

# Integration of Digital Devices to Enhance English Language Competence: A Literary Survey

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#### **Abstract**

The integration of digital devices in language learning has become increasingly prevalent in offering new opportunities for enhancing English language competence. This paper explores various ways in which digital devices can be utilized effectively to improve English language skills. It discusses the use of interactive language learning apps, e-books, language exchange apps, grammar and spellcheck tools, online language communities, language learning platforms, podcasts, YouTube, language learning games, data-driven assessment and online English learning platforms. With the help of various research papers, articles, and research works the researchers explored which digital devices are effectively used in enhancing the English language competence.

Keywords- Digital devices, Multimedia tools, English Language Competence, Language skills, Language learning tools.

#### Introduction-

The importance of the mastery of English is rising in the world that is rapidly integrating in the global economy and where English is used as a universal language for communication, business, and learning. Fluency in the English language offers the holders of this ability numerous opportunities in academic, economic, and cultural aspects of life, and is therefore beneficial for people all around the world. Therefore, there is a relatively growing concern towards finding the right approaches that may help in improving that ability from the underpinning of the language studies. Indeed, since India is a multilingual country, English is used as the second or third language

in this country and the number of people speaking this language as their first language is significantly lower. Nevertheless, more languages are adopting English as the language of communication making it a more important means of communication around the world. Thus, mastering this language is vital when it comes to communication between inhabitants of different countries. In the past, teachers always used the conventional approach in the teaching learning process of languages. This is especially the case given that English is now one of the most widely used languages in the global market and classroom. The advancement in science and technology has made it possible to adopt multimedia resources in language teaching hence developing an appropriate context for re-examining and improving the techniques of teaching English in the modern society (Pun, 2013). "Multimedia provides a complex multi-sensory experience in exploring our world through the presentation of information through text, graphics, images, audio and video, and their evidences to suggest that a mixture of words and pictures increases the likelihood that people can integrate a large amount of information and helps pupils to grasp information by visualizing the real effect" (Pandey). Number of researches have been conducted by various researchers to see the effectiveness of multimedia on different fields and disciplines of education. This review paper is aimed to review various studies related to integrating digital devices or tools in order to answer the research questions; which digital devices are helpful in enhancing English language competence and does these digital devices capable to improve English language competence as in existing literatures?

# Objectives-

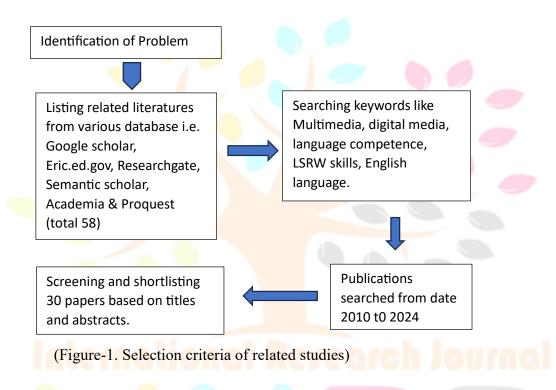
To explore the various digital devices which are helpful in enhancing English language competence based as in existing literature.

To study the integration of digital devices to enhance of English language competence as in existing literature.

## Methodology-

This research paper is a review based qualitative study which involves a comprehensive review of various existing literature on the integration of digital devices in English language learning. According to Nazir (2003), a literature survey is a data collection approach that involves reviewing textbooks, literatures, notes, and reports connected to the topic at hand. According to Sarwono (2006), a literature review is a research process that

involves gathering material from books, magazines, newspapers, and other sources in order to develop a basic hypothesis. In this paper researchers have done in-depth literature review of related studies. In this, researchers have gone through three phases and tried to answer the research questions, (i) identification of problem, (ii) shortlisting the related literatures from various sources like google scholar, researchgate, proquest, semantic scholar, eric.ed.gov, academia and shodhganga, etc. (iii) selecting the relevant studies related to the research problem and done in-depth reviews.



## Review of related literatures-

Finding relevant studies is the first step and major focus of review of any research. It helps in identifying the problem, justifying its significance of selected problem and suggesting appropriate methodology. This study intends to add to the ongoing discussion on optimizing language instruction in the digital age through carrying out a comprehensive literature review, analyzing empirical data, and discussing practical consequences.

According to Oyeyemi, et al. (2016), "Multimedia refers to any computer-mediated software or interactive application that integrates text, colour, graphical images, animation, audio sound, and full motion video in a single application". In their research paper entitled "The Effects of Interactive Multimedia on English Language Pronunciation Performance of Pupils in the Nigerian Primary Schools,", they observed that using interactive

multimedia has improved the quality of learning language and it positively affects the English language pronunciation and other language skills.

Pun, (2013), in his research titled with "the use of multimedia technology in English language teaching: a global perspective" found that using multimedia helps to increase students' ability of thinking and skills of English language. In his study he found that despite its disadvantages, utilization of multimedia during teaching helps teachers to make it effective and also enhance practical language skills of non- native speakers of English.

Klassen & Milton, (2010), examined the use of effective multimedia technology enhances students' listening skill, students who have taught through multimedia technology, have better performance and got improvement in their language skills in comparison to traditional method of teaching. A positive attitudinal change also found in the students taught through interaction with multimedia.

Попова (2022), analyzed the uses of multimedia technologies in teaching to develop linguistic professionals and checked its effectiveness on foreign language competence. Researchers used various pedagogical methodologies to achieve the objectives and found that multimedia technologies increased the communicative environment of foreign language competence and provided positive motivation regarding its uses for future linguistic professionals.

Yulian et al. (2022), studied on perception of slow learners while speaking with authentic multimedia assisted learning and it was found that EFL slow learners got benefited from authentic multimedia devices in terms of effectiveness, usefulness and easiness while speaking.

Hiel, Wu, Lee & Schmidth (2016), studied on 50 language learning app provided by android, IOS and blackberry phones and found that 36 apps out of 50 provide content and knowledge in English language. 42 apps focusing on vocabulary learning, 5 provide assessment for vocabulary and 23 apps providing grammar, punctuation and pragmatic learning. The introduction of language learning apps on digital devices, such as Duolingo and Rosetta Stone, has transformed the process of language acquisition. These apps provide dynamic, gamified learning experiences that adapt to a variety of learning styles. Language learners may practice their English skills on fascinating and user-friendly sites. Language learning applications have positive impact on learners' proficiency, vocabulary and achievement in second language

Mahdi (2017) conducted a meta-analysis by reviewing 108 research works related to significant effect of mobile devices and app on vocabulary, his findings shows that mobile devices affect moderately people's vocabulary learning and also confirmed that adult's vocab learning are more affected than the young learners.

Smith (2018), revealed that Interactive language learning apps, like Rosetta Stone, Babbel, and, Duolingo offer learners engaging exercises and lessons that target vocabularies, grammar, and pronunciation.

Tso (2021), assessed the effectively use of mobile apps by the EFL of university students of Hong Kong. He found that they frequently used three apps i.e., dictionary app, ABA English app and Hemingway. He stated that these apps helped them in their vocab development along with phonology and morphology.

As technology spread its uses all over the world, its users also increased in numbers daily. People are more friendly with technology and dependent on these gadgets. Government distributed mobiles and tablets to the students to learn with technology. In this process, e-books take place over the printed texts. Individual can easily access the e-books and it is easy to handle. "Electronic books usually contain a combination of features, such as animated pictures and background sounds and music that dramatize the text" (Andriana, et.al., 2014). They stated that e-book containing images, animations and interesting visual effects provide more guidance in comparison to printed materials.

Smith & Bus (2014), compared the effect of e-story books and computer based static story pictures on elementary school students and found e-storybooks provide better opportunities for vocabulary development in contrast to computer based static story books.

Wright, Fugett & Caputa (2013), found no difference in reading comprehension scores by e-books and paper-books users.

Santos & Ilustre (2022), revealed that Facebook is most frequently used app in all the social media that helps in language and vocabulary learning. It develops writing skill of people through blogs, posts and content creation. They also concluded that these apps create a positive attitude and motivation among second language learners. In acquiring and enhancing language skill language exchange apps can be collaboratively used in teaching and learning.

Karimova, Ishanov, Mukanova, Odintsova, Aratayeva (2023), examined the impact of digital story on English language. The experimental design was conducted on 70 students of class 5<sup>th</sup>, finding revealed the use of digital story telling activities found effective for the students' English vocabulary, language and grammar in comparison to students taught with traditional method.

Muftah (2023), looked into the effectiveness of web-based learning on translation proficiency of university students. Total 93 students of third year graduation course were selected as experimental group for 9 weeks. After analysing and comparing the pre-test post-test data, it was found that web-based language learning materials has significant effect on translation proficiency on university students, research also examined the gendered effect which was found not significant.

Ekawati (2017), conducted a study to answer the question 'at what extent project-based learning helps in students' listening achievement. This study was confined on third semester students of department of English, Teacher and Training Faculty of Pancasakti University of Tegal. After analysing the data, researcher found that project-based learning model contributes in listening achievement of the students.

Ali, Nakshbandi, Saadi, & Barzani, (2022), studied effect of spell checker apps on spelling proficiency and found significant difference in spelling competence of EFL learners using spell check apps and those who used handwriting tools, learners who used spell checker features had high level of spelling competence. Correct use of grammar is essential element for all four language skills. Correct and appropriate spellings and grammar enhances the quality of writing. Language is a means of communication; people communicate other by using simple languages with its proper grammatical structure. If anyone is unable to use the correct grammar pattern, the message he/she wants to convey may be vary. For example- 'your' & 'you're' both pronunciations are same uses are different. In this way various grammar and spell checker applications help us to improve our language.

Schlechtweg (2023), found significant effect of phonetic software 'Praat' on pronunciation of German learners in English language.

Kabooha and Elyas, (2018), conducted a study to check the effect of YouTube as multimedia instruction for vocabulary learning; they collected data from both teachers and students. They found that the 100 students have the significant effect of YouTube media and got improvement in their second language vocabulary by using

YouTube as multimedia instruction in their learning. YouTube media helps to improve and strengthen the vocabulary learning, understanding and memorizing it.

Wulandari, Hartatik, & Ifianti (2021), investigated the effect of YouTube as a digital media on students' speaking proficiency of *Desa Inggris Singosari*. Data were collected by speaking test and scoring rubrics from 15 students and found the significant effect of YouTube on students' speaking proficiency.

Adnyani (2018), observed that use of interpretive drills, active songs and flashcards helped in enhancing listening skills of early childhood learners and also motivate them. Language games are quite effective and helps learners to learn language in an interesting way. It is creative and interactive method of teaching and learning which makes learning more easier and stress free. According to Kiryk (2010), 'Games often incorporate logical reasoning, communication, kinesthetics, visual stimulation and spatial relations.'

Antari, Arini, Sumantri (2019), investigated the effect of word square learning model assisted by image media on speaking skills of grade 3<sup>rd</sup> students. Findings revealed that it influences the students' speaking skill of Cluster XIV of Buleleng District.

Zein & Pushpita (2021), observed the effect of BTPB on language skills of kindergarten children. They used ADDIE model to test the effectiveness and found that BTPB had significant effect on language skills of the learners.

Yeni, Putra, Angranni, Tanjung (2021), found the development of students' native language after utilizing animated media in Minangkabau tunes that influence the kid's creativity so they could communicate their thoughts in mother tongue.

Ustari, Sumantri, Jayanta (2018), concluded that dramatic learning model assisted by hand puppets had significant effect on students' speaking skill of grade three.

Sejdiv (2017), in a quasi-experimental study investigated on the impact of multimedia technology on listening comprehension of primary school students and found significant effect of multimedia technology on listening comprehension of students.

Jeong (2018), developed a way for English language competence through Multimedia assisted language learning and revealed that integration of multimedia as language learning with classroom activities motivated learners to improve communication skills in English as a foreign language.

Dzasezheva, et.al. (2023), in their study found the effectiveness of multimedia educational presentations in foreign language teaching, particularly for the formation of communicative competence in future teachers.

Li (2023), done a meta-analysis on 20 experimental studies conducted to see the effect of MALL on learners' language skills of and concluded that MALL developed more effectively listening skills of EFL learners than the traditional one.

# Findings of the study-

Various studies are reflecting that these devices have effect on learning new languages, and help learners to enhance their language competence in easier way. These digital devices are categorized as-

Table-1: categorization of digital devices based on the findings

Serial no.	Category	Digital devices
1.	Multimedia tools	audio, video, graphical images, e-books, audio-books, podcasts, digital storytelling and animations
2.	Language learning apps-	Duolingo, Hemingway, Babbel, Praat and Rosetto stone.
3.	Language exchange apps	Facebook and web-based learning apps
4.	Grammar & spell check	Grammarly, online spell checker
5.	Language learning platforms	YouTube, British English, ChatGPT and online dictionary

6.	Language games	Word squares, quiz, visual games, song-
		based games, flashcard making game and
		role-modeling

The above literatures reviewed by the researchers reflected that integration of digital devices such as audio-videos, texts, animations, graphics, various language learning apps, language games and digital platforms in teaching -learning processes have strong effect on English language that helps in enhancing English language competence including language skills (LRSW), grammar, vocabulary and pronunciations. Results of these studies also suggested that integration of digital devices develop positive attitudes and motivate students towards language learning.

### Conclusion-

After reviewing the various research papers and articles, researchers found that digital devices and multimedia tools help in enhancing language competence and they also describe the implications of using various digital devices and multimedia tools on language learning; such as language skills (LRSW), grammar, vocabulary and pronunciations. Integrating these digital devices in learning made language learning easier and more convenient for language learners that they can access any digital tool anytime anywhere. Interactive multimedia tools enhance learners' motivation, develop positive attitude and made them active learners while learning any new language. Digital devices provide opportunities for learner specific contents, interactive learning experiences and enjoyable platform for language learning. Multimedia and digital tools connect learners with real world and help them in developing their communication skill. Digital tools provide immediate feedback and positive sights and sounds that creates better language learning environment.

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#### References-

Adriana G. B., Zsofia K. T. & Cornelia A.T. K. (2014). Affordances and limitations of electronic storybooks for young children's emergent literacy. *Developmental review*. Retrieved from <a href="https://www.researchgate.net/publication/270345306">https://www.researchgate.net/publication/270345306</a> Affordances and limitations of electronic storybooks for young children%27s emergent literacy

Adnyani, N. W. S. (2018). Metode total physical response (TPR) untuk pengembangan kemampuan mendengarkan dalam pembelajaran bahasa Inggris bagi anak usia dini. *Pratama Widya: Jurnal Pendidikan Anak Usia Dini, 3(2)*. <a href="https://doi.org/10.25078/pw.v3i2.735">https://doi.org/10.25078/pw.v3i2.735</a>

Ali, H.F., Nakshbandi, L.J., Saadi, F., & Barzani, S.H.H. (2022). The Effect of Spell-Checker Features on SpellingCompetence among EFL Learners: An Empirical Study. *International Journal of Social Sciences and Educational Studies*, 9(3), 101-111. Doi: 10.23918/ijsses, 9(3), 101.

Antari, N. M. W., Arini, N. W., & Sumantri, M. (2019). Pengaruh model pembelajaran word square berbantuan media gambar terhadap keterampilan berbicara. *Jurnal Penelitian Dan Pengembangan Pendidikan, 3(3),* 174–182. <a href="https://doi.org/10.23887/jppp.v3i3.18160">https://doi.org/10.23887/jppp.v3i3.18160</a>

Dzasezheva, L., Rebro, O., Tikhonova, I., Potapova, O., Deputatova, N., & Rets, N. (2023). Impact of Multimedia Technology on the formation of foreign language communicative competence in students. *Revista Conrado*, 19(90), 297-303.

Ekawati, Y. N. (2017). Peningkatan Kemampuan mendengarkan (listening) mahasiswa bahasa inggris melalui model pembelajaran "project-based learning." Cakrawala: Jurnal Pendidikan, 11(2), 135–143. https://doi.org/10.24905/cakrawala.v11i2.121

Hiel, R.C., Wu, S. J., Lee, J.J. & Schmidth, T. (2016). A review of mobile language learning applications: trends, challenges and opportunities. *The EUROCALL Review*, 24(2). Retrieved from <a href="https://www.researchgate.net/publication/313346126">https://www.researchgate.net/publication/313346126</a> A review of mobile language learning applications trends challenges and opportunities

Jeong, K. (2018). Developing EFL learners' communicative competence through multimedia-assisted language learning. \*Journal of Theoretical and Applied Information Technology, 96(5), 1367-76.

Retrieved from <a href="https://www.jatit.org/volumes/Vol96No5/19Vol96No5.pdf">https://www.jatit.org/volumes/Vol96No5/19Vol96No5.pdf</a>

Kabooha, R., & Elyas, T. (2018). The effects of YouTube in multimedia instruction for vocabulary learning:

Perception of EFL students and teachers. English Language Teaching, 11(2), 72-81.

<a href="http://doi.org/10.5539/elt.v11n2p72">http://doi.org/10.5539/elt.v11n2p72</a> Santos, K.D. & Ilustre, R. (2022). Social media platforms as pedagogical tools in language acquisition. *Journal of world Englishes and education, 4(20.* Retrieved from

https://www.researchgate.net/publication/359832898\_Social\_Media\_Platforms\_as\_Pedagogical\_Tools\_in\_Language\_Acquisition

Karimova, G., Ishanov, P., Mukanova, S., Odintsova, S., & Aratayeva, A. (2023). The effects of using digital stories and media in foreign language teaching. International Journal of Education in Mathematics, Science, and Technology (IJEMST), 11(5), 1113-1130. <a href="https://doi.org/10.46328/ijemst.3599">https://doi.org/10.46328/ijemst.3599</a>

Kiryk, T.A. (2010). Using Games in a Foreign Language Classroom. *MA TESOL Collection*.

Retrieved from

https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=1488&context=ipp collection

Klassen, J. & Milton, P. (2010). Enhancing English Language Skills using Multimedia: Tried and Tested.

Computer assisted Language learning. Retrieved from

П

https://www.researchgate.net/publication/232959977 Enhancing English Language Skills using Mu ltimedia Tried and Tested

Li, R. (2023). Effects of Mobile-Assisted Language Learning on EFL Learners' Listening Skill Development. *Educational Technology & Society*, 26(2), 36-49.

https://doi.org/10.30191/ETS.202304\_26(2).0003

Mahdi, H. S. (2018). Effectiveness of Mobile Devices on Vocabulary Learning: A Meta-Analysis.

\*\*Journal of Educational Computing Research, 56(1), 134–154.\*\*

https://doi.org/10.1177/0735633117698826

Muftah, M. (2023), The effects of web-based language learning on university students' translation proficiency. *Journal of Applied Research in Higher Education*,15(5), 1420-1439. https://doi.org/10.1108/JARHE-05-2022-0173

Oyeyemi, A.F., Abioye, O., & Daniel, O.U. (2016). The Effects of Interactive Multimedia on English Language Pronunciation Performance of Pupils in the Nigerian Primary Schools. *Research on Humanities and Social Sciences*, 6(9). Retrieved from <a href="https://core.ac.uk/download/pdf/234675058.pdf">https://core.ac.uk/download/pdf/234675058.pdf</a>

Pandey, M. (n.d.) The use of multimedia in teaching and learning in English Language. Retrieved from https://www.academia.edu/5649576/Use\_of\_Multimedia\_in\_English\_Language\_Teaching

Pun, M. (2013). THE USE OF MULTIMEDIA TECHNOLOGY IN ENGLISH LANGUAGE TEACHING: A GLOBAL PERSPECTIVE. Crossing the Border: International Journal of Interdisciplinary Studies, 1(1). Retrieved from

https://www.nepjol.info/index.php/CTBIJIS/article/view/10466/8517

Schlechtweg, M. (2023). Optimizing English Pronunciation of German Students Online and with Praat. In: Suárez, MdM., El-Henawy, W.M. (eds) Optimizing Online English Language Learning and Teaching. English Language Education, 31. Springer, Cham. <a href="https://doi.org/10.1007/978-3-031-27825-9">https://doi.org/10.1007/978-3-031-27825-9</a> 14

Smith, R. (2018). The effectiveness of language learning apps in improving vocabulary and grammar. Journal of Digital Language Education, 11(1), 45-60.

Sejidiu, S. (2017). Are Listening Skills Best Enhanced Through the Use of Multimedia Technology. Digital education review, 32. Retrieved from https://files.eric.ed.gov/fulltext/EJ1166469.pdf

Tso, A.W. (2021). An investigation of the effectiveness of English language apps for EFL vocabulary building. Journal of global literacies, technologies and emerging pedagogies, 6(1). <a href="https://www.researchgate.net/publication/353141770">https://www.researchgate.net/publication/353141770</a> An investigation of the effectiveness of English language apps for EFL vocabulary building

Ustari, K. S., Sumantri, M., &; Laba Jayanta, I. N. (2019). THE EFFECT OF THE HAND PUPPET-ASSISTED DRAMATIC LEARNING LEARNING MODEL ON SPEAKING SKILLS. *Journal of Education Technology*, 2(4), 153–159. https://doi.org/10.23887/jet.v2i4.16427

Wright, S., Fugett, A. & Caputa, F. (2013). Using E-readers and internet resources to support comprehension. *Educational Technology & Society, 16(1)*. Retrieved from <a href="https://www.researchgate.net/publication/282499458\_Using\_E-readers\_and\_internet\_resources\_to\_support\_comprehension">https://www.researchgate.net/publication/282499458\_Using\_E-readers\_and\_internet\_resources\_to\_support\_comprehension</a>

Wulandari, S., Hartatik, S., & Ifianti, T. (2021). Efektifitas Youtube sebagai Media Pembelajaran Digital terhadap Kemampuan Berbicara Siswa di Desa Inggris Singosari. *Prosiding Seminar Nasional IKIP Budi Utomo*, 2(01), 302-308. <a href="https://doi.org/10.33503/prosiding.v2i01.1409">https://doi.org/10.33503/prosiding.v2i01.1409</a>

Yeni, I., Putra, I. E. D., & Anggraini, V., Tanjung, A. (2022). Development of minangkabau song animation media towards the development of mother's language for early childhood. Seminar Nasional Pendidikan Pra-Munas ISPI VIII, 64–70. <a href="https://doi.org/10.2991/assehr.k.210618.064">https://doi.org/10.2991/assehr.k.210618.064</a>

Yulian, R., Ruhama', U., & Utami, P. Y. (2022). EFL Slow Learners' Perception in Speaking with Authentic Multimedia Assisted Language Learning. *International Journal of Language Education*, 6(2), 183. <a href="https://doi.org/10.26858/ijole.v6i2.21511">https://doi.org/10.26858/ijole.v6i2.21511</a>

Zein, R., & Puspita, V. (2021). Efektivitas pengembangan model bercerita terpadu terhadap kemampuan berbahasa anak usia 5-6 Tahun. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 5(2), 2168–2178. https://doi.org/10.31004/obsesi.v5i2.1123

Попова. (2022). PROFESSIONAL FOREIGN LANGUAGE COMPETENCE FORMATION USING EDUCATIONAL MULTIMEDIA TECHNOLOGIES. Rudn.

https://www.academia.edu/67939433/PROFESSIONAL FOREIGN LANGUAGE COMPETENCE
FORMATION USING EDUCATIONAL MULTIMEDIA TECHNOLOGIES?sm=b



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