

STUDI DESRIPTIF TENTANG INTEGRASI TEKNOLOGI DAN PEMBELAJARAN KONTEKSTUAL DALAM Mendukung KETERAMPILAN BERBICARA SISWA

A Descriptive Study on the Integration of Technology and Contextual Learning in Supporting Students' Speaking Skill

Submit Tgl.: 30-Juli-2026	Diterima Tgl.: 03-Agustus-2026	Diterbitkan Tgl.: 06-Agustus-2026
Diva Salsabila^{1*}, Desi Sri Astuti², Dian Shinta Sari³ ^{*1-3} English Language Education, Language Arts and Vocational, University PGRI Pontianak, Indonesia *email: divasalsabila513@gmail.com, desisa28@gmail.com, dianshintasari@gmail.com	Abstrak Penelitian ini bertujuan untuk mendeskripsikan integrasi teknologi dalam pendekatan <i>Contextual Teaching and Learning</i> (CTL) pada pembelajaran keterampilan berbicara bahasa Inggris serta mengkaji bagaimana penerapan yang terintegrasi tersebut berkontribusi terhadap peningkatan kemampuan berbicara siswa di SMA Negeri 01 Anjongan. Penelitian ini menggunakan metode deskriptif kualitatif dengan partisipan siswa kelas XI A yang dipilih melalui teknik purposive sampling. Data penelitian dikumpulkan melalui observasi kegiatan pembelajaran di kelas dan wawancara semi-terstruktur dengan siswa. Hasil penelitian menunjukkan bahwa integrasi teknologi dalam pendekatan CTL mendukung pembelajaran berbicara dengan menghadirkan pengalaman belajar yang kontekstual dan bermakna, meningkatkan keterlibatan siswa, serta mendorong partisipasi aktif dalam kegiatan berbicara. Integrasi tersebut juga menciptakan lingkungan belajar yang lebih autentik dan interaktif sehingga meningkatkan rasa percaya diri dan motivasi siswa untuk berkomunikasi menggunakan bahasa Inggris. Temuan ini menunjukkan bahwa integrasi teknologi dalam pendekatan CTL merupakan strategi pembelajaran yang efektif untuk mengembangkan keterampilan berbicara siswa di tingkat sekolah menengah, khususnya di sekolah yang berada di wilayah nonperkotaan. Penelitian ini diharapkan dapat menjadi referensi bagi guru bahasa Inggris dalam merancang pembelajaran berbicara yang lebih interaktif, bermakna, dan kontekstual.	
Kata Kunci: Teknologi Integrasi, Pembelajaran Kontekstual, Keterampilan Berbicara Keywords: Technology Integration, Contextual Learning, Speaking Skill	Abstract <i>This study aims to describe the integration of technology within the Contextual Teaching and Learning (CTL) approach in English speaking instruction and to examine how this integrated implementation contributes to the improvement of students' speaking skills at SMA Negeri 01 Anjongan. This study employed a descriptive qualitative method involving purposively selected students from Class XI A. Data were collected through classroom observations and semi-structured interviews with students. The findings indicate that integrating technology into the CTL approach enhances speaking instruction by providing meaningful contextual learning experiences, increasing student engagement, and encouraging active participation in speaking activities. The integration also creates a more authentic and interactive learning environment, which enhances students' confidence and motivation to communicate in English. These findings suggest that the integration of technology within the CTL approach is an effective instructional strategy for developing students' speaking skills at the secondary school level, particularly in non-urban educational settings. This study is expected to serve as a reference for English teachers in designing more interactive, meaningful, and contextually relevant speaking instruction.</i>	

Cara mengutip Salsabila, D., Astuti, D. S., & Sari, D. S. (2026). A Descriptive Study on the Integration of Technology and Contextual Learning in Supporting Students' Speaking Skill. *EduCurio: Education Curiosity*, 4(3), 492–500. <https://doi.org/10.71456/ecu.v4i3.2403>

INTRODUCTION

Speaking is one of the most essential productive skills in English language learning, as it allows students to convey ideas, feelings, and thoughts in real-life communication (Brown, 2014; Harmer, 2015). However, for many high school students, speaking remains the most difficult skill to master. In classroom practice, students often struggle to speak fluently and confidently. This is evident from their limited vocabulary, frequent pauses or hesitations, fear of making mistakes, and low participation in speaking activities. Many students tend to be passive and rely more on teacher instructions rather than taking the initiative to communicate. This situation shows that their speaking skills are still far

from the expected communicative competence. Therefore, learning must be designed communicatively and contextually to provide meaningful learning experiences (Thornbury, 2021; Widodo, 2021; Yasin et al., 2023).

One of the main causes is the use of traditional teacher-centered learning methods, where speaking activities are limited and less connected to real-life contexts. In such situations, students rarely have the opportunity to practice speaking in an authentic environment. As a result, speaking skills are often treated as theoretical material, rather than as communicative skills. Speaking, in reality, is an interactive process that requires active engagement between the speaker and the listener. Therefore, learning must be designed communicatively and contextually to provide meaningful learning experiences (Thornbury, 2016). This situation emphasizes the need for more effective teaching strategies to encourage student engagement in authentic communication.

In the current digital era, educational technology offers significant opportunities to address these challenges. The integration of technology, such as learning videos, multimedia presentations, and online resources, can create a more interactive and engaging learning environment (Bates, 2022; Godwin-Jones, 2021; Kessler, 2018). Technology also provides access to authentic language input and opportunities for repetitive practice, which are essential for developing speaking skills (Richards, 2022). However, in many classroom practices, technology is still only used as a tool to deliver content, not as a means to encourage active communication. This indicates that the potential of technology to enhance speaking skills has not been optimally utilized.

In addition to the use of technology, the Contextual Teaching and Learning (CTL) approach is also highly relevant in improving students' speaking skills. CTL emphasizes the connection between the subject matter and students' real-life experiences, so that language is practiced meaningfully in a social context. This aligns with previous research findings that show the integration of technology with contextual learning can enhance students' speaking fluency, confidence, and participation in oral communication activities (Jannah et al., 2023; Limbong et al., 2024; Liunokas, 2023). Through CTL, students are directed to actively construct knowledge and connect classroom learning with everyday life (Bernstein, 2018). This approach has proven to strengthen students' motivation and confidence, especially in speaking activities, because the learning process becomes more relevant and meaningful (Widodo, 2021; Yuliana & Imperiani, 2021; Yasin et al., 2023).

Several previous studies have confirmed that the integration of technology and the application of CTL positively contribute to the development of speaking skills (Chapelle, 2016; Stanley, 2017; Limbong et al., 2024; Liunokas, 2023). However, most of these studies examine them separately. Research that combines technology and CTL within a single learning framework is still limited. Moreover, many studies focus more on learning outcomes rather than describing the implementation process in the classroom. Studies in high schools located in non-urban areas are also rarely conducted, even though the conditions of access, readiness, and learning environment in those areas differ from schools in urban areas. This indicates a research gap, particularly in understanding how technology and CTL are integrated into real teaching practices and how this integration supports the development of students' speaking skills.

The novelty of this study lies in its focus on describing the integration of educational technology and Contextual Teaching and Learning (CTL) within a single instructional framework for speaking instruction in a non-urban senior high school context. While previous studies have primarily examined technology-enhanced language learning or CTL separately, limited research has explored how these two approaches are combined in actual classroom practices to support speaking development. Therefore, this study contributes to the literature by providing an in-depth description of the implementation process, students' experiences, and the contribution of technology-integrated CTL to speaking skills development in a non-urban educational setting.



Therefore, this research is considered important to provide a deeper understanding of the application of technology-based speaking learning integrated with CTL and its impact on students' learning experiences. By emphasizing not only the outcomes but also the learning process, this research is expected to provide practical contributions for teachers in designing more effective and student-centered speaking learning (Jannah et al., 2023; Yuliantini, 2026).

This research was conducted at SMA Negeri 01 Anjongan, a secondary school in a non-urban area with a unique and relevant context. Based on initial observations, students at this school still face various obstacles in speaking English, such as a lack of confidence, limited vocabulary, and minimal participation in class interactions. Although the teachers have made efforts to use educational technology in the form of PowerPoint presentations, learning videos, and internet-based materials, the integration with contextual learning strategies has not been fully implemented. This condition makes SMA Negeri 01 Anjongan an appropriate location to research how technology and CTL can be effectively combined to improve students' speaking skills.

Based on this consideration, this research aims to describe how educational technology is integrated with the CTL approach in English speaking lessons and to explain how this integration supports students' speaking skills at SMA Negeri 01 Anjongan. The research questions posed are: (1) How is technology integrated with the CTL approach in teaching English speaking? (2) How does this integration support students' speaking skills? (3) What are the students' experiences in the implementation of technology-based and CTL-based speaking learning?

METHOD

This study employed a qualitative descriptive design to systematically describe the process of integrating technology with the Contextual Teaching and Learning (CTL) approach in supporting students' English speaking skills. This design was chosen because the research does not involve experimental treatment or variable manipulation. The main focus is directed toward efforts to understand the learning process as it exists in the classroom (Creswell & Poth, 2024).

The descriptive qualitative approach is considered appropriate because it provides researchers with the opportunity to understand educational phenomena based on participants' experiences in real contexts. Creswell & Poth (2024) emphasize that qualitative research is oriented toward the exploration of meaning and processes that occur naturally without experimental intervention. In line with that, Sugiyono (2016) states that descriptive qualitative research aims to describe and interpret social phenomena as they are.

This research was conducted at SMA Negeri 01 Anjongan in the 2025/2026 academic year, focusing on English speaking learning that integrates educational technology with the CTL approach.

The research participants consisted of an English teacher and 28 students from class XI A. All students were involved in observation activities, while interviews were conducted with 10 purposively selected students to obtain in-depth information about their experiences in participating in CTL-based speaking lessons integrated with technology. The selection of participants used purposive sampling techniques, which involved selecting individuals deemed most relevant and capable of providing data in accordance with the research objectives. The English teacher was chosen because of their experience in applying technology and CTL in speaking instruction.

Class XI A was chosen as the research subject for several reasons. First, this class consistently receives speaking lessons that integrate educational technology with CTL. Second, the students in this class actively participate in various speaking activities, such as discussions, presentations, and technology-based collaborative tasks. Third, based on initial observations and consultations with the teacher, Class XI A shows a higher level of engagement and interaction

compared to other classes. Therefore, this class is considered the most appropriate source of data to obtain in-depth information regarding the application of technology and CTL in speaking lessons.

Data for this research were obtained through two main methods, namely classroom observation and semi-structured interviews. Observations were conducted to directly examine the application of technology and the Contextual Teaching and Learning (CTL) approach in English speaking lessons. Observation activities were conducted three times a week to obtain a more comprehensive picture of the integration of technology and CTL. The focus of the observation includes the use of digital media, context-based speaking activities, interaction between teachers and students, as well as the level of student participation and response during the learning process. Observation indicators include the types of technology used, such as smartphones, laptops, LCD projectors, speakers, WhatsApp, Google Classroom, YouTube, and PowerPoint; the application of CTL components in speaking activities; teacher instructions and feedback; student activities, confidence, engagement, and classroom interaction dynamics. Observation was chosen because it allows researchers to obtain direct data from learning situations that occur naturally. Creswell & Creswell (2018) emphasize that observation is an important technique in qualitative research to understand participants' behavior and interactions in real contexts.

Additionally, semi-structured interviews were conducted with students to delve deeper into their experiences participating in technology-based and CTL learning, the benefits of using technology in speaking activities, and the challenges faced during the learning process. The interview indicators include students' perceptions of technology use in speaking classes, experiences using digital devices for speaking practice, perceived benefits in fluency, vocabulary, pronunciation, and confidence, as well as obstacles such as limited internet access, devices, or technical issues. The interviews lasted 30–40 minutes per session and were recorded using a voice recorder on a smartphone to ensure data accuracy. According to Sugiyono (2020), semi-structured interviews provide flexibility for researchers to explore participants' perspectives in depth in accordance with the research objectives.

The instruments used in this study consist of observation sheets and interview guidelines. The observation sheets serve to record the implementation of speaking lessons that integrate technology with CTL, including the use of technological devices, the application of CTL components, teacher-student interactions, student participation, and obstacles that arise during the learning process. Meanwhile, the interview guidelines are used to obtain information about students' experiences in technology-based and CTL-based speaking lessons. The questions posed include students' perceptions, perceived benefits, motivation, confidence, challenges faced, and suggestions given (Creswell & Creswell, 2018).

Data analysis was conducted qualitatively by following the stages proposed by Miles and Huberman, namely data reduction, data presentation, and conclusion drawing.

The data reduction stage includes the process of selecting, focusing, and organizing data from observations and interviews according to the research objectives. Data presentation is carried out by organizing information into narrative descriptions to provide a clear picture of the integration of technology and CTL in speaking learning. Next, the conclusion stage is conducted by interpreting the data to identify patterns and themes related to how the integration of technology and contextual learning supports students' speaking skills. Miles et al. (2014) emphasize that qualitative data analysis is interactive and ongoing throughout the research process.

To ensure the trustworthiness of the findings, data credibility was established through methodological triangulation by comparing observation and interview data. The researcher also conducted member checking by confirming several interview responses with participants to ensure the accuracy of interpretations. Furthermore, peer



debriefing with the academic supervisor was conducted throughout the research process to enhance the consistency and credibility of the analysis.

RESULTS AND DISCUSSION

This section presents the research results obtained through classroom observations and interviews with ten eleventh-grade students regarding the application of technology-based Contextual Teaching and Learning (CTL) in teaching speaking skills. Data analysis was conducted using the interactive analysis model developed by Miles and Huberman (1994), which includes the stages of data reduction, data presentation, and conclusion drawing and verification. Thru this analysis process, three main themes aligned with the research focus were identified, namely: (1) the application of CTL integrated with technology in speaking learning, (2) students' experiences and perceptions of CTL-based speaking learning integrated with technology, and (3) the contribution of technology-based CTL to the improvement of students' speaking skills.

Table 1. Results of Observation and Interview Data Reduction Based on Miles and Huberman's Analysis

Theme	Evidence from Observation and Interview	Analytical Interpretation
Implementation of CTL Integrated Technology	Classroom observations showed that teachers used videos, PowerPoint presentations, LCD projectors, discussions, and dialogue practices. Interviewed students reported that digital media helped them understand speaking materials and pronunciation more easily.	Technology facilitates contextual and meaningful speaking instruction by connecting authentic language input with students' real-life experiences.
Student Experiences and Perceptions	Students actively participated in speaking activities and reported increased motivation and engagement during lessons.	Technology-integrated CTL promotes positive learning experiences and encourages active participation.
Contribution to Speaking Skill	Students participated in discussions, presentations, and dialogue practices. They reported improvements in confidence, vocabulary, pronunciation, and fluency.	The integration of technology and CTL contributes positively to speaking skill development.

1. Implementation of CTL Integrated with Technology in Speaking Learning

The first finding of this study concerns the application of Contextual Teaching and Learning (CTL) combined with technology in speaking lessons. Based on the observation results, the teachers utilized various technological devices such as laptops, LCD projectors, educational videos, PowerPoint presentations, and other digital learning resources. The use of technology not only serves as a medium for delivering material but also as an instrument for creating contextual and meaningful learning processes.

Observations show that teachers relate speaking material to students' real-life experiences through activities such as discussions, presentations, Q&A sessions, and dialog exercises relevant to everyday situations. Learning videos are used to present examples of authentic conversations and correct English pronunciation models. After watching the video, students are directed to discuss the content and relate it to their personal experiences before practicing speaking.

These findings affirm that the teachers have implemented the main principles of CTL, which include constructivism, inquiry, learning communities, reflection, and authentic assessment. As stated by Johnson (2014), contextual learning allows students to connect academic material with real-life experiences, making the learning process more meaningful. In the context of this research, students do not just passively receive information, but actively build understanding through relevant learning experiences.

Furthermore, the integration of technology in learning reflects the Technological Pedagogical Content Knowledge (TPACK) framework developed by Koehler and Mishra (2009). This framework emphasizes the importance of integrating technology, pedagogy, and learning content to create effective learning experiences. The technology used by

teachers has been proven to support speaking learning as it is directly integrated with student-centered CTL activities. The results of this study are also in line with the findings of Sari and Astuti (2023) in *The Role of Technology in English Classroom: Exploring Teachers' and Students' Perspectives*, which emphasize that the use of integrated technology in English learning helps teachers present material more interactively and provides broader opportunities for students to actively engage in the learning process.

Table 2. Implementation of Technology-Integrated CTL in Speaking Learning

Theme	Observation Evidence	Interpretation
Technology Use	Teachers used laptops, LCD projectors, PowerPoint, and learning videos.	Technology provided authentic language input and learning support.
Contextual Activities	Speaking materials were linked to students' daily experiences.	CTL made learning more meaningful and relevant.
Learning Activities	Students participated in discussions, presentations, Q&A sessions, and dialogue practices.	Students were actively engaged in communicative speaking activities.
Teacher's Role	The teacher facilitated technology use and contextual learning activities.	The teacher functioned as a facilitator of student-centered learning.

The results of this study are consistent with the views of Kessler (2018), Godwin-Jones (2021), and Hockly (2024), who emphasize that the use of technology contributes to the improvement of language learning quality. Technology enables the availability of authentic materials, expands interaction spaces, and provides broader opportunities for learners to communicate actively.

2. Students' Experiences and Perceptions of Technology-Integrated Contextual Teaching and Learning in Speaking Instruction

The second finding of this study concerns students' perceptions of the application of technology-based Contextual Teaching and Learning (CTL) in speaking lessons. Based on the interview results, the majority of students responded positively to the use of technology during the learning process. They assessed that the learning activities became more engaging, less monotonous, and easier to understand compared to conventional methods.

The students conveyed that the use of educational videos, digital presentations, and other technology-based media helps them understand the material, especially in aspects of pronunciation, vocabulary mastery, and the use of English expressions. In addition, the connection between the learning topics and daily experiences makes the material easier to understand and more relevant to them.

The interview results also show that the integration of technology can enhance students' learning motivation. They feel more enthusiastic about participating in learning activities and more active in speaking activities. The opportunity to observe examples of English usage through digital media provides better readiness when having to speak in front of the class.

These findings align with the CTL theory proposed by Johnson (2014), which states that learning will be more meaningful if students can connect academic material with real-life experiences. When students find relevance between the subject matter and everyday life, their motivation to learn tends to increase. Furthermore, the results of this study also support the views of Bahastika et al. (2025), who emphasize that Vygotsky's constructivist approach places social interaction and collaboration as important components in the learning process and the development of students' abilities.

**Table 3. Students' Experiences and Perceptions of Technology-Integrated CTL**

Student Perceptions	Evidence from Interviews	Analytical Meaning
Interest in Learning	Students stated that learning became more interesting through videos and presentations.	Technology increased students' interest in speaking activities.
Understanding the Material	Students reported that digital media helped them understand pronunciation and vocabulary.	Technology supported comprehension and language acquisition.
Learning Motivation	Students expressed greater enthusiasm for participating in speaking lessons.	Technology-integrated CTL enhanced motivation.
Participation	Students became more active during discussions and presentations.	Active learning opportunities promoted engagement.
Relevance of Topics	Students found daily-life topics easier to discuss.	CTL connected learning with real-life contexts.

Furthermore, the results of this study reinforce the findings of Widodo (2021), Yuliana and Imperiani (2021), as well as Yasin et al. (2023), which show that the integration of technology in language learning plays a role in enhancing student motivation, learning interest, and engagement in learning activities. From the perspective of Vygotsky's social constructivism (1978), students' positive perceptions are also influenced by the opportunity to interact and collaborate with peers during the learning process.

3. The Contribution of Technology-Integrated Contextual Teaching and Learning to Students' Speaking Skills

Table 4. The Contribution of Technology-Integrated CTL to Students' Speaking Skills

Speaking Skill Aspect	Evidence	Contribution to Speaking Development
Fluency	Students participated actively in discussions and presentations.	Increased opportunities for speaking practice improved fluency.
Pronunciation	Students learned pronunciation through videos and digital media.	Authentic language models improved pronunciation accuracy.
vocabulary	Students encountered new vocabulary through multimedia resources.	Technology enriched vocabulary acquisition.
confidence	Students reported feeling more confident when speaking.	Technology and CTL reduced anxiety and increased confidence.
Communication Skills	Students expressed ideas during contextual speaking activities.	Students developed better communicative competence.

Based on Table 4, the implementation of Contextual Teaching and Learning (CTL) combined with technology significantly contributes to the development of students' speaking skills, particularly in aspects of fluency, pronunciation, vocabulary, confidence, and communication ability. The third finding of this study confirms that this approach has a positive impact on the improvement of speaking skills, especially in terms of fluency, active participation, courage in expressing opinions, and students' confidence.

During the learning process, students appeared actively engaged in group discussions, presentations, and dialog practice. They showed greater courage in using English in various class activities. Most students also expressed that technology-based speaking lessons made them more confident when having to perform in front of the class. This improvement in skills occurs because technology provides authentic learning resources that can serve as language models. Learning videos, for example, help students understand pronunciation, intonation, and conversation patterns in English. Meanwhile, CTL activities provide students with the opportunity to use English in contexts close to their lives, making speaking practice more meaningful.

These findings align with Richards (2022), who emphasizes that speaking skills develop through sustained practice in real communication situations. The more often students interact using the language, the better their speaking skills become. This research also supports the findings of Liunokas (2023), Jannah et al. (2023), Limbong et al. (2024), and Yuliantini (2026), which show that the integration of technology in language learning can enhance oral communication skills through interactive and student-centered activities.

In addition, the social interactions that occur in group discussions and collaborative activities also contribute to the development of speaking skills. According to Vygotsky (1978), social interaction is an important component in language and cognitive development. In this study, students have the opportunity to exchange ideas, provide feedback, and practice using English with their friends, thereby enhancing their communication skills more optimally.

Although there are obstacles such as unstable internet connections and technical disruptions during the learning process, data triangulation from observations and interviews shows that technology-based CTL still positively contributes to students' speaking skills. These findings prove that the integration of technology with a contextual approach can create more active, meaningful, and effective learning in improving speaking skills. The results of this study are also consistent with Marlinda et al. (2025), who found that the use of learning media plays an important role in improving language skills and student engagement in the learning process.

CONCLUSION

Based on the results of observations and interviews, it can be concluded that the integration of technology in speaking lessons is realized thru the use of learning videos, PowerPoint presentations, LCD projectors, discussions, presentations, and dialog exercises related to the students' daily life contexts in accordance with the principles of Contextual Teaching and Learning (CTL). Students show positive experiences and perceptions toward the application of technology-based CTL because the learning process becomes more engaging, easier to understand, and capable of increasing learning motivation. Furthermore, the implementation of CTL combined with technology significantly contributes to the development of speaking skills, particularly in aspects of fluency, pronunciation, vocabulary mastery, confidence, and communication ability. Although there are technical constraints such as suboptimal internet connection stability, the triangulation of data from observations and interviews confirms that CTL integrated with technology is an effective approach in supporting the improvement of students' speaking skills. These findings are also in line with research by Marlinda et al. (2025), which shows that the use of learning media positively contributes to the development of language skills and enhances student engagement in the learning process.

REFERENCES

- Bahastika, I., Sekti, R. P., & Trisakti. (2025). *Vygotsky's constructivist approach in the use of the boardgame Codenames in extracurricular art education*. *Wacana: Jurnal Bahasa, Seni, dan Pengajaran*, 9(2), 144–155. <https://doi.org/10.29407/jbsp.v9i2.3>
- Bates, A. W. (2022). *Teaching in a digital age: Guidelines for designing teaching and learning* (3rd ed.). Tony Bates Associates Ltd. <https://pressbooks.bccampus.ca/teachinginadigitalagev3m/>
- Brown, H. D. (2014). *Principles of language learning and teaching* (6th ed.). Pearson Education.
- Chapelle, C. A. (2016). Teaching culture in introductory foreign language textbooks. *Teaching Culture in Introductory Foreign Language Textbooks*, 1–263. <https://doi.org/10.1057/978-1-137-49599-0>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.



- Creswell, J. W., & Poth, C. N. (2024). *Qualitative inquiry and research design: Choosing among five approaches* (5th ed.). Sage Publications.
- Godwin-Jones, R. (2021). Evolving technologies for language learning. *Language Learning & Technology*, 25(3), 6–26. <https://doi.org/10.64152/10125/73443>
- Harmer, J. (2015). *The practice of English language teaching* (5th ed.). Pearson Education.
- Ilyas, M., & Putri, M. E. (2025). The impact of a YouTube-assisted contextual-based e-module on EFL learners' speaking skills. *Journal of Languages and Language Teaching*, 13(4), 2103–2114. <https://doi.org/10.33394/jolt.v13i4.15321>
- Jannah, N. M., Afrezah, N. N., & Margana, M. (2023). Pedagogical potential of immersive technology for English speaking learning. *Diksi*, 31(2), 214–223. <https://doi.org/10.21831/diksi.v31i2.59666>
- Johnson, E. B. (2014). *Contextual teaching and learning: What it is and why it's here to stay*. Corwin Press.
- Kessler, G. (2018). Technology and the future of language teaching. *Foreign Language Annals*, 51(1), 205–218. <https://doi.org/10.1111/flan.12318>
- Limbong, S., Palayukan, N., Djajasasana, E. E., & Tandibura, F. (2024). Can contextual teaching and learning (CTL) revolutionize cadets' speaking skills in maritime English? *Voices of English Language Education Society*, 8(2). <https://doi.org/10.29408/veles.v8i2.26651>
- Liunokas, Y. (2023). The efficacy of using contextual teaching and learning (CTL) approach in teaching speaking to Indonesian English as foreign language (EFL) students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 11(2), 1334–1342. <https://doi.org/10.24256/IDEAS.V11I2.4679>
- Marlinda, S., Susilowati, P., Hilaliyah, T., & Hasani, A. (2025). Meta-analysis of instructional media to enhance writing skills in Indonesian language education. *Wacana: Jurnal Bahasa, Seni, dan Pengajaran*, 9(2), 198–207. <https://doi.org/10.29407/jbsp.v9i2.8>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage Publications.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. Sage Publications.
- Richards, J. C. (2022). *Teaching listening and speaking: From theory to practice*. Cambridge University Press.
- Sari, D. S., & Astuti, D. S. (2023). The role of technology in English classroom: Exploring teachers' and students' perspectives. *Jurnal Pendidikan Bahasa*, 12(2), 145–158.
- Stanley, G. (2017). *Language learning with technology: Ideas for integrating technology in the classroom*. Cambridge University Press.
- Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sugiyono. (2020). *Metode penelitian kualitatif: untuk penelitian yang bersifat eksploratif, interpretif, interaktif, dan konstruktif*. Alfabeta.
- Thornbury, S. (2016). *How to teach speaking*. Pearson Education.
- Yuliantini, N. (2026). Enhancing EFL Speaking Fluency and Confidence through ChatGPT Voice in Contextual Learning at Madrasah Aliyah. *Jurnal Iman Dan Spiritualitas*, 6(1), 121–134. <https://doi.org/10.15575/JIS.V6I1.54377>