Using VoiceThread to develop the speaking skills of EFL learners: A systematic literature review

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ABSTRACT

The use of technology in teaching and learning helps students in the learning process. The information communication and technology (ICT) tools are used, such as VoiceThread. This review focuses on previous research on the use of VoiceThread to develop the speaking skills of EFL learners. This systematic review investigated the use of VoiceThread to develop the speaking skills of EFL learners. This study uses Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines to search for the result. A total of ten journal articles from 2011 to 2022 were accessed from Google Scholar. A review, an inclusion, and exclusion criteria in selecting process were employed in the review. Furthermore, the article journal review presents the use of VoiceThread shows a positive effect to develop the speaking skills of EFL learners. The findings reveal that VoiceThread develops the speaking skills of EFL learners with the features in it. The practical implication of this study is that EFL teachers are advised to use VoiceThread to support students' speaking learning process.
INTRODUCTION

In this era of technology, students and teacher gain countless benefits from technology usage. One of them is to help teachers and students in the learning process. Technology gives teachers and students advantages in the learning process, especially in English. The technology aids teachers in sharing the material with the students and when doing online instruction. Meanwhile, for the students, the use of technology ease them to access the material, understand the material delivered by the teacher, and improve their English skills. One that most EFL students experience is their speaking skills. Speaking skills are one of the basic skills that EFL learners should learn in the classroom. Teaching speaking is challenging because there are many problems in the learning process because of the student’s anxiety and lack of interaction. Besides, the use of technology can give EFL learners the opportunity to practice their speaking skills. The use of technology helps EFL learners and teachers easier to teach and learn in the learning process. One of the technologies commonly used is computer-assisted language learning (CALL). According to Smith, (2004) the use of computer-assisted language learning facilitates students and teachers to have control of their performance with tools of technology. Hashemi & Aziznezhad (2011) stated that the use of computer-assisted language learning (CALL) for students helps them become autonomous learners. The students can monitor their learning styles and needs in the learning process. CALL can develop students’ English skills, especially the speaking skills, with appropriate strategies and methods. Students who learn English should have good speaking skills to emphasize the idea and information to be clearly stated when speaking. Batubara, 2018, CALL can improve the student’s ability to speak and convey meaning differently. The use of CALL also can test if it is possible and use it to develop students, especially in EFL learners in speaking skills.

The goal of speaking is to enhance students’ communicative skills during the learning process. A study by Glick, 2021, reviews one of the interactive multimedia slideshows that uploading images, recording audio and documents, and recording video in the web browser or application can help increase students’ speaking skills. The students can select an audio or video recorder to record their oral presentation. The viewer of the audio or video recorder can give any comments by adding some pictures and voice on VoiceThread. Erickson, 2020, The features that VoiceThread offers to the students give students an experience of student-centered learning. The students can use their opportunity to use their pictures, audio, and video relevant to the materials. Another study by Ghoneim & Elghotmy, 2016 reviews the use of VoiceThread in developing students’ and teachers’ speaking skills at the university level from 2003 until 2010.

Furthermore, there is still a lack of a systematic review conducted on the new period; only the old period is included in this article. This paper only reviews the previous journal articles about using VoiceThread on the speaking skills of EFL learners from 2011 to 2022. Besides, there are still few systematic review research about using VoiceThread relevant to EFL learners speaking skills. This systematic review, as a new study to conduct, summarizes the use of VoiceThread on the speaking skills of EFL learners. As a result, the current systematic review attempts to close the gap by summarizing the information from the previous studies related to the use of VoiceThread to develop student’s speaking skills of EFL learners between 2011 and 2022. This systematic literature review aims to analyze and summarize information from research
articles on using VoiceThread to develop the speaking skills of EFL learners published from 2011 until 2022 and to summarize their findings to achieve the main goals, namely: 1) to figure out the effect of using VoiceThread to develop students’ speaking skill of EFL learners, and 2) to discover the features of VoiceThread to develop student’s speaking skill of EFL learners. Based on the preestablished goal, the research questions in this systematic review are:

1. What is the effect of implementation of VoiceThread to develop students’ speaking skill of EFL learners?
2. What are the features of VoiceThread to develop student’s speaking skill of EFL learners?

METHOD

In investigating the use of VoiceThread to develop students' speaking skills among EFL students and teacher in English language learning, the reviewed publication articles related to the topic were the ones of 2011-2022. Systematic review method was employed to arrange relevant information in several articles correlated to using VoiceThread on students’ speaking skills and included several other aspects of the use of VoiceThread. This article used Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Guidelines (Page et al., 2021). The PRISMA guidelines was used to describe the schema and visualize the identification and selection of the result in the review of the articles. This PRISMA model was applied to make eligible criteria, data collection process, data details, study information resources, and results.

Data collection technique

The articles reviewed in this systematic review are from Google Scholar, an electronic database website, obtained by inputting some keywords. The keywords were “Using VoiceThread in speaking skill” and “Implementation of VoiceThread in Speaking skill in EFL learners”. Then, the time setting was “2011-2022”. Three processes of the review of the previous studies from the database were doing database search and terms search, applying inclusion and exclusion criteria, and selecting. From the processes of searching the studies from the database, 300 articles were obtained. The exclusion and inclusion criteria were then used to determine the article that fit the study.

Figure 1. Visual representation of the search and selection process based on Page et al., (2021)
Table 1. Inclusion and exclusion criteria

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use VoiceThread to develop speaking skill of EFL learners</td>
<td>Not using VoiceThread to develop speaking skill of EFL learners</td>
</tr>
<tr>
<td>Must be about the implementation effect of VoiceThread on speaking skill of EFL learners</td>
<td>The implementation effect of VoiceThread to develop other skills of EFL learners</td>
</tr>
<tr>
<td>Must be empirical research</td>
<td>Non-empirical research</td>
</tr>
<tr>
<td>Published in the year of 2011-2022</td>
<td>Not published in the year of 2011-2022</td>
</tr>
<tr>
<td>English language</td>
<td>Other languages</td>
</tr>
<tr>
<td>EFL and Teacher English Language context</td>
<td>Not in EFL and Teacher English Language context</td>
</tr>
</tbody>
</table>

Data analysis

The exclusion criteria were used to select non-criteria that did not meet the scope of research, while inclusion criteria were used to determine the ones that fit in the scope area. After the selection process from the database, only ten articles matched this research topic. The articles were then used in this study. Figure 1 depicts the visual representation of the search and selection process.

The ten articles that met the inclusion criteria mostly discuss the use of VoiceThread to develop the speaking skills of EFL learners (see Table 1). None of the ten articles discusses the use of VoiceThread for students’ speaking skills of EFL learners conducted in Indonesia. The final findings from previous research are at different levels. The most common level is at the university level and the rest is at the school level. Based on the result in ten articles, the VoiceThread is commonly used in Iran and Russia and there are few of the use VoiceThread abroad. VoiceThread also used in different aspect than in speaking skills such as assessment teacher and students and other English skills beside speaking skills, for example, listening.

Thematic and sub-thematic data analysis was used in this study to search for findings related to the discussion section. According to Braun & Clarke, (2014), thematic analysis is used to emerge themes and sub-themes to facilitate the selection process. This study used thematic analysis to make the presentation of results and discussion more systematic. In addition, Surahman & Wang, (2022) performed a systematic literature review on the previous studies using four techniques of data analysis process for each article reviewed, but this study used a narrative synthesis framework that consists of three stages: (1) developing a preliminary synthesis, (2) exploring the relationship between the objects of the study, and (3) accessing the strength of the synthesis. This study employed a manual analysis process by carefully reading each selected article that fit the criteria on discussion and conclusion.

RESULT

The researcher found ten articles that fit the selection criteria through a systematic review. Table 2 is an overview of the selected articles of the studies on VoiceThread to develop the speaking skills of EFL and teachers in an English language context. According to the ten published from 2011 to 2022, using VoiceThread assist EFL learners in developing their speaking skills. Based on the final result of the ten articles reviewed, six highlight the use of VoiceThread to develop EFL learners speaking skills at the university level, and the rest focus on the senior high school level and second-grade students.

The use of VoiceThread as a media tool for learning is more common abroad than in Indonesia. In Indonesia, no research about the use of VoiceThread as media to teach or learn in the EFL context was found. The previous research about using VoiceThread in assisting EFL learners and Teachers of the English language is commonly in speaking and oral communication. Most of the research studies about using VoiceThread by EFL learners and Teachers of the English language are in Iran and Russia. Every year, from 2011 until 2022, there is always new research about using VoiceThread as media for teaching, assessment, and developing English skills. Table 2 shows the finding of the use VoiceThread to develop EFL learners’ speaking skills. In Table 2, most of the previous articles used mixed methods and only interviewed while doing the research.
According to the review findings, the use of VoiceThread to develop EFL learners' speaking skills is mostly at the university level in Iran and Russia. The researcher found many studies about the use of VoiceThread in other countries to develop EFL students speaking skills, but they do not fit the inclusion criteria.

Table 2. An overview of the selected article of using VoiceThread to develop students speaking skill in EFL learners

<table>
<thead>
<tr>
<th>No</th>
<th>Authors</th>
<th>Findings</th>
<th>Methods</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ataeifar &amp; Sadegh Bagheri, (2017)</td>
<td>The result shows the use of VoiceThread to assess speaking skills had good impact on learners in the communicative competence.</td>
<td>Interview and test</td>
<td>The Internet speed when the application was used was not fast enough because many students used it at the same time.</td>
</tr>
<tr>
<td>2</td>
<td>Ebadi &amp; Asakereh, (2018)</td>
<td>The result of this study shows Iranian EFL Learners used VoiceThread to enhance their speaking skills.</td>
<td>Mix method</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>3</td>
<td>Ataeifar &amp; Sadegh Bagheri, (2019)</td>
<td>The result of this study shows that 71.25% participants had positive attitudes toward mobile learning (VoiceThread).</td>
<td>Interview and test</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>4</td>
<td>Zemlyanova et al, (2021)</td>
<td>The majority of participants agreed that VoiceThread contributed to their speaking skill.</td>
<td>Mixed method</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>5</td>
<td>Pagkalinawan, (2021)</td>
<td>The use of VoiceThread showed a significant improvement of student’s oral presentation.</td>
<td>Descriptive analysis</td>
<td>Small size of participants with 45 students and one teacher.</td>
</tr>
<tr>
<td>6</td>
<td>Alokaily, (2021)</td>
<td>The result of this study shows that the students had positive attitudes toward the use of VoiceThread in IELTS preparations.</td>
<td>Questionnaires and semi-structured interviews.</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>7</td>
<td>Ghoneim &amp; Elghotmy, (2016)</td>
<td>The result of this study is that VoiceThread gave significant effect of Pre-service teacher's speaking skills</td>
<td>Quasi-Experimental Study</td>
<td>The sample of this study was 30 students majoring English in Menoufa University</td>
</tr>
<tr>
<td>8</td>
<td>El-Zayat (2019)</td>
<td>The result of this study shows significant effect of EFL student English major in speaking skill and critical thinking</td>
<td>Quasi-experimental design</td>
<td>The sample of this study was 30 English major student teacher and some EFL speaking skills have comprehensibility required of the students teacher at Mansoura University</td>
</tr>
<tr>
<td>9</td>
<td>Gevorgyan, (2015)</td>
<td>The result of this study shows that using VoiceThread gave significant effect on EFL learners in terms of easy to use to practice speaking because it is user-friendly technology.</td>
<td>Mix-method design</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>10</td>
<td>Rojano Pineda, (2017)</td>
<td>The implementation activity by using VoiceThread to the students gave significant effect to develop their speaking and fluency.</td>
<td>Qualitative method</td>
<td>Not mentioned</td>
</tr>
</tbody>
</table>
Research Question 1. What is the effect of implementation of VoiceThread to develop students’ speaking skill of EFL Leaners?

In the final result of the analysis, the researcher found ten articles that fit this study. The previous research took place in Iran and Russia. Most of the studies show the effect of VoiceThread implementation on students’ speaking skills in EFL learners. Most of the studies employed mixed methods, interviews, quasi-experimental methods, Questionnaires, Descriptive analysis, and Qualitative methods. The setting of the studies is different in places and levels. Most of those studies took place at the university level and secondary level. Table 2 shows the overview of the selected articles of the final finding studies on using VoiceThread to develop the speaking skills of EFL learners. It provides the examination based on the year of publication, starting from the old to the new one.

Research Question 2. What are the features of VoiceThread to develop student’s speaking skill of EFL learners?

VoiceThread use aims to make EFL learners easier to learn, especially in mastering speaking skills. VoiceThread has many features. One of them is using text, audio, and video. When using VoiceThread, audio and video are the most used by learners. In learning speaking skills, EFL learners use it to record their voice or audio of themselves in the comment of a presentation or give advice in someone’s presentation. Using features of VoiceThread gives EFL learners student-centered learning. VoiceThread provides EFL learners to communicate, express their ideas, and share their understanding of the material with the audience. When using VoiceThread, the features of this tool give EFL learners motivation and promote student engagement to increase students’ motivation (Burns & Joyce, 1997); for example, when using features of audio and comment in VoiceThread, students can add many variations of text and media, and other learners can use their idea and expression by adding some text and media.

DISCUSSION

This study reviewed ten journal articles related to the use of VoiceThread on students’ speaking skills of EFL learners. From the result of this study, the researcher found that using VoiceThread helped enhance the speaking skills of EFL learners. Review of the previous studies from 2011 until 2022 was selected as the data collection technique in investigating the use of VoiceThread on speaking skills among EFL learners. As the answer to the first question, the researcher found that the use of VoiceThread impacted students and enhanced the speaking skills of EFL learners. Among the primary points that the researcher found is that VoiceThread does not only work on students but also teachers. Teachers use VoiceThread to make it easier to share the material with the students. The second previous study from Table 2 shows that VoiceThread enhanced pre-service teachers’ speaking skills when teaching in the classroom. Another result from other studies conducted at different levels shows that VoiceThread usage is prevalent at the university and high school levels. It is because of VoiceThread’s features that are difficult to use at elementary and junior high school levels. Furthermore, based on Table 2, little research used VoiceThread at elementary and junior high school levels, but most of the findings show that the use of VoiceThread impacted students and teachers to enhance their speaking skills.

Most previous studies used interviews, mixed methods, questionnaires, qualitative descriptive analysis, and quasi-experimental design. Based on Table 2, of the reviewed 10 articles: 3 used interviews; 3 used mixed method; 1 used questionnaire and interview; 1 used qualitative method; and 2 used quasi-experimental design. The previous studies involving different participants, places, and countries focused on the impact of VoiceThread on students speaking skills. In this study, the researcher found distinct use of VoiceThread between teachers and students. Ataeifar & Sadegh Bagheri, (2017) investigated how to evaluate oral overview and assess the speaking skills using VoiceThread among EFL learners. It took place at the university level. The result of this study shows the positive impact of using VoiceThread in assessing the learners’ speaking skills to communicate. Another research by Ebadi & Asakerereh (2018) investigated the possible contribution of VoiceThread to the speaking skills of Iranian EFL students. The result of this study is that VoiceThread enhanced their speaking skills. In addition,. Ataeifar et al, (2019) investigated the impact of mobile-assisted instruction on improving Iranian
EFL learners’ speaking skills and perceptions. The research used interviews and tests. The result is that the participants had positive attitudes toward using VoiceThread.

Another research conducted by Zemlyanova et al., (2021) investigated VoiceThread in learning to comprehend any significant effect of using it at a Russian university. The result of this research is that VoiceThread contributed to enhance their speaking skill. Pagkalinawan, (2021) also researched about VoiceThread to strengthen language proficiency and oral presentation skill. This research used descriptive analysis. The result of this study is that VoiceThread use showed a significant improvement effect on students’ oral presentation. Another research was conducted by Alokaily, (2021) about using VoiceThread in online learning for students’ speaking skills. This research used a questionnaire and semi-structured interviews. The result of this study indicates the positive impact of using VoiceThread in their IELTS preparation.

In the same vein, research was conducted by Ghoneim & Elghotmy, (2016) about using VoiceThread to develop pre-service teachers’ speaking skills. El-Zayat (2019) also investigated the effect of using VoiceThread in developing speaking and critical thinking of English-major students in the faculty of education. The result of this study is that it significantly affected the EFL students' English majors’ speaking skills and critical thinking. Gevorgyan (2015) examined the use of VoiceThread to practice speaking skills in the classroom among Experimental English classes at the University of Armenia. The result of this study is that using VoiceThread significantly affected EFL learners as it is easy to use to practice speaking because it is a user-friendly technology. The last study was conducted by Rojano Pineda, (2017) investigating the implementation of VoiceThread in developing speaking and fluency in third-grade students at Montessori schools. This study uses qualitative methods. This study claims that the implementation activity of using VoiceThread significantly affected the development of the students' speaking and fluency.

**Implementation and Features of VoiceThread to develop EFL learners’ speaking skills**

The implementation of VoiceThread to develop students’ speaking skills for EFL learners showed a positive impact. The six studies in Table 2 indicate that using VoiceThread to develop students’ speaking skills had different results and settings. Most of them show a positive impact. Those six studies employed diverse methods due to the participants and places. VoiceThread increased students’ motivation to learn and study in class, especially speaking. It happened because VoiceThread made it easier for them to learn and use during learning. The features of VoiceThread that can be used to develop EFL learners' speaking skills is that the students can use their video or voice to record the presentation. Not only students; teachers can use features on VoiceThread to support them during learning and teaching (Sun, 2009). The feature of recording presentations on VoiceThread can assist teachers in recording a presentation for the students. The features of adding an image and adding a PowerPoint presentation to VoiceThread help teachers who want to do presentations easily and share with the students during the learning (Pallos, 2011). Students can experience student-centered learning. Moreover, teachers and students in EFL can experience collaborative learning activity, peer interaction between teacher and student, and individual feedback between teacher and students (Alameen, 2011). Feedback from the teacher is also easy to give because the teacher can add a comment directly in VoiceThread. The main features VoiceThread offers to its users are a voice recorder, video recorder, add images to the recording, and add PowerPoint to self-record. Based on the explanation, helpful tools in VoiceThread can give students and teachers other benefits. According to Pop et al., (2011), VoiceThread helps teachers and students experience making self-assessments and develop speaking skills in pronunciation and fluency. In another study by Archambault & Carlson (2011), another benefit can be felt by the teacher because the teacher can use tools in VoiceThread to increase students’ engagement and motivation to learn during English lessons. In conclusion, the implementation of VoiceThread to develop students and teachers’ speaking skills in EFL context showed positive feedback and that using this technology can develop students’ speaking skills as the features on VoiceThread can give students and teacher easy presentation and students-centered learning activity.
CONCLUSION

Technology such as VoiceThread is beneficial to help EFL learners to master speaking skills easier. The use of VoiceThread to develop speaking skills in EFL learners showed a positive impact. The result of this systematic review uncovers the effect of using VoiceThread on the speaking skills of EFL learners. The previous studies reviewed in this study agree that VoiceThread gives EFL learners an easier way to learn speaking skills with its features, including text, audio, and media. The features also provide opportunities for EFL learners to express their ideas through text, audio, and recorded voice of themselves learning speaking skills. This article is not sufficient as the result of a review of previous studies on VoiceThread to develop the speaking skills of EFL learners, but it can become a source to comprehend the report of the mentioned topic. The suggestions for further researchers are to explore other aspects than English speaking skills, to conduct more research about the different stages of EFL and teachers of English language context, and to do research on VoiceThread in different periods.

Author contributions

The authors made significant contributions to the study’s conception and design. The authors were in charge of data analysis, interpretation, and discussion of results. The final manuscript was read and approved by the authors.

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Conflict of interest

The authors declare that there is no potential conflict of interest.

Data availability statement

All data are available from the authors.

REFERENCES


