



Using Multimedia Tools and Online Resources to Teach Listening

Umar^{1*}, Rudi Hartono², Sri Wahyuni³ 

¹.STIT Buntet Pesantren Cirebon, Indonesia

^{2,3} Universitas Negeri Semarang, Semarang, Indonesia

ARTICLE INFO

Article history:

Received April 16, 2023

Revised April 8, 2023

Accepted July 30, 2023

Available online August 25, 2023

Kata Kunci :

Multimedia, Sumber daya online, Pengajaran Mendengarkan

Keywords:

Multimedia, Online resources, Teaching Listening



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Copyright ©2023 by Author. Published by Universitas Pendidikan Ganesha

ABSTRAK

Masalah yang dihadapi oleh guru bahasa Inggris ketika mengajar mendengarkan adalah bagaimana membuat semua siswa fokus pada materi pembelajaran dan aktif mengingat tidak semua siswa dapat fokus pada apa yang disampaikan dan seringkali ada siswa yang juga sibuk bermain ponsel. Untuk mengatasi masalah ini, guru bahasa Inggris terkadang mengajukan beberapa pertanyaan kepada siswa untuk mengembalikan niat belajar mereka. Tujuan dari penelitian ini adalah untuk menganalisis strategi dalam mengajar mendengarkan siswa dan masalah yang ditemukan oleh guru bahasa Inggris dalam mengajar mendengarkan serta bagaimana mereka mengatasi masalah tersebut. Penelitian ini dilakukan dengan menggunakan penelitian kualitatif deskriptif. Subyek penelitian ini adalah seorang guru bahasa Inggris. Penelitian ini mengumpulkan data melalui pedoman wawancara dan menggunakan penelitian kepustakaan, yang mengumpulkan dokumentasi yang luas pada satu atau beberapa topik. Baik sumber asli maupun sumber sekunder digunakan dalam penelitian ini. Sebagai kesimpulan, penelitian ini dapat berargumen bahwa menggunakan multimedia untuk mengajar mendengarkan menekan beberapa aspek yang tidak alami dari pelatihan telinga yang lebih konvensional di kelas EFL sekaligus membawa sejumlah keuntungan potensial.

ABSTRACT

The problem faced by English teachers when teaching listening was how to make all students focus on the learning material and be active, considering that not all students can focus on what is conveyed and often there were students who also busy playing cellphones. To overcome this problem, the English teacher sometimes asked students some questions to regain their learning intention. The objective of this research is to analyze the strategies in teaching listening to students and the problems found by the English teacher in teaching listening as well as how they overcome the problems. The research was conducted by using descriptive qualitative research. The subject of this research was a English teacher. The research collected the data through interview guidance and uses library research, which compiles extensive documentation on a single or a number of topics. Both original sources and secondary sources are used in this investigation. As a conclusion, this study can argue that using multimedia to teach listening suppresses some of the unnatural aspects of the more conventional ear training in EFL classrooms while also bringing about a number of potential advantages.

1. INTRODUCTION

Speaking, reading, and writing are the other three parts of communication, and listening is just as crucial. Understanding input requires the ability to listen well. Particularly in media and educational tools used in the classroom, learning listening has evolved and improved (Alenezi, 2020; Binmahboob, 2020; Nicolaou et al., 2019). There are numerous options for listening materials used in classes. The majority of pupils find it challenging to retain what they hear. Due of this, we require media that prohibits English in the listening element while still being more creative and interesting (Djamdjuri et al., 2014; Kivunja, 2015; Septianto & Hasan, 2017). Multimedia is the suggested solution within the realm of visual communication design (Alawamleh et al., 2022; Dhanil & Mufit, 2021). One of the four components of teaching English is listening to it. This hearing component was picked since it is thought to be the one that needs innovation the most to keep up with modern technologies (Khlyzova, 2019; Tuna & Razi, 2016; Usman et al., 2018). To create engaging and cutting-edge multimedia for pupils, this design was created. The absence of teachers' attention to students' listening, however, is supported by several data. One of the abilities that serves as the foundation of one's communicative competence in the context of teaching English as a foreign language is listening. It implies that in order to be effective in the oral communication process, a person must be able to recognize and cognitively understand the aural information in addition to speaking

*Corresponding author.

E-mail addresses: umar@stit-buntetpesantren.ac.id (Umar)

a foreign language (Mollaei & Riasati, 2013; Suganda et al., 2018; Yamazaki, 2018). The target language is presented in the typical textbook-related materials for practicing listening in a didactically modified way that lacks real context and the authenticity of natural speech (Apriyani & Robiasih, 2019; Dewantara et al., 2022). Since information and technology have an impact on every aspect of our lives in the digital age, technology is no longer a novel concept and has significantly transformed the way English is traditionally taught. Technology has existed in the past, but it did not advance as quickly as it has in recent years. Technology can be utilized to improve language learning even if it is not a magic bullet that can replace language teachers and in-person instruction (Jacob & Karn, 2003; S. Li & Swanson, 2014; Milliner & Cote, 2018). Today's technology offers a variety of options and instructional conveniences that make the learning and teaching process more engaging and simpler in terms of enhancing students' abilities. Technology is the force behind globalization, which has an effect on culture, employment, and education (Nasrah & Elihami, 2021; Shalikhah, 2017; Susilowati & Suyatno, 2021).

Previous study claim that language learners have access to an infinite number of resources thanks to technology (Dashtestani, 2014). In order to succeed in language acquisition, underlined that teachers should encourage students to identify relevant activities through the use of computers. According to other study learners may benefit from using appropriate technological resources (Bayyurt et al., 2014; Oliveira et al., 2021). Previous study asserts that computer-based language activities enhance students' cooperative learning. Using computer-based activities, kids can easily access pertinent information (Alenezi, 2020). Technology has always played a significant role in the teaching and learning process. As they can use information to aid students' learning, it is a crucial component of teachers' duties. The term "integration" is used to describe the usage of technology in education (Q. Li, 2007; Liu, 2011; Rohmitawati, 2018). It is time to reconsider the idea of incorporating technology into the curriculum given that it is a part of our daily lives and instead focus on integrating it into teaching to support student learning. Beginning with the development of learning experiences and continuing throughout the teaching and learning process, technology becomes a crucial component of the learning experience and a significant problem for teachers. Teachers won't be able to stay up with technology if they don't include it into their lessons. So, in order to successfully teach language skills, it is essential for teachers to have a complete understanding of these technologies. Also, because multimedia and other technologies resources support multi-modal processing, it is far easier to simulate the intricacy of spoken conversation in real life than it is with traditional audio recordings. The objective of this research is to analyze the strategies in teaching listening to students and the problems found by the English teacher in teaching listening as well as how they overcome the problems.

2. METHODS

In this research, the researcher using the qualitative method. Purpose of this qualitative research is to analyze the object in the natural condition, the object is analyzed without any manipulation. The condition and situation of students and English teachers in STIT Buntet Pesantren presented as they are. There had no change that is given by the researcher to the object. In addition, the qualitative research design is the logic that the data to be collected. The research design in this study is conduct through descriptive qualitative research. Descriptive method is collecting the qualitative data, analyzing data, and writing result (Cresswell & Cresswell, 2018). Based on definition above, descriptive method is a method to collect and analyze data, and draw conclusion of analyze data.

This study uses library research, which compiles extensive documentation on a single or a number of topics. Both original sources and secondary sources are used in this investigation. It is known as "library research" because the information or materials required to finish the research are found in books, encyclopedias, dictionaries, journals, documents, periodicals, and other things found in libraries. The reading materials used in this study can be broadly split into two groups, namely: Textbooks, encyclopedias, monographs, and other wide sources of reference that frequently include general notions and concepts; Journals, research bulletins, theses, and other sources can be used as specific references.

3. RESULT AND DISCUSSION

Results

Listening Definition

Active listening is necessary for understanding spoken and occasionally unspoken messages and for responding to them. Both the conversation analysis and language arts disciplines of study handle this subject. In a conversation, listening entails more than just hearing what the other person is saying (Nardo et al., 2022; Supriatna, 2013). Despite the fact that listening is a highly complex activity that is a

cornerstone of target language acquisition and a skill that is crucial to foreign language communicative competence in the TEFL environment, listening denotes highly complex interpretative processes that together determine what meanings are generated as a result of conversation in actual face-to-face communication. The process of learning to listen takes time. The process of becoming accustomed to English's foreign sounds is significantly lengthier. Also, learning English calls on the subconscious capacity of the brain to better recall the information that has been taken in throughout the process of listening to the English conversation previously (Anggeraini, 2018; Caterine et al., 2021). Two arguments for teaching listening to pupils learning English: general comprehension of learning English and Enhancing English language learning.

Language is heard through the process of listening. When listening, one must recognize speech sounds and combine them to create words and phrases. Our brains transform the letters, stresses, rhythms, and pauses that our ears receive into messages that have significance for us. Listening requires focus and attention for all languages. Some people will have to work harder than others to master this skill. Poor listeners frequently exhibit focus problems. A second language listener must pay much closer attention. Like young children, we learn this skill by listening to natural language speakers. Native speakers could be included in this or not (Kalogiannakis & Papadakis, 2019; Young et al., 2018). We can use both recorded and live voices for practice. It is crucial that we hear as many different voices as we can. If students want to speak English fluently, they must improve their listening skills. By listening, they can comprehend more of what is being spoken to them. It will also help if you communicate clearly with others (Adiyawati & Nuroh, 2023; Kivunja, 2015). It teaches children how to pronounce words correctly, how to emphasize words and sentences, and how to use intonation. This makes it easier for those listening to the students' conversations to understand what they are saying.

Comparing Listening in the Classroom and in Real Life

In a real life listening, the majority of the language we hear is informal and unplanned. Instead of reading aloud or reciting from memory, the speaker is making it up as they go along. Informal speech has a number of intriguing characteristics. Shortness of chunks: usually, it is divided into bite-sized pieces. For instance, during a conversation, each person has a turn to talk for a little period of time. Pronunciation, the phonological representation provided in a dictionary is markedly different from the frequently slurred pronunciation. There are blatant examples like "can't," "In English Cannot," and others that have entered written language. Vocabulary: The language is frequently colloquial; for instance, you can use "guy" when you mean "man" in writing or "kid" for "child". Grammar: Generally speaking, informal communication lacks some grammar. In general, utterances do not easily break down into sentences. Grammatical structures might alter in the middle of a phrase, and incomplete clauses are frequent. Noise: A certain degree of "noise" will be present. A portion of the conversation that the hearer finds difficult to understand and, as a result, perceives as meaningless "noise". Redundancy: Usually, the speaker talks a lot more than is really necessary to get the point through. Non-repetition: The speech won't be repeated word for word. It is typically only heard once.

The listener nearly always has some idea of what is going to be stated in real life as well. Usually, our hearing is done with a purpose other than simple comprehension—to learn something, for instance. Only a very small percentage of listening, like to the radio or phone, is done "blind". In most cases, there is a relevant visual to consider in relation to what is being spoken. Often, as the conversation continues, the listener will answer at various points. It is uncommon for us to hear long speeches and answer only at the very end. The options for feedback are restricted in a classroom setting. According to Meskill, this interpretative task is typically evaluated by looking at how well the students answered a sequence of WH-questions, which isn't the typical way to give feedback. Classroom listening is defined as having a clear objective supplied by a task that the teacher assigns and grades, predictable made-up context, a transcript, and as repetitive because there are multiple opportunities to hear it. In light of the fact that meaning is inferred during a natural conversation as a result of the interaction of numerous factors (such as the etcetera principle, one's subjective experiences, combined retrospective and prospective meanings, visual cues like facial expressions, eye shape, gestures, etc.), real-world communicative situations allow a variety of information delivery methods, and a listener can use multiple receptive channels simultaneously to infer meaning (Blyth, 2014; Struyf et al., 2019).

Merging of Technologies, Multimedia and Education

The area of education has benefited greatly from advances in information and communication technology, especially in the learning process. One of them is taking classes in English. Information and communication technologies must be incorporated into all subjects of instruction in this digital age. Students now have access to information fast and readily because to the growth of digital era schooling.

Information technology has now permeated several areas, including English, in the realm of education. Information technology plays a wide range of functions in English language learning, particularly in the wake of the Covid-19 epidemic, which moved classroom instruction online (Norahmi, 2017; Sukmawati & Nensia, 2019). Several researchers have provided definitions of technology. It entails applying specialized knowledge and utilizing technological resources, methods, or abilities to finish a task. The use of technology involves deliberate interactions with other people, other machines, and the environment in addition to tools and computer hardware. Technology is described as the study and knowledge of the practical, especially industrial, utilization of scientific discoveries (Hoi & Mu, 2021; Sert & Boynueđri, 2017). There are many scholarly definitions of technology available. It is a way of going about doing something, especially when using technical tools, techniques, or knowledge. It also refers to the application of knowledge practically, particularly in a particular field. Using technology necessitates controlled interactions with other people, machines, and the environment in addition to using tools and equipment (such as computer hardware). The use of technology by instructors to do routine tasks more efficiently and maybe change the nature of that work is known as technology integration. The use of technology to enhance the learning environment is known as technology integration. Giving students the option of using computers for activities rather than the more traditional pencil and paper enhances classroom education.

A hardware and software combination based on digital technology is referred to as "multimedia," and it is used to convey information about an object. Second, learning is the process through which knowledge is passed from instructor to pupil. Hence, learning multimedia is a collection of digital technology-based hardware and software that allows teachers and students to communicate information messages and to practice and assess each other. Moreover, learning multimedia can be understood as multimedia programs (text, audio, video, graphics, diagrams, photographs, charts, and animations) that use computer technology to transmit information in order to accomplish learning goals. Further qualities of learning multimedia include having many unified media (for instance, a combination of audio and visual), being interactive, and being simple to use without assistance from others. Using computers in the classroom without teacher preparation is not integration. Without training, it won't happen. Integration does not mean that the teachers should read for 30 minutes instead of developing their computer skills for 30 minutes. Nonetheless, it does teach 30 minutes of reading using computers. Integration does not simply mean dispensing with the need for application software such as databases, spreadsheets, and electronic encyclopedias. It is not prepackaged programs, which are frequently unrelated exercises grouped together around a certain subject and only briefly touch higher concepts or objectives. It also does not include teacher-created programs that address specialized knowledge or interests but do not align with subject-area curricula. The first step in determining how to incorporate technology into the classroom is to define what it is and is not.

When students have access to a choice of tools that are appropriate for the work at hand and provide them the chance to develop a deeper understanding of the subject matter, they engage with technology on a regular basis and experience seamless integration. For instance, learning is likely to remain teacher-centric in a classroom with just an interactive whiteboard and one computer, and integration will focus more on instructor demands than necessary student needs. Even an interactive whiteboard can be used in a variety of ways that benefit your pupils. Successful technology integration calls for the ability to adapt to change. Technology is advancing quickly and steadily. As learning is a process, it must be continual. When technology integration is done correctly, neither students nor teachers are aware that they are using a technological tool because it is something that they are used to doing. Students are frequently more engaged in projects when digital tools are an inherent part of the teaching and learning process. The use of technology in the classroom can significantly extend learning when it is properly incorporated. These resources can offer both teachers and students: availability of recent primary sources; Techniques for gathering and documenting data; Methods for cooperating with learners, educators, and specialists from around the world; Possibilities for using multimedia to communicate understanding; Learning that is pertinent and genuine assessment; and learning how to present and disseminate their new knowledge.

Technological Usage in English Language Instruction

Because of the age of globalization in which we live, studying foreign languages—especially English—is essential. The importance of teaching English as a second language is increasing, in part because of the Internet. Over a billion people were learning English in 2000; ten years later, that figure had doubled. The projection indicates that English learning peaked in 2010. English makes up more than 80% of online information, according to studies. For the first time, more people speak a language other than their mother tongue, and ELT nowadays stands out for the variety of its students in terms of age,

nationality, learning background, etc. The usage of technology has had a huge impact on how English is taught. It provides a variety of possibilities for enhancing teaching by making it interesting and productive for growth. A few examples of contemporary language teaching and learning technologies that can aid students in learning languages more rapidly and fully include the usage of language laboratories, digitalization, multimedia devices, cell phones, and audio/visual multimedia content. Students use a range of English language skills for communication and proficiency, including speaking, listening, reading, and writing. Educators and students can build local and global communities through the use of computer technology, which connects them with one another and expands learning opportunities. They claimed that whether computer technology has a positive impact depends on how teachers integrate it into their language lessons.

Previous study state that Technology use has significantly changed how English is taught (Muslimin et al., 2023). It provides a range of alternatives for enhancing the caliber and efficacy of instruction. In traditional classrooms, teachers utilize a chalkboard or whiteboard and stand in front of the pupils to lecture, explain, and instruct. In light of technological growth, the way we conduct ourselves must alter. Students are introduced to vocabulary and grammatical structures through the use of multimedia texts in the classroom. The usage of print texts, videos, and the internet is also included in the application of multimedia to enhance students' language skills. Using print, film, and the internet offers the chance to learn new things and have access to a wide range of materials for the study of language and its interpretation in many contexts. The use of the internet, increases pupils' motivation. By employing films in the classroom, instructors may inspire their students to engage with the material and increase their understanding. By the use of a computer and the internet, learners can obtain pertinent knowledge when technology is employed in the learning process. The use of technology in the classroom aids pupils in developing higher order thinking skills. The right blending of teaching methods and multimedia is essential for piquing students' interest in learning the English language.

Despite the vast variations in resources and experience between classrooms, schools, and districts, it is still possible to integrate technological tools in ways that will affect student engagement and learning across the board. Multimedia has a compelling argument for being a tool for developing second-language listening abilities. The following arguments are made in favor of using multimodal processing to improve listening skills: 1.) The ability of text and images to serve as language processing aids when used in conjunction with audio text; 2.) The advantages of video for language learning in terms of motivation; 3.) The fact that mixed media increases target language processing, making input more direct and apparent for the language acquisition process; and 4.) It is a setting that promotes schematization and the learner's use of the discourse chunking approach.

Discussion

Listening activities should be adapted to the needs of the students, and teachers should give students with authentic listening resources that will help them better grasp the speech of native speakers (Linh & Ngo, 2021; Rafique et al., 2020). By using websites to improve English listening, students' ability to learn languages may be increased. New technologies have forced teachers to think about their roles in computer-assisted instruction. Today, websites on the Internet are rapidly growing, and educators are beginning to see computers as active collaborators rather than just as passive tools (Efriana, 2021; Rahmani, 2020). The main person who decides how the lesson should be conducted is the educator, not the computers or the Internet. As a result, teachers are not the only sources of knowledge; they also provide students with the knowledge they need to succeed in their studies.

The author made a brief mention on the application of technology in language learning. According to a review of the research, using technology resources does not ensure that pupils will comprehend the material being taught. Teachers must comprehend the benefits and usefulness of technology in enhancing student learning. To employ technology in language instruction, teachers require support and training (Norahmi, 2017; Sert & Boynueğri, 2017). According to the review, there are several advantages to using technology appropriately for both teachers and pupils. It is a tool that students may utilize since it enables people to identify answers to their learning challenges and strategies to effectively and meaningfully apply what they have learned. Only a very little portion of a discourse can be accurately simulated by multimedia technology, with each user making an independent effort to partially negotiate meaning. Multimedia presents a wide range of teaching options as a tool for language learning (Kang & Kim, 2021; Suwantarathip & Wichadee, 2014). The system's capabilities, which include text, audio, and video, make sense in the context of the objective of enhancing listening abilities in a second or foreign language. Educators and software developers must carefully consider the variety of options for combining input modalities and the tools that allow students to manipulate them.

The study makes the following recommendations for language students who want to improve their technology language skills in language learning such as to use technology to enhance their teaching, teachers should seek assistance from their colleagues. In order for teachers to successfully use and teach it, they should undergo training. For the purpose of facilitating the incorporation of technology, teachers should have enough support and technical assistance. Teachers must be aware of their obligations to act as guides and facilitators of their students' learning. Teachers' ought to think about how technology might help them shift from teacher-centered instruction to learner-centered instruction. Teachers should create lesson plans that include technology. These resources should emphasize teaching and learning rather than just describing technology challenges. Instructors ought to provide a good example for their kids when using technology. English teachers who use technology in their classes should have additional support from technology professionals. The use of technology in university teaching and learning efforts should be prioritized. The use of technology by language learners should be encouraged by language teachers. A key element of the educational activity that conveys knowledge to students is computer technology.

4. CONCLUSION

The data analysis showed how important technology is for successful language learning at the student's own pace, helps with self-understanding, doesn't limit interaction with the teacher, and increases student motivation. According to the study, students should use technology to develop their language skills since it encourages creativity in students and offers them interesting, enjoyable, and stimulating alternatives to language instruction. According to the findings of this review of the literature, technology encourages teacher-student interaction, offers input and output that are simple to understand, aids in students' development of critical thinking abilities, puts more emphasis on student learning and teaching, promotes student autonomy and self-confidence, and boosts students' motivation to successfully learn a foreign language.

5. REFERENCES

- Adiyawati, F. F., & Nuroh, E. Z. (2023). The influence of digital storytelling on story writing skills of class II elementary school students. *Jurnal Pendidikan Dasar Nusantara*, 8(2), 357–369. <https://doi.org/10.29407/jpdn.v8i2.18582>.
- Alawamleh, M., Al-Twait, L. M., & Al-Saht, G. R. (2022). The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian Education and Development Studies*, 11(2), 380–400. <https://doi.org/10.1108/AEDS-06-2020-0131>.
- Alenezi, A. (2020). The role of e-learning materials in enhancing teaching and learning behaviors. *International Journal of Information and Education Technology*, 10(1), 48–56. <https://doi.org/10.18178/ijiet.2020.10.1.1338>.
- Anggeraini, Y. (2018). Interactive teaching: Activities and the use of technology in EFL classroom. *LANGUAGE CIRCLE: Journal of Language and Literature*, 13(1), 1–6. <https://doi.org/https://doi.org/10.15294/lc.v13i1.11131>.
- Apriyani, L. A., & Robiasih, R. H. (2019). Eight Grade Text Book Evaluation By Cunningsworth's Theory. *Journal of English Language and Pedagogy*, 2(2), 94–103. <https://doi.org/10.36597/jelp.v2i2.4865>.
- Bayyurt, Y., Erçetin, G., & Karataş, N. B. (2014). The Stages in Mobile-Assisted Language Learning Material Development. In *International Conference on Mobile and Contextual Learning* (pp. 339–350). Springer, Cham. https://doi.org/10.1007/978-3-319-13416-1_33.
- Binmahboob, T. (2020). YouTube as a Learning Tool to Improve Students' Speaking Skills as Perceived by EFL Teachers in Secondary School. *International Journal of Applied Linguistics and English Literature*, 9(6), 13. <https://doi.org/10.7575/aiac.ijalel.v9n.6p.13>.
- Blyth, C. S. (2014). *Digital literacies in foreign and second language education*. 12, 288.
- Caterine, W., Amalia, T., & Shaberina, S. G. R. (2021). Indonesian EFL learners' ability to comprehend and produce implicature. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 9(2), 128–137. <https://doi.org/10.24256/ideas.v9i2.1924>.
- Cresswell, J. W., & Cresswell, J. D. (2018). *Research Design; Fifth Edition*.
- Dashtestani, R. (2014). English as a Foreign Language-Teachers' Perspectives on Implementing Online Instruction in the Iranian EFL Context. *Research in Learning Technology*, 22(1063519). <https://doi.org/10.3402/rlt.v22.20142>.
- Dewantara, K. A. ., Artini, L. ., & Wahyuni, L. G. . (2022). Reading Related Activities in English Textbook and How the Texts are Exploited in the Classroom. *Journal of Education Research and Evaluation*, 6(3).

- <https://doi.org/10.23887/jere.v6i3.48583>.
- Dhanil, M., & Mufit, F. (2021). Design and Validity of Interactive Multimedia Based on Cognitive Conflict on Static Fluid Using Adobe Animate CC 2019. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, 7(2), 177–190. <https://doi.org/10.21009/1.07210>.
- Djamdjuri, D. S., Furqon, M., & Habibah, W. N. (2014). The Effects of Infographic to Enhance Students' Comprehension on Writing Descriptive Text. *Indonesian Technology Enhanced Language Learning*, 6(2), 57–63. <https://online-journal.unja.ac.id/IJoLTE/article/view/23721>.
- Efriana, L. (2021). Problems of Online Learning during Covid-19 Pandemic in EFL Classroom and the Solution. *Journal of English Language Teaching and Literature*, 2(1), 38–47. <https://jurnal.stkipmb.ac.id/index.php/jelita/article/view/74>.
- Hoi, V. N., & Mu, G. M. (2021). Perceived teacher support and students' acceptance of mobile-assisted language learning: Evidence from Vietnamese higher education context. *British Journal of Educational Technology*, 52(2), 879–898. <https://doi.org/10.1111/bjet.13044>.
- Jacob, R. J., & Karn, K. S. (2003). Eye tracking in human-computer interaction and usability research: Ready to deliver the promises. *In The Mind's Eye*, 573–605. <https://doi.org/10.1016/B978-044451020-4/50031-1>.
- Kalogiannakis, M., & Papadakis, S. (2019). Evaluating pre-service kindergarten teachers' intention to adopt and use tablets into teaching practice for natural sciences. *International Journal of Mobile Learning and Organization*, 13(1), 113–127. <https://doi.org/10.1504/ijmlo.2019.096479>.
- Kang, S., & Kim, Y. (2021). Examining the quality of mobile-assisted, video-making task outcomes: The role of proficiency, narrative ability, digital literacy, and motivation. *SAGE Journals*. <https://doi.org/10.1177/13621688211047984>.
- Khlyzova, N. (2019). Media education as a tool to develop foreign language communicative competence. *International Journal of Media and Information Literacy*, 4(2), 31–41. <https://doi.org/10.13187/ijmil.2019.2.31>.
- Kivunja, C. (2015). Unpacking the Information, Media, and Technology Skills Domain of the New Learning Paradigm. *International Journal of Higher Education*, 4(1), 3–6. <https://doi.org/10.5430/ijhe.v4n1p166>.
- Li, Q. (2007). Student and teacher views about technology: A tale of two cities? *Journal of Research on Technology in Education*, 39(4), 377–397. <https://doi.org/10.1080/15391523.2007.10782488>.
- Li, S., & Swanson, P. B. (2014). Engaging language learners through technology integration: Theory, applications, and outcomes. *Engaging Language Learners through Technology Integration: Theory, Applications, and Outcomes*, 1–368. <https://doi.org/10.4018/978-1-4666-6174-5>.
- Linh, H. G., & Ngo, T. T. C. (2021). Challenges in learning listening comprehension via Microsoft Teams among English majors at Van Lang University. *International Journal of TESOL & Education Home*, 1(3), 142–175. <http://i-jte.org/index.php/journal/article/view/36>.
- Liu, S. H. (2011). Factors Related to Pedagogical Beliefs of Teachers and Technology Integration. *Computers and Education*, 56(4), 1012–1022. <https://doi.org/10.1016/j.compedu.2010.12.001>.
- Milliner, B., & Cote, T. J. (2018). Faculty adoption, application, and perceptions of a CMS in a university English language program. *In Handbook of Research on Integrating Technology into Contemporary Language Learning and Teaching*, 161–175. <https://doi.org/10.4018/978-1-5225-5140-9.ch008>.
- Mollaei, F., & Riasati, M. J. (2013). Teachers' Perceptions of Using Technology in Teaching EFL. *International Journal of Applied Linguistics and English Literature*, 2(1), 13–22. <https://doi.org/10.7575/ijalel.v2n.1p.13>.
- Muslimin, A. I., Mukminatien, N., & Ivone, F. M. (2023). TPACK-SAMR digital literacy competence, technostress, and teaching performance: Correlational study among EFL lecturers. *Contemporary Educational Technology*, 15(2), ep409. <https://doi.org/10.30935/cedtech/12921>.
- Nardo, J. E., Chapman, N. C., Shi, E. Y., Wieman, C., & Salehi, S. (2022). Perspectives on Active Learning: Challenges for Equitable Active Learning Implementation. *Journal of Chemical Education*, 99(4), 1691–1699. <https://doi.org/10.1021/acs.jchemed.1c01233>.
- Nasrah, N., & Elihami, E. (2021). The importance of awareness and education in muhamadiyah university of enrekang. *Jurnal Edukasi Non Formal*, 2(1), 120–126. <https://ummaspul.e-journal.id/JENFOL/article/view/1827>.
- Nicolaou, C., Matsiola, M., & Kalliris, G. (2019). Technology-enhanced learning and teaching methodologies through audiovisual media. *Education Sciences*, 9(3). <https://doi.org/10.3390/educsci9030196>.
- Norahmi, M. (2017). 21st-century teachers: The students' perspectives. *Journal on English as a Foreign Language*, 7(1), 77. <https://doi.org/10.23971/jefl.v7i1.538>.
- Oliveira, G., Grenha Teixeira, J., Torres, A., & Morais, C. (2021). An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID-19

- pandemic. *British Journal of Educational Technology*, 52(4), 1357–1376. <https://doi.org/10.1111/bjet.13112>.
- Rafique, H., Almagrabi, A. O., Shamim, A., Anwar, F., & Bashir, A. K. (2020). Investigating the acceptance of mobile library applications with an extended technology acceptance model (TAM). *Computers & Education*, 145, 103732. <https://doi.org/10.1016/j.compedu.2019.103732>.
- Rahmani, E. F. (2020). The Benefits of Gamification in the English Learning Context. *IJEE (Indonesian Journal of English Education)*, 7(1), 32–47. <https://doi.org/10.15408/ijee.v7i1.17054>.
- Rohmitawati, R. (2018). The implementation of TPACK (technology, pedagogy, and content knowledge) framework on Indonesian online mathematics teachers training. *Southeast Asian Mathematics Education Journal*, 8(1), 61–68. <https://doi.org/10.46517/seamej.v8i1.64>.
- Septianto, W., & Hasan, M. K. U. (2017). Efektivitas Penggunaan Media Pembelajaran Elektronik Interaktif Pada Hasil Belajar Siswa. *Jurnal Pendidikan Vokasional Teknik Mesin*, 5(3), 175–181. <https://doi.org/10.21831/teknik%20mesin.v5i3.7107>.
- Sert, N., & Boynueğri, E. (2017). Digital technology use by the students and English teachers and self-directed language learning. *World Journal on Educational Technology: Current Issues*, 9(1), 24–34. <https://doi.org/10.18844/wjet.v9i1.993>.
- Shalikhah, N. D. (2017). Media Pembelajaran Interaktif Lectora Inspire sebagai Inovasi Pembelajaran. *Warta LPM*, 20(1), 9–16. <https://doi.org/10.23917/warta.v19i3.2842>.
- Struyf, A., De Loof, H., Boeve-de Pauw, J., & Van Petegem, P. (2019). Students' engagement in different STEM learning environments: integrated STEM education as promising practice? *International Journal of Science Education*, 41(10), 1387–1407. <https://doi.org/10.1080/09500693.2019.1607983>.
- Suganda, L. A., Loeneto, B. A., & Zuraida, Z. (2018). Teachers' Use of Code Switching in An English as a Foreign Language Context in Indonesia. *Script Journal: Journal of Linguistic and English Teaching*, 3(2), 111. <https://doi.org/10.24903/sj.v3i2.202>.
- Sukmawati, S., & Nensia, N. (2019). The Role of Google Classroom in ELT. *International Journal for Educational and Vocational Studies*, 1(2). <https://doi.org/10.29103/ijevs.v1i2.1526>.
- Supriatna, A. R. (2013). Meningkatkan Kualitas Pembelajaran Melalui Active Learning In High Education (ALIHE) Pada Mata Kuliah Pendidikan IPA SD Di Jurusan PGSD FIP UNJ. *Perspektif Ilmu Pendidikan*, 27(1), 15–21. <https://doi.org/10.21009/PIP.271.3>.
- Susilowati, W. W., & Suyatno, S. (2021). Teacher competence in implementing higher-order thinking skills oriented learning in elementary schools. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*. <https://doi.org/10.25273/pe.v11i1.7762>.
- Suwantarathip, O., & Wichadee, S. (2014). The effects of collaborative writing activity using Google docs on students' writing abilities. *Turkish Online Journal of Educational Technology*, 13(2), 148–156. <https://eric.ed.gov/?id=EJ1022935>.
- Tuna, İyşlem K., & Razi, S. (2016). Integrating Culture into ELT Classes: What, Why, and How? *Procedia - Social and Behavioral Sciences*, 232, 41–48. <https://doi.org/10.1016/j.sbspro.2016.10.009>.
- Usman, B., Muslim, A., Champion, I. C. R., & Samad, I. A. (2018). Progressive peer evaluation: Important but absent in EFL speaking classes. *Studies in English Language and Education*, 5(2), 308–327. <https://doi.org/10.24815/siele.v5i2.11115>.
- Yamazaki, K. (2018). Computer-assisted learning of communication (CALC): A case study of Japanese learning in a 3D virtual world. *ReCALL*, 30(2), 214–231. <https://doi.org/10.1017/S0958344017000350>.
- Young, T., Hazarika, D., Poria, S., & Cambria, E. (2018). Recent trends in deep learning based natural language processing. *Ieee Computational Intelligence Magazine*, 13(3), 55–75. <https://doi.org/10.1109/MCI.2018.2840738>.