limited multimedia learning:** Traditional teaching methods may not offer the same multimedia learning experiences as technology-based methods.
- **Lack of customization:** Traditional teaching methods may not be as customizable to individual learner needs and learning styles as technology-based methods.

In conclusion, both technology-based and traditional teaching methods have potential benefits and

drawbacks for teaching listening skills to foreign language learners. Teachers should consider the needs and learning styles of their students when selecting the most appropriate teaching method, and should be mindful of both the potential benefits and drawbacks of each approach.

4. Results

Table 2. Sample Lesson Plan for Practicing Listening Skills

Title	Global Climate Change: A Listening and Speaking Lesson	
Level	Intermediate	
Objective	By the end of the lesson, learners will be able to improve their listening and speaking skills while also learning about global climate change.	
Materials	Materials Video on global climate change from YouTube, Audio recording software (Audacity), Interactive quiz software (Kahoot!), Writing materials (paper and pen or word processing software), Language learning app (Duolingo)	
Procedure		
Step	Activity	Time
1.	<p>Warm-up activity: < >- Ask learners to share what they already know about global climate change.< >- Provide a list of key vocabulary related to global climate change and ask learners to match the vocabulary with their definitions.</p> <p><i>OR alternatively</i></p> <p>< >- Ask learners to share their experience with technology tools for listening practice.< >- Provide a list of key vocabulary related to listening skills and technology tools and ask learners to match the vocabulary with their definitions.</p>	10 minutes
2.	<p>Pre-listening activity: < >- Give learners a list of the key vocabulary and grammar structures they will encounter in the video.< >- Ask them to fill in the blanks in a set of sentences using the vocabulary and grammar structures provided.</p> <p><i>OR alternatively</i></p> <p>< >- Provide learners with a list of technology tools they will be using in the lesson and briefly introduce each one.< >- Ask learners to choose one tool and research how it can be used for improving listening skills. Have them share their findings with the class.</p>	15 minutes
3.	<p>Interactive listening comprehension tasks: < >- Show the video on global climate change from YouTube, dividing it into three shorter segments.< >- After each segment, give learners an interactive quiz using software like Kahoot! to check their understanding.< >- Have learners use audio recording software like Audacity to record themselves listening to the content and answering comprehension questions.< >- Use Zoom to discuss the content with classmates or</p>	45 minutes

practice speaking skills.

Post-listening activity: < >- Divide learners into pairs or small groups.< >- Ask them to discuss questions related to global climate change.< >- After the discussion, have each learner write a short summary or reflection on what they learned.

OR alternatively

4. < >- Ask learners to reflect on the tools they used and evaluate which ones were most helpful for their listening skills.< >- Provide feedback on their performance and encourage learners to share their experiences with their chosen technology tool.< >- Have learners use a language learning app like Duolingo to complete listening exercises and activities. 30 minutes

- Feedback and reflection:** < >- Review the summary or reflection writing with the learners and provide feedback on their performance.< >- Encourage them to reflect on their listening and language learning strategies. 10 minutes

Assessment: < >- Listening comprehension quizzes using speech recognition software like Dragon Naturally Speaking or Google Voice Typing.< >- Participation in Zoom discussions and speaking activities.< >- Reflection writing on technology tools and their effectiveness/ global climate change.

Homework: < >- Encourage learners to continue practicing listening skills using the technology tools they found most helpful.< >- Have learners listen to a podcast or watch a video on a similar topic and write a reflection on what they learned.

Technology Artifacts Used:< >- Audio recording software< >- Language learning app< >- Video conferencing software< >- Speech recognition software< >- Podcasts< >- YouTube < >- Online lectures and webinars< >- Language exchange apps

Note: The time is subject to change depending on the class's needs and progress.

4.1 Analysis of the Sample Listening Lesson

This lesson plan is designed for intermediate level learners and aims to improve their listening and speaking skills while also educating them on the topic of global climate change. The materials required include a video from YouTube, audio recording software, an interactive quiz software, writing materials, and a language learning app.

The lesson plan consists of five main steps. The warm-up activity involves learners sharing their prior knowledge about global climate change or technology tools for listening practice. The pre-listening activity includes providing learners with a list of vocabulary and grammar structures they will encounter in the video and asking them to fill in the blanks in sentences or research technology tools and present their findings.

The interactive listening comprehension tasks include showing the video in three shorter segments, using an interactive quiz software like Kahoot! to check learners' understanding after each segment,

and having learners record themselves answering comprehension questions using audio recording software like Audacity. The learners then use Zoom to discuss the content with classmates or practice speaking skills.

The post-listening activity includes dividing learners into pairs or small groups to discuss questions related to global climate change or reflecting on the tools they used and evaluating which ones were most helpful for their listening skills. Learners use a language learning app like Duolingo to complete listening exercises and activities.

The feedback and reflection step involves reviewing learners' writing and providing feedback on their performance and encouraging them to reflect on their listening and language learning strategies. The assessment includes listening comprehension quizzes using speech recognition software, participation in Zoom discussions and speaking activities, and reflection writing on technology tools and their effectiveness/global climate change. The homework involves encouraging learners to continue practicing listening skills using the technology tools they found most helpful and to watch a video or listen to a podcast on a similar topic and write a reflection on what they learned.

Overall, this lesson provides a dynamic and engaging learning experience that fosters language development, critical thinking, and awareness on the subject topic. It includes a variety of interactive activities and technology tools to engage learners and improve their listening and speaking skills while also teaching them about a current global issue.

5. Discussion

In this study, we aimed to explore the use of technology tools in improving the listening skills of foreign language learners. Our research questions focused on identifying the available technology tools for language learners, understanding the principles and strategies for integrating these tools effectively, examining the best practices and common challenges faced by teachers, and comparing the potential benefits and drawbacks of using technology versus traditional teaching methods.

What technology tools are available to improve the listening skills of foreign language learners?

Our findings suggest that a variety of technology tools are available to improve listening skills, including audio recording software, interactive quizzes, language learning apps, podcasts, and online lectures and webinars. Each tool has unique features that cater to specific aspects of listening skills, such as pronunciation, comprehension, and vocabulary acquisition.

What principles and strategies must be considered when integrating technology tools to enhance the listening skills of foreign language learners?

Integrating technology tools effectively requires careful consideration of several principles and strategies. These include the alignment of technology tools with specific learning objectives, the adaptation of tools to meet learners' individual needs, and the provision of guidance and feedback to enhance learners' skills.

What are the best practices and common challenges faced by teachers who use technology to teach

listening skills?

Despite the potential benefits of technology in language teaching, such as increased motivation and engagement, our study also identified common challenges faced by teachers when integrating technology in their teaching practices. These include technical issues, students' lack of digital literacy, and the need for teacher training on technology integration.

What are the potential benefits and drawbacks of using technology to teach listening skills to foreign language learners, and how do these compare to traditional teaching methods?

When comparing the benefits and drawbacks of using technology versus traditional teaching methods, our findings suggest that technology can provide numerous benefits, including flexibility, accessibility, and personalized learning opportunities. However, some drawbacks also exist, such as the risk of technology becoming a distraction and the potential for students to rely too heavily on technology, leading to a lack of face-to-face interaction and communication skills.

6. Conclusion

In conclusion, the use of technology tools in language teaching can provide a dynamic and engaging learning experience that enhances listening skills, critical thinking, and awareness of global issues. However, teachers must carefully consider the principles and strategies of technology integration and be aware of the potential challenges and drawbacks. Further research is needed to explore the long-term impact of technology on language learning and the most effective methods for integrating technology tools in language teaching.

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