

Development of Learning Media For Critical Listening Skills Based on Websites And Local Wisdom: A Systematic Literature Review

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Abstract. This study examines the effectiveness of website-based learning media that integrates elements of local wisdom in developing students' critical listening skills. Through a systematic literature review (SLR), relevant articles from the Scopus and SINTA databases were analyzed. The results indicate that critical listening skills are an important component of learning, and technology especially website-based media has great potential to enhance these skills. Additionally, integrating local wisdom into learning materials can strengthen students' understanding and motivation to learn. However, several research gaps remain, including a scarcity of studies that directly combine local wisdom with website-based media and a lack of comprehensive measurements assessing the impact of various learning methods. This study concludes that developing innovative and culturally relevant learning media is crucial for improving the quality of education. Further research is needed to explore the full potential of technology in fostering critical listening skills.

Keywords: critical listening, website-based learning media, local wisdom, learning, systematic literature review.

1 Introduction

Critical listening is a skill that transcends mere auditory processing; it encompasses a series of complex cognitive processes that enable individuals to analyze, comprehend, and respond to messages effectively. This skill is vital across various contexts, including educational settings, professional environments, and interpersonal interactions. A profound understanding of the message's meaning and purpose can significantly influence the quality of decisions and outcomes. Consequently, critical listening extends beyond the passive reception of information to encompass a deeper comprehension of the conveyed message[1].

Critical listening is recognized in the literature as a multifaceted skill involving components such as active listening, critical thinking, and emotional intelligence. Active listening entails full engagement with the received message, while critical thinking emphasizes the logical and objective assessment of the conveyed information. Emotional intelligence is instrumental in managing emotional reactions to messages, enabling individuals to respond thoughtfully and judiciously. These elements are interrelated and collectively contribute to developing practical critical listening skills [2], [3].

Critical listening skills encompass two essential components: listening and critical thinking. Listening is a complex process involving attention and understanding of spoken language. Within this process, individuals hear, recognize, and interpret the speaker's message. The primary goal of listening is to grasp effectively, identify the core message, and comprehend the underlying meaning of the communicated information. Moreover, listening demands active engagement, emphasizing careful understanding and appreciation of the received message. This approach allows listeners to interpret communication more accurately and comprehensively, facilitating relevant and constructive responses [4], [5].

Critical thinking skills significantly enhance students' cognitive abilities across various disciplines. These skills bolster students' problem-solving capabilities, foster creativity, and prepare them to navigate the challenges and complexities of an increasingly dynamic world. Furthermore, critical thinking equips students with reflective and analytical thought processes essential in a rapidly evolving environment. Hence, critical thinking is crucial in cultivating individuals who are prepared to embrace change and address problems in the modern era.

The fundamental elements of critical thinking include the ability to analyze, evaluate, and synthesize information rationally. These skills are not simply innate but strongly influenced by the educational approach and teaching methods. Providing clear instructions on critical thinking has been shown to improve students' ability to think at a higher level, which is essential for academic success and problem-solving in everyday life [6], [7], [8]. In addition, applying metacognitive strategies in learning can increase students' awareness of how they think, which in turn encourages more profound engagement with the subject matter and facilitates the development of critical analysis skills [9]. In line with the importance of developing listening and critical thinking skills, the application of educational technology, especially website-based media, plays an important role in creating a more dynamic and interactive learning environment. Digital media not only enriches students' learning experiences but also opens up opportunities to practice listening and critical thinking skills more efficiently. Through digital applications and platforms that allow flexible access to learning materials, students can be trained in analyzing, evaluating, and synthesizing information in more applicable and relevant contexts [10], [11]. Therefore, website-based media functions as a learning aid and an effective means to develop students' critical thinking skills, which can ultimately deepen their understanding of the material being taught.

In the context of learning, website-based media can be an effective tool to improve students' critical listening skills. Research shows that social media and other digital platforms can enrich students' learning experiences [12], [13]. For example, using applications such as TikTok in literary literacy learning shows how technology can increase student engagement and strengthen their understanding of the material [14]. In addition, video-based learning media has also been effective in increasing student motivation and learning outcomes, especially in the context of increasingly developing online learning [15].

Integrating local wisdom in the learning process creates a solid foundation for students to understand the subject matter. Learning becomes more meaningful and relevant by connecting abstract concepts with real experiences and familiar cultural values [16]. The connection between learning materials and students' cultural contexts increases learning motivation and strengthens their understanding of complex concepts [17]. When students can see the relevance of the subject matter to their daily lives, they will be more motivated to be actively involved in the learning process. The main objective of this study is to conduct a Systematic Literature Review (SLR) to assess the effectiveness of website-based learning media that integrates

elements of local wisdom in developing critical listening skills among students. The framework with the PICOS protocol (Population, Intervention, Comparison, Outcome, Study Design) is used in this study to ensure relevant and comprehensive coverage of the literature. The stages in PICOS are: population, element refers to the group of individuals who are the focus of the study; in SLR research, determining the right population helps ensure that the research results can be applied relevantly. Intervention is an action or treatment given to the population; an explanation of the intervention allows researchers to understand what is being tested and how it can affect the results. Comparison: this element involves a control or comparison group used to assess the effectiveness of the intervention. The outcome is the result measured to determine the effectiveness of the intervention. This can be a clinical outcome, quality, or other parameter. Study design, especially in this research, includes studies relevant to the topic and have been published in the last five years in journals indexed by Scopus and SINTA to ensure the relevance and currency of the information analysed [18].

Thus, developing website-based learning media that integrates local wisdom can be one solution to improve the quality of education, especially in the context of learning critical listening skills. In order to achieve this goal, educators need to continue to innovate and utilize existing technology. Interactive and engaging learning media can help students be more active in the teaching and learning process so that they are not only recipients of information but also active participants in learning [9]. Therefore, the development and implementation of website-based learning media that integrates local wisdom must be a priority in improving education quality.

2 Research Method

This research is a Systematic Literature Review (SLR). The research process includes a series of steps: determining the research objectives, selecting appropriate databases, determining keywords, searching for relevant literature, determining inclusion and exclusion criteria for articles, and synthesizing the results [19]. Data were obtained from research articles published in the Scopus and SINTA databases. To analyze the data, researchers used the PICOS framework: population, intervention, comparison, outcome, and study design. The number of articles used in this study was 18 from the Scopus and SINTA databases. The inclusion and exclusion criteria applied in this study are as follows.

Table 1. Inclusion and Exclusion Criteria

Criteria	Description
1. Inclusion	1.1 Articles from the Scopus and SINTA databases published between 2020-2024
	1.2 Articles in English or Indonesian
	1.3 Articles from open-access journals
	Articles have topics that are by the research, namely:
	a. Critical listening skills b. Website-based listening skills learning media c. Local wisdom-based listening skills learning
2. Exclusion	2.1 Articles outside the Scopus and SINTA databases and articles from the Scopus and SINTA databases published before 2020
	2.2 Articles that are not in English and Indonesian
	2.3 Articles from closed-access journals/ subscription journals
	2.4 Articles that do not match the research topic

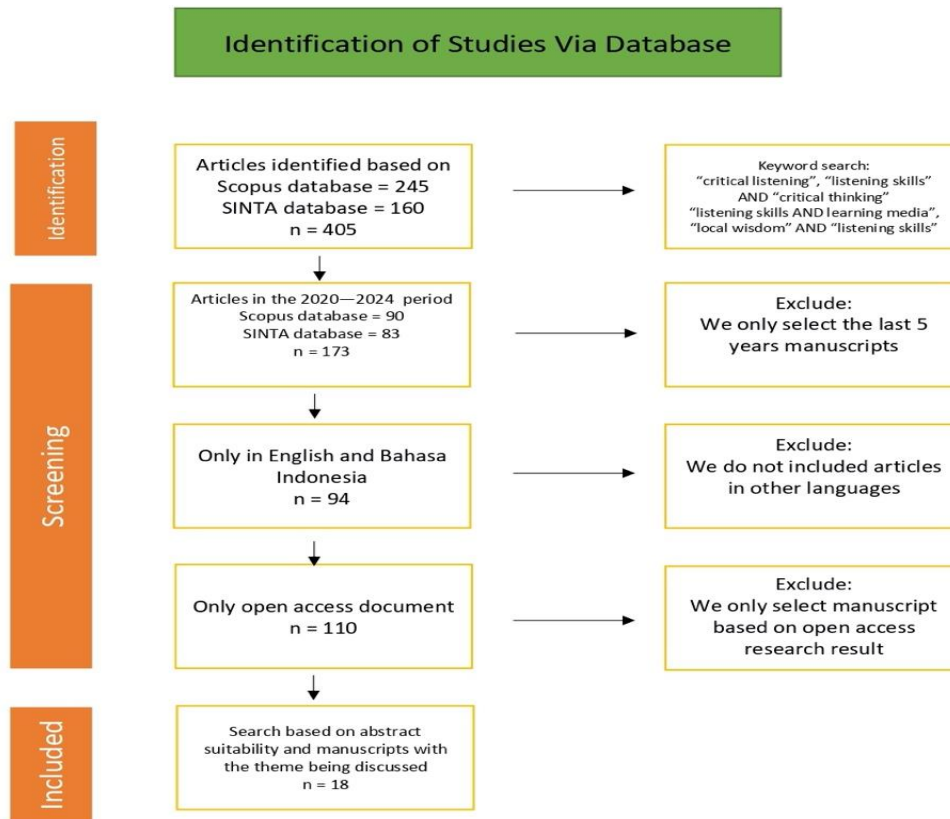


Figure 1. PRISMA Flow Chart for Systematic Literature Review

3 Result And Discussion

This SLR research began with a literature search by identifying articles published between 2020-2024 relevant to developing critical listening skills and learning media based on websites and local wisdom in the Scopus and SINTA databases. Researchers found 18 research articles. The PICOS protocol (population, intervention, comparison, outcome, and study design) was applied to analyze the articles obtained. The analysis results are presented in the order of years as follows.

3.1 Review of Articles in 2020

Table 2. Results of Review of Articles in 2020

No.	Author and Article Title	Database	PICOS
1.	Harun Şahin Investigation of listening types of Turkish pre-service teachers in terms of the	Scopus	Population: This study focused on a population of 193 Turkish preservice teachers from Kafkas University during the fall semester of the 2019-2020 academic year. The sample included 124 female and 69 male participants spread across grade levels:

	<p>various variables: A case of Kafkas University</p> <p>53 first-grade students, 50 second-grade students, 52 third-grade students, and 38 fourth-grade students. This diversity of gender and grade levels provides a comprehensive perspective on listening skills among preservice teachers.</p> <p>Intervention: The intervention in this study involved the application of the "Listening Types Scale," which assesses different dimensions of listening: relational listening, interactive listening, and critical listening. The scale includes 18 items and measures the effectiveness of listening skills among preservice teachers. This study aimed to evaluate how these skills are influenced by educational experiences and activities carried out inside or outside the university environment.</p> <p>Comparison: This study compared listening skills across demographics, such as gender and grade level. The study also examined the impact of screen time on listening skills. The analysis used non-parametric tests (Kruskal Wallis and Mann-Whitney U tests) because the data did not show a normal distribution. However, this comparison found no significant differences in listening scores.</p> <p>Outcome: The primary outcomes assessed in this study included mean scores in various types of listening: a. Relational listening: Mean score 34.59 b. Interactive listening: Mean score 27.22 c. Critical listening: Mean score 22.13</p> <p>Study design: This study used a quantitative survey design standard in social sciences to collect data from large groups. This study used a simple random sampling method to select participants and analyzed quantitative data using SPSS software. The reliability of the listening types scale was confirmed by Cronbach's Alpha coefficient [20].</p>
<p>2. Elsa Ernawati Nainggolan and Hanifah</p> <p>University Students' Critical Thinking Ability in Listening Skill</p>	<p>SINTA</p> <p>Population: The population in this study were students of Raja Ali Haji Maritime University, precisely 25 students who were taking listening courses in the first semester.</p> <p>Intervention: The intervention carried out in this study was using a test to measure students' critical thinking skills. This test consists of 6 essay questions adjusted to the indicators of critical thinking skills. In addition, the measurement procedure includes: playing audio recordings in the form of conversations, monologues, and interviews; giving tests in the form of multiple choices; filling in blanks; and arranging pictures and essays.</p> <p>Comparison: This article has no clear comparison group because the main focus is on analyzing students' critical thinking skills without comparing them with other groups or different teaching methods.</p> <p>Outcome:</p>

			<p>The results of the study showed that students' average critical thinking skills in listening skills were at a low level. This result was obtained from analyzing students' work on the critical thinking skills essay test.</p> <p>Study design: The study design used was descriptive qualitative research. This study aims to analyze students' critical thinking and listening skills using predetermined instruments to collect and analyze data [21].</p>
3.	<p>Tri Pujiatna, Elin Rosmaya, Nuning Wahyuningsih</p> <p>Development of Local Wisdom-Oriented Listening Teaching Materials to Improve Students' Literacy Skills in Listening Courses</p>	SINTA	<p>Population: The population in this study were students of the Indonesian Language Education Study Program at Universitas Swadaya Gunung Jati, especially first-year students in semester 1 who took the Listening course. This study was conducted because it was found that students' literacy skills (listening ability) were still low.</p> <p>Intervention: The intervention carried out was the development of listening teaching materials that were oriented towards local wisdom. These teaching materials were in the form of Student Worksheets equipped with listening/audio media containing information about local wisdom in the Ciayumajakuning area (Cirebon, Indramayu, Majalengka, and Kuningan). The development of these teaching materials used the ADDIE model (Analysis-Design-Develop-Implement-Evaluate).</p> <p>Comparison: This article does not explicitly mention the comparison group. However, implicitly, it can be interpreted that the comparison was made between students who used local wisdom-based teaching materials and students who did not use these teaching materials. The trial and validation of the teaching materials also showed that the developed teaching materials needed minor revisions before implementation.</p> <p>Outcome: The study results indicate that the developed teaching materials have quite good validity, with a percentage value of 90.93%. In addition, the trial results show that using these teaching materials can improve students' literacy skills in listening to the information presented.</p> <p>Study design: The study design used in this study is development research that follows the ADDIE model. This study includes several stages: needs analysis, teaching material design, teaching material development, limited trials, expert validation, and revision of teaching materials before being applied in the learning process [22].</p>
4.	<p>Wiendi Wiranty dan Melia</p> <p>Development of Interactive Media Based on Local Wisdom as Material for Listening to Folk Tales</p>	SINTA	<p>Population: The subjects of the study were students of class X of SMAN 1 Segedong, consisting of 19 students (3 males and 16 females).</p> <p>I</p> <p>ntervention:</p>

			<p>The intervention carried out was the development and implementation of interactive learning media based on local wisdom for the material of listening to folk tales. This media is designed to improve students' learning activities and learning outcomes.</p> <p>Comparison: In this study, there was no clear control group mentioned. However, a comparison was made between the results of the students' pre-test and post-test to measure the effectiveness of the interactive media used.</p> <p>Outcome: The results of the study showed an increase in the average learning outcomes of students from the pre-test (68.16) to the post-test (80.31), which was categorized as very good. In addition, the effect size test showed a value of 0.86, which showed a large influence of interactive media on improving student learning outcomes.</p> <p>Study design: The study design used was the research and development method (Research and Development) with the Hannafin and Peck design. This research involves the stages of needs assessment, design, development, and evaluation [23].</p>
5.	Septina Rahmawati & Dhina Cahya Rohim The Influence of Local Wisdom-Based Contextual Learning Models on Students' Listening Skills	SINTA	<p>Population: The study subjects were students of class X of SMAN 1 Segedong, consisting of 19 students (3 males and 16 females).</p> <p>Intervention: The intervention carried out was developing and implementing interactive learning media based on local wisdom for listening to folk tales. This media is designed to improve students' learning activities and learning outcomes.</p> <p>Comparison: In this study, there was no clear control group mentioned. However, a comparison was made between the students' pre-test and post-test results to measure the effectiveness of the interactive media used.</p> <p>Outcome: The study's results showed an increase in the average learning outcomes of students from the pre-test (68.16) to the post-test (80.31), which was categorized as very good. In addition, the effect size test showed a value of 0.86, which showed a significant influence of interactive media on improving student learning outcomes.</p> <p>Study design: The study design used was the research and development method (Research and Development) with the Hannafin and Peck design. This research involves needs assessment, design, development, and evaluation [23].</p>

Existing research focuses on developing local wisdom-based teaching and learning materials to improve listening skills. No res needed in 2020. Uses website media and local-based materials

directly in listening learning. Although many studies have shown the effectiveness of website-based learning, only some studies have used interactive media and not directly on local wisdom in listening learning. In addition, the scope of existing research makes listening skills and critical thinking affect different parts.

3.2 Review of Articles in 2021

Table 3. Results of Review of Articles in 2021

No.	Author and Article Title	Database	PICOS
1.	Erin D. Besser, Lauren E. Blackwell, dan Matthew Saenz Investigation of listening types of Turkish pre-service teachers in terms of the various variables: A case of Kafkas University	Scopus	<p>Population: The population in this study consisted of educators who implemented podcasting in their teaching. These educators had a high educational background in educational technology and a desire to integrate technology in innovative ways in learning.</p> <p>Intervention: The intervention used was the use of podcasting, specifically student-led podcasts, as a tool to increase student engagement in the learning process. This study explored the various strategies used by educators to integrate podcasting into their teaching.</p> <p>Comparison: This article does not explicitly mention a comparison group, but it can be interpreted that a comparison was made between classes that used podcasting and classes that did not use this method. The main focus was on the effectiveness of podcasting in increasing student engagement and learning outcomes.</p> <p>Outcome: The results of the study indicate that podcasting can improve students' literacy skills, encourage collaboration, and improve critical thinking skills. In addition, podcasting provides opportunities for students to learn anytime and anywhere, and allows them to repeat learning.</p> <p>Study design: The study design used was a narrative approach with semi-structured interviews as the main data collection method. Additional data was also collected through field notes, lesson plans, classroom artifacts, and observations to provide a deeper understanding of podcasting implementation in the classroom.</p>
2.	Heleen Bourdeaud'hui , Koen Aesaert dan Johan van Braak Exploring the relationship between metacognitive awareness, motivation, and L1 students' critical listening skills	Scopus	<p>Population: The population of this study consisted of sixth-grade students in elementary schools in Flanders, Belgium. The study involved 649 students who were subjects to explore the relationship between metacognitive awareness, motivation, and critical listening skills.</p> <p>Intervention: Although this article does not report a specific experimental intervention, the main focus of the study was on measuring</p>

			<p>students' metacognitive awareness and motivation in the context of listening. The study used a questionnaire to collect data on listening strategies, intrinsic and extrinsic motivation, and critical listening skills.</p> <p>Comparison: The study did not explicitly compare two different groups in the intervention context. However, the researchers compared the relationship between metacognitive awareness, motivation, and critical listening skills. The study also suggests the need for further research to compare listening processes in the context of a first language (L1) and a second language (L2).</p> <p>Outcome: The results showed a positive relationship between metacognitive awareness and motivation with students' critical listening skills. The study found that students with higher metacognitive awareness and better motivation tended to have better listening skills. However, the researchers also noted that these findings are correlational and cannot be interpreted as cause-and-effect relationships.</p> <p>Study design: The study design was a quantitative study with a correlational approach. Data were collected through questionnaires filled out by students, which included questions on listening strategies, motivation, and critical listening skills. Statistical analysis was conducted to explore the relationships between these variables.</p>
3.	<p>Nur Shabrina Reznani , Nurhayati, and Sungkowo Soetopo</p> <p>Development of Local Wisdom-Based Listening Course Teaching Materials</p>	SINTA	<p>Population: Students of Language Education, Indonesian and Regional Literature, Baturaja University, who are taking the essential listening skills course.</p> <p>Intervention: Development and implementation of a local culture-based listening module. This module is designed to improve students' listening skills by adapting and modifying the development models of Borg, Gall and Gall and Dick, Carey, and Carey.</p> <p>Comparison: Although the article does not explicitly mention a control group or other comparisons, it can be assumed that a comparison was made between students' listening skills before and after using the developed module.</p> <p>Outcome: The study results indicate that the developed module can improve students' listening skills. This increase can be seen from the average score of students before and after using the module. In addition, this module is expected to meet students' needs for local culture-based listening learning.</p> <p>Study design: This study uses a research and development (R&D) design that involves collecting information, compiling teaching materials, validating teaching materials, evaluating teaching</p>

materials, and describing evaluation results. Data collection techniques include questionnaires, interviews, assessment sheets, and tests.

The literature review developed in 2021 shows several media that have been used to have applications. Remarkably, children's listening is learning quickly through several technological features like websites. Besser et al. conducted research from several pieces of evidence on the use of podcasting in making learning presented in songs more interesting and understandable. They found that providing podcasting was proven to achieve literacy skills, language cooperation, language collaboration, and students' critical or reflective thinking skills [25]. Furthermore, Bourdeaud'hui et al., through research on several literature sources, proved the importance of metacognitive awareness and motivation in critical listening activities. They compared two test scores, which found that metacognitive awareness and positive motivation were related to student activities in listening to the process, although the results were only correlational [26]. Next, Reznani et al. combined the items found in a concept for children's learning to listen to the process through local modules. The module has been tested at several universities and provided quality understanding to students [27].

3.3 Review of Articles in 2022

Table 4. Results of Review of Articles in 2022

No.	Author and Article Title	Database	PICOS
1.	Dodi Mulyadi, Siti Aimah, dan Yudhi Arifani Boosting efl learners' listening comprehension through a developed mobile learning application: effectiveness and practicality	Scopus	<p>Population: This article focuses on EFL (English as a Foreign Language) learners who are individuals learning English as a foreign language. This population may consist of students at various education levels with different language backgrounds.</p> <p>Intervention: The intervention used in this study was using a mobile learning application specifically developed to improve listening comprehension. The application was designed to provide relevant exercises and materials to help students improve their listening skills.</p> <p>Comparison: This article may compare the learning outcomes of students who used the mobile application with those who did not. However, specific details about this comparison group must be examined further in the text for more accurate information.</p> <p>Outcome: The results of this study indicate that the use of the mobile application positively impacts students' listening comprehension. This study may include quantitative and qualitative data that show improvements in listening skills after the intervention.</p> <p>Study design: The study design used in this study is likely an experimental or quasi-experimental study in that the researcher observes the effects of the intervention (mobile application) on the</p>

			population studied. This design allows the researcher to conclude the effectiveness of the application in improving listening comprehension.
2.	<p>Syafrizal Syafrizal dan Tia Septiawati</p> <p>Enhancing Listening Skills of Efl Indonesian Learners Through Busuu Application</p>	Scopus	<p>Population: The population in this study were fourth-semester students from the English Language Education Study Program at a university in Banten, Indonesia. The total population involved was 126 students. However, the sample taken for this study was 25 students who met specific criteria, such as having completed the courses Literal Listening, Interpretative Listening, and Critical Listening.</p> <p>Intervention: The intervention carried out in this study was using the Busuu application as a learning medium to improve students' listening skills. Students were given training using this application, and the results were measured through pretests and post-tests to assess the improvement in their listening skills.</p> <p>Comparison: In this study, there was no control group explicitly mentioned. However, a comparison was made between the results of the pretest (before the intervention) and the post-test (after the intervention) to assess the effectiveness of using the Busuu application in improving listening skills.</p> <p>Outcome: The results showed a significant improvement in students' listening skills after using the Busuu application. The average pretest score was 44, while the average post-test score increased to 81.80. The paired t-test results showed a significance value (sig) of 0.001, indicating that the difference between the pretest and post-test was significant.</p> <p>Study design: The study design used was a pretest-posttest design with a single group. This study measured students' listening skills before and after the intervention using the Busuu application. The data were analyzed using a paired t-test to determine whether there was a significant difference between the pretest and post-test results.</p>
3.	<p>Zinat Mohebbi , Alireza Mortezaei-Haftador and Manoosh Mehrabi</p> <p>Synchronous online lecturing oor blended flipped classroom with jigsaw: an educational intervention during the covid-19 pandemic</p>	Scopus	<p>Population: The population in this study consisted of nursing students enrolled at Shiraz University of Medical Sciences. The study involved two groups of students following different educational programs during the Covid-19 pandemic.</p> <p>Interventions: Blended Learning Group: the blended flipped classroom method with the jigsaw approach was used. In this method, students are given access to class materials and questions before the meeting, encouraging them to think deeply about the material before group discussions.</p> <p>Synchronous Online Lecture Group: attended online lectures directly without the flipped classroom approach.</p>

Comparison:

A comparison was made between two groups, namely:

- a. Blended Learning Group (which used the jigsaw and flipped classroom methods)
- b. Synchronous Online Lecture Group (which attended online lectures directly)

Outcome:

The results showed that:

- a. There was a significant increase in critical thinking and communication skills in the blended learning group compared to the online lecture group.
- b. Although the mean score of critical thinking skills was higher in the blended group, the difference between the groups was not significant.
- c. The blended group showed more remarkable improvement in all dimensions of communication skills, except for empathy and intimacy.

Study design:

The study design used was an experimental study with a quasi-experimental approach. This study involved measurements before and after the intervention to evaluate the effects of the learning method applied. Data were collected and analyzed to determine differences between the two groups.

The study compared the effects of two different teaching methods, digital applications and blended learning, with the jigsaw method. In this case, the study by Dodi Mulyadi et al. [28]. Assessed the effectiveness of a mobile application developed specifically for learning purposes. In contrast, the study by Syafrizal Syafrizal et al. discussed the usefulness of the Busuu application. In both cases, the researchers mentioned that teaching using the application improved listening skills [29]. Another study by Zinat Mohebbi et al. concluded that critical thinking and communication skills were developed more effectively in a combined teaching format [30]. Given the above findings, no study has examined the effects of different teaching methods on listening skills in a way that describes them holistically. In addition, the researchers considered the statistical calculations that were funded to measure it. Future research should involve more holistic indicators. For example, the evaluation might involve aspects of students trying to solve real-world problems.

3.4 Review of Articles in 2023

Table 5. Results of Review of Articles in 2023

No.	Author and Article Title	Database	PICOS
1.	Nahide İrem Azizoğlu and Alparslan Okur The impact of education tailored for critical listening on the critical listening	Scopus	Population: The population in this study were seventh-grade students at Mithatpaşa Secondary School, Sakarya, Turkey. There were two classes involved, with 81 students (41 students in the experimental group and 40 in the control group).

	<p>skills of seventh-grade students</p> <p>Intervention: The intervention used in this study was education specifically designed to improve critical listening skills. The experimental group received training for 40 hours of lessons that included critical listening texts and questions.</p> <p>Comparison: The experimental group was compared to a control group that did not receive critical listening education intervention. Before the intervention, both groups were tested to ensure they had equivalent listening skills.</p> <p>Outcome: The study results showed that the experimental group experienced a significant increase in critical listening scores after the intervention compared to the control group. This suggests that education designed for critical listening effectively improves these skills among students.</p> <p>Study design: The study design used was quasi-experimental. This study involved measurements before and after the intervention to assess changes in students' critical listening skills. The Mann-Whitney U test for data analysis showed that the data were not normally distributed, which supports the use of this design.</p>
<p>2. Ratri Harida</p> <p>Youtube to Promote Critical Thinking in Critical Listening Course</p>	<p>SINTA</p> <p>Population: The population in this study were fourth-semester students of the English Education Study Program. They became the subjects involved in the learning and research process.</p> <p>Intervention: The intervention carried out was the use of YouTube videos as a teaching aid. The videos used covered various themes, such as stem cells, racial prejudice, marijuana legalization, and issues related to gun violence. The teaching method included planning, observation, and reproduction activities, where students were involved in discussions, role plays, and reflections.</p> <p>Comparison: This article does not explicitly mention a comparison group, but it can be assumed that a comparison was made between traditional teaching methods and methods using YouTube videos. This study focused on the effectiveness of using videos in improving critical listening skills and student participation.</p> <p>Outcome: The results of the study showed that the use of YouTube videos increased student engagement and participation in discussions. Students began to provide longer and more structured responses, and demonstrated the ability to analyze and apply material in different contexts. Their speaking and critical thinking skills also increased as the number of speaking tasks given increased.</p> <p>Study design:</p>

			<p>The study design used was critical participatory action research. This research involved three phases: planning, action and observation, and reflection. Data were collected through semi-structured interviews and classroom observation forms, with data analysis conducted using data reduction, data display, and conclusion drawing methods.</p>
3.	<p>Fitri Jayanti dan Lala Bumela Sudimantara</p> <p>Digital Storytelling Resources for Critical Listening: A CEFR-Based Approach for Middle Schoolers</p>	SINTA	<p>Population: The population in this study were middle school students in Indonesia who faced challenges in mastering critical listening skills.</p> <p>Intervention: The intervention carried out was the development of CEFR (Common European Framework of Reference for Languages)-based digital storytelling resources designed to improve students' critical listening skills. This intervention also included innovative approaches such as Reading for Emotion and Aesthetics.</p> <p>Comparison: This article does not explicitly mention a comparison group. However, it can be assumed that this intervention was compared to traditional teaching methods that are more commonly used in educational contexts in Indonesia.</p> <p>Outcome: The expected outcomes of this intervention are improvements in students' critical listening skills and learning outcomes related to the use of digital storytelling resources. This study aims to demonstrate the effectiveness of the new approach in improving students' language skills.</p> <p>Study design: The study design used was research and development (R&D), which focused on analysing lesson plans and developing product prototypes, namely digital storytelling resources. This study also adopted a curriculum engineering approach prioritising students and differentiated learning.</p>

The summary of the literature review above shows that critical listening skills are an important aspect of education at all levels, especially in college and high school. Analysis of three relevant studies on this topic shows positive results from implementing and developing learning media. Azizoğlu and Okur showed that critical listening training effectively builds students' skills [31]. Ratri Harida discusses the influence of YouTube videos on understanding and building critical thinking skills from the perspective of physical and time implementation [32]. Furthermore, Jayanti and Sudimantara introduce the potential of digital storytelling [33]. Overall, the three studies that have been reviewed prove that using technology in the learning process is a much more effective method than traditional educational strategies.

3.5 Review of Articles in 2024

Table 6. Results of Review of Articles in 2024

No.	Author and Article Title	Database	PICOS
1.	Nagwa Mohammed Khallaf, Amin Rasti-Behbahani, and Mohammed Abdulgalil Abugohar Genre Analysis in Blended Learning: Empowering English Majors' Critical Listening Skills: Case of Faculty of Education, Minia University, Egypt	Scopus	<p>Population: The population in this study were third-year English students at the Faculty of Education, Minia University, Egypt. A total of 60 students were taken as samples and divided into the treatment group and the comparison group, each consisting of 30 students.</p> <p>Intervention: The intervention was a blended learning program that used genre analysis. The treatment group received training in critical listening skills through the course "Genre Analysis," designed to improve the understanding and use of critical listening skills.</p> <p>Comparison: The experimental group was compared with the group. The comparison group was taught the conventional method in the same course, "Genre Analysis," without applying blended learning. This allowed the researcher to compare the effectiveness of the two approaches in improving critical listening skills.</p> <p>Outcome: The results showed that the treatment group who took the blended learning program significantly performed better in the post-intervention test on the acquisition and use of critical listening skills than the comparison group. This suggests that blended learning and genre analysis contribute positively to developing critical listening skills.</p> <p>Study design: The study design used was quasi-experimental with a mixed methods approach. This study involved collecting quantitative and qualitative data through three phases: a pilot phase to collect baseline data, a pre-testing phase to measure listening skills before the intervention, and a post-testing phase to evaluate the impact of the intervention.</p>
2.	Rina Astuti Purnamaningwulan Listening Journals to Promote Students' Critical Thinking Skills in an Integrated Listening-Speaking Course	Scopus	<p>Population: The population in this study were students enrolled in the Critical Listening and Speaking II course at Sanata Dharma University, Yogyakarta, Indonesia. In this study, 50 students participated.</p> <p>Intervention: The intervention used was the use of video. The intervention used was the implementation of the use of listening journals as one of the assignments in the course. Students were asked to write a journal that included a summary and value of the text they listened to, which aimed to improve their critical thinking skills.</p>

			<p>Comparison: In this article, there was no explicit comparison group. However, the assessment of critical thinking skills was carried out by comparing the results of students' self-assessments before and after the implementation of the listening journal assignment.</p> <p>Outcome: The study showed a significant increase in students' critical thinking skills after implementing listening journals. Students reported that listening to journals helped them improve their reflective abilities, understanding of the material, and learning motivation.</p> <p>Study design: The study design was quasi-experimental, where researchers measured students' critical thinking skills before and after the intervention. Data were collected through a critical thinking skills self-assessment scale (Critical Thinking Self-Assessment - CTSA) filled out by students.</p>
3.	<p>Nafri Yanti, Dadang Sunendar, Yeti Mulyati, Vismaia Sabariah Damaianti, dan Malia Dwi Putri</p> <p>Systematic, active, contextual, technological, integrative (SAKTI) framework in the development of critical listening teaching</p>	SINTA	<p>Population: The population in this study consisted of students and prospective language teachers who needed to develop critical listening skills. This study focuses on the educational context in Indonesia, especially among students preparing to teach.</p> <p>Intervention: The intervention carried out was the development of critical listening teaching materials using the SAKTI framework (Systematic, Active, Contextual, Technological, and Integrative). These teaching materials are designed to improve students' critical listening skills using digital technology and a more interactive approach.</p> <p>Comparison: This article does not explicitly mention the comparison group. However, it can be assumed that teaching materials developed with the SAKTI framework are compared to traditional teaching methods that may need to be more interactive and need to utilize technology optimally.</p> <p>Outcome: The expected outcome of this intervention is an increase in critical listening skills among students. This study also aims to demonstrate the effectiveness of using digital teaching materials in improving student understanding and engagement in the learning process.</p> <p>Study design: The study design used in this study is a developmental study that focuses on creating and evaluating teaching materials. This research involves needs analysis, module development, and testing the module's effectiveness in a learning context.</p>
4.	<p>Andi Pratama Lubis,[*] Nursukma Suri, and Windi Chaldun</p>	Scopus	<p>Population: The population in this study were high school students in Mandailing Natal Regency, North Sumatra, Indonesia. This</p>

<p>The Mangupa Method for Improving Students Listening Skills</p>	<p>study focused on students involved in the process of learning listening skills.</p> <p>Intervention: The intervention applied was the use of the Mangupa method, a local tradition of the Mandailing community. This method involves short film media that records the manga tradition to convey learning messages. The aim is to improve students' listening skills by utilizing local wisdom.</p> <p>Comparison: This article does not explicitly mention a comparison group in the context of the study. However, it can be assumed that this intervention is compared to traditional listening learning methods that do not involve local wisdom or engaging media.</p> <p>Outcome: The expected outcome of this intervention is an increase in students' listening skills. Research shows that the use of short film media related to the manga tradition can increase students' interest and motivation in learning to listen and help them better understand the material being taught.</p> <p>Study Design: The study design used was a qualitative approach. This study used interview and observation methods to collect data on applying local wisdom in improving listening skills. This descriptive and exploratory research focuses on social phenomena and human behaviour in the context of learning.</p>
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Critical listening skills are an important pillar in English language learning. Several studies have shown that active and reflective listening activities, such as those facilitated by blended learning approaches, can hone students' abilities in understanding, analyzing, and evaluating the information they hear. Using listening journals has also been effective in encouraging students to reflect on their listening experiences, thereby improving their understanding of the learning material. In addition, the development of teaching materials oriented to the local cultural context has also been shown to significantly contribute to improving students' listening skills. Applying the SAKTI (Listen, Analyze, Criticize, Respond) framework in teaching materials, for example, can guide students in systematically carrying out the listening process. Meanwhile, using local methods such as Mangupa, which involves active interaction between students and teachers, can create a learning environment conducive to developing listening skills. The results of the study showed that the combination of innovative learning approaches and the use of teaching materials that are relevant to students' cultural contexts can result in significant improvements in critical listening skills.

4 Conclusion

The literature review that has been conducted shows that critical listening skills are an essential component of the learning process. The ability to analyze, evaluate, and respond to information effectively supports a deep understanding of the subject matter and equips individuals with the critical thinking skills needed to face real-world challenges. Technology, especially website-

based media, has been proven effective in improving critical listening skills. Using digital platforms, applications, and learning videos can make learning more engaging, interactive, and relevant for students. Integrating local wisdom into learning materials can strengthen conceptual understanding and motivate learning.

Although several studies have examined this topic, several gaps still need to be considered, including: first, the need for more research that directly integrates local wisdom with website-based media. Most studies focus more on the use of technology in general without explicitly linking it to the local cultural context. Second, there is a need for more research that holistically measures the impact of various learning methods. Most studies only measure specific aspects of critical listening skills, such as comprehension or analytical skills. Third, there is a need for more research that compares the effectiveness of various types of website-based media.

Further research is needed to identify the most effective media types for developing critical listening skills. Therefore, developing critical listening skills is an important long-term investment to improve the quality of education. Utilizing technology and integrating local wisdom into the learning process can create a more effective learning environment and equip learners with the skills needed for future success. Further research is needed to explore the full potential of web-based media in developing critical listening skills and to address the gaps that still exist in current research.

References

- [1] R. A. Purnamaningwulan, "Listening Journals to Promote Students' Critical Thinking Skills in an Integrated Listening-Speaking Course," *Studies in English Language and Education*, vol. 9, no. 2, pp. 744–760, 2022, doi: 10.24815/SIELE.V9I2.23387.
- [2] H. Kazu and D. Demiralp, "Comparison of Critical Listening Proficiency of Teacher Candidates in Terms of Several Variables.," *Eurasian Journal of Educational Research*, vol. 17, pp. 81–97, 2017, doi: 10.14689/ejer.2017.68.5.
- [3] H. S. A.-H. A. Helwa, "Using a Program Based on Embodied Learning and Online Task Activities for Developing Student Teachers' EFL Critical Listening Skills and Willingness to Communicate," *يسوهاج التربوية لكلية التربية المحلة*, vol. 91, no. 91, pp. 109–162, 2021, doi: 10.21608/edusohag.2021.192137.
- [4] R. C. Anderson, *Language Skills in Elementary Education*. New York: Macmillan Publishing Co, Inc., 1972.
- [5] H. G. Tarigan, *Menyimak Sebagai Suatu Keterampilan Berbahasa*. Bandung: Angkasa, 2008.
- [6] D. R. A. T. , A. W. Garrison, "Critical Thinking, Cognitif Presence, and Computer Conferencing in Distance Education," *American Journal of Distance Education*, vol. 15, no. 1, pp. 7–23, 2011.
- [7] R. Kumar.R and R. James, "Evaluation of Critical Thinking in Higher Education in Oman," *International Journal of Higher Education*, vol. 4, no. 3, 2015, doi: 10.5430/ijhe.v4n3p33.
- [8] K. Changwong, A. Sukkamart, and B. Sisan, "Critical Thinking Skill Development: Analysis of a New Learning Management Model for Thai High Schools," *Journal of*

- International Studies*, vol. 11, no. 2, pp. 37–48, 2018, doi: 10.14254/2071-8330.2018/11-2/3.
- [9] C. Magno, “The Role of Metacognitive Skills in Developing Critical Thinking,” *Metacogn Learn*, vol. 5, no. 2, pp. 137–156, 2010, doi: 10.1007/s11409-010-9054-4.
 - [10] S. Suripah and W. Susanti, “Alternative Learning During a Pandemic: Use of the Website as a Mathematics Learning Media for Student Motivation,” *Infinity Journal*, vol. 11, no. 1, p. 17, 2022, doi: 10.22460/infinity.v11i1.p17-32.
 - [11] A. Fitrianiingsih, “Developing Website-Based Learning Media to Improve Students’ 5Cs Skills,” *Al-Ishlah Jurnal Pendidikan*, vol. 15, no. 4, pp. 4772–4780, 2023, doi: 10.35445/alishlah.v15i4.4504.
 - [12] B. Budiman, “Pemanfaatan Media Sosial sebagai Media Pembelajaran Bahasa Indonesia,” *EUNOIA (Jurnal Pendidikan Bahasa Indonesia)*, vol. 2, no. 2, p. 149, Nov. 2022, doi: 10.30821/eunoia.v2i2.2098.
 - [13] F. N. Aini, “IMPLEMENTASI LITERASI DIGITAL DALAM PEMBELAJARAN DARING,” *Ibtidaiyyah: Jurnal Pendidikan Guru Madrasah Ibtidaiyyah*, vol. 1, no. 3, pp. 242–262, Oct. 2022, doi: 10.18860/ijpgmi.v1i3.2383.
 - [14] A. D. Kusumandaru and F. P. Rahmawati, “Implementasi Media Sosial Aplikasi Tik Tok sebagai Media Menguatkan Literasi Sastra dalam Pembelajaran Tematik di Sekolah Dasar,” *Jurnal Basicedu*, vol. 6, no. 3, pp. 4876–4886, Apr. 2022, doi: 10.31004/basicedu.v6i3.2972.
 - [15] A. R. Nugraha, “Profil Pemanfaatan Kearifan Lokal Dalam Program Unggulan Berbasis Kearifan Lokal Di Sekolah: Studi Observasional,” *Jurnal Ilmu Pendidikan Dan Pembelajaran*, vol. 1, no. 2, pp. 51–55, 2023, doi: 10.58706/jipp.v1n2.p51-55.
 - [16] F. Salili, C. Chiu, and S. Lai, “The Influence of Culture and Context on Students’ Motivational Orientation and Performance,” in *Student Motivation*, Boston, MA: Springer US, 2001, pp. 221–247. doi: 10.1007/978-1-4615-1273-8_11.
 - [17] A. C. Anyichie and D. L. Butler, “Examining culturally diverse learners’ motivation and engagement processes as situated in the context of a complex task,” *Front Educ (Lausanne)*, vol. 8, Feb. 2023, doi: 10.3389/educ.2023.1041946.
 - [18] A. M. Methley, S. Campbell, C. Chew-Graham, R. McNally, and S. Cheraghi-Sohi, “PICO, PICOS and SPIDER: a comparison study of specificity and sensitivity in three search tools for qualitative systematic reviews,” *BMC Health Serv Res*, vol. 14, no. 1, p. 579, Dec. 2014, doi: 10.1186/s12913-014-0579-0.
 - [19] A. Fink, *Conducting Research Literature Reviews: From The Internet to Paper*. Sage publications, 2019.
 - [20] H. ŞAHİN, “Investigation of listening types of Turkish pre-service teachers in terms of the various variables: A case of Kafkas University,” *Dil ve Dili Bilimi Çalışmaları Dergisi*, vol. 16, no. 1, pp. 306–315, Mar. 2020, doi: 10.17263/jlls.712835.
 - [21] E. Ernawati Nainggolan, “UNIVERSITY STUDENTS’ CRITICAL THINKING ABILITY IN LISTENING SKILL,” *Getsempena English Education Journal (GEEJ)*, vol. 7, no. 2, p. 340, 2020.
 - [22] T. Pujiatna, E. Rosmaya, and N. Wahyuningsih, “Pengembangan Bahan Ajar Simak Berorientasi Kearifan Lokal untuk Meningkatkan Kemampuan Literasi Mahasiswa pada Mata Kuliah Menyimak,” *Deiksis: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, vol. 7, no. 1, p. 91, Apr. 2020, doi: 10.33603/deiksis.v7i1.2804.
 - [23] W. Wiranty, “PENGEMBANGAN MEDIA INTERAKTIF BERBASIS KEARIFAN LOKAL SEBAGAI MATERI MENYIMAK CERITA RAKYAT,” vol. 8.

- [24] S. Rahmawati, & Dhina, and C. Rohim, "PENGARUH MODEL PEMBELAJARAN KONTEKSTUAL BERBASIS KEARIFAN LOKAL TERHADAP KETERAMPILAN MENYIMAK SISWA," *Jurnal Review Pendidikan Dasar*, vol. 6, no. 3, 2020, [Online]. Available: <http://journal.unesa.ac.id/index.php/PD>
- [25] E. D. Besser, L. E. Blackwell, and M. Saenz, "Engaging Students Through Educational Podcasting: Three Stories of Implementation," *Technology, Knowledge and Learning*, vol. 27, no. 3, pp. 749–764, Sep. 2022, doi: 10.1007/s10758-021-09503-8.
- [26] H. Bourdeaud'hui, K. Aesaert, and J. van Braak, "Exploring the relationship between metacognitive awareness, motivation, and L1 students' critical listening skills," *Journal of Educational Research*, vol. 114, no. 1, pp. 40–51, 2021, doi: 10.1080/00220671.2021.1872474.
- [27] N. Shabrina Reznani, S. Soetopo, J. Manajemen, S. Dwi Sakti Baturaja, J. Pendidikan Bahasa dan Sastra Indonesia, and U. Sriwijaya Palembang, "PENGEMBANGAN BAHAN AJAR MATA KULIAH MENYIMAK BERBASIS KEARIFAN LOKAL," 2021.
- [28] S. Aimah, "Boosting EFL Learners' Listening Comprehension through a Developed Mobile Learning Application: Effectiveness and Practicality."
- [29] S. Syafrizal and T. Septiawati, "ENHANCING LISTENING SKILLS OF EFL INDONESIAN LEARNERS THROUGH BUSUU APPLICATION," *International Journal of English Language and Literature Studies*, vol. 11, no. 3, pp. 147–154, 2022, doi: 10.55493/5019.v11i3.4615.
- [30] Z. Mohebbi, A. Mortezaei-Haftador, and M. Mehrabi, "Synchronous online lecturing or blended flipped classroom with jigsaw: an educational intervention during the Covid-19 pandemic," *BMC Med Educ*, vol. 22, no. 1, Dec. 2022, doi: 10.1186/s12909-022-03915-5.
- [31] N. İ. Azizoglu and A. Okur, "The impact of education tailored for critical listening on the critical listening skills of seventh-grade students," *S Afr J Educ*, vol. 43, no. 4, 2023, doi: 10.15700/saje.v43n4a2158.