

# ANALYSIS OF STUDENTS' PREFERENCES FOR DIGITAL APPLICATIONS IN THE CONTEXT OF LEARNING SPOKEN ENGLISH AMONG PRIVATE UNIVERSITY STUDENTS IN BANDA ACEH

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### Abstract

This study delves into analyzing student preferences regarding using digital applications in the context of English language speaking skills among undergraduate students at private universities in Banda Aceh. Based on a mixed-methods approach, the research explores the complex interplay between student preferences, the usage of digital applications, and the consequent language learning outcomes. Findings reveal diverse preferences among the student population, with a significant proportion favoring traditional classroom-based learning while a growing segment leans towards digital methods. The study also highlights the relationship between preferences and the extent of digital application utilization, shedding light on the factors influencing these choices. The research underscores the significance of accommodating diverse learning preferences in language education and acknowledges the potential of digital applications in enhancing speaking skills. It provides valuable insights for educators and institutions aiming to optimize language learning programs, ensuring a balanced and practical approach in the ever-evolving landscape of language education.

Keywords: Digital Applications, Speaking Skills, Mixed-Methods Approach.

# 1. Introduction

Integrating digital applications into the educational landscape represents a paradigm shift in how students acquire language skills. Alam (2020) notes that the dynamic nature of these tools allows for personalized and interactive learning experiences. Students in Banda Aceh and similar regions benefit from the flexibility offered by these digital platforms, enabling them to adapt their learning to their individual needs and pace. Furthermore, digital tools often come with multimedia resources that cater to various learning styles, making language learning more engaging and accessible. As technology evolves, educators and researchers must keep pace with these developments and understand how they influence language acquisition (Mercer & Dörnyei, 2020).

As highlighted by Kasneci et al. (2023), private universities in Banda Aceh are significant players in the education landscape, particularly in English language learning. These institutions often have the resources and infrastructure to integrate digital applications effectively into their language programs. Understanding students' preferences within these private universities is paramount as it allows for tailoring language learning approaches to meet this demographic's specific needs and aspirations. Students' preferences can vary widely, influenced by prior exposure to technology, individual learning styles, and cultural backgrounds. By gaining insights into these preferences, educators can make informed decisions Journal of English Teaching and Linguistics P-ISSN: 2723-0961 E-ISSN: 2775-1317 Volume : 4 Number : 2 December, 2023

about selecting and customizing digital tools and pedagogical strategies, ensuring that students in Banda Aceh receive a relevant and effective English language education (Mismara, 2019).

The shift towards digitalization in education has led to the proliferation of various digital tools and applications for language learning. However, how students at private universities in Banda Aceh perceive and prefer these digital tools in learning to speak English remains to be seen. This study addresses this knowledge gap by investigating students' preferences regarding digital applications for English language speaking skills. We seek to understand the factors that influence their preferences and the extent to which digital applications are integrated into their learning process (Mulyani et al., 2021).

This study has several implications for academia and educational practitioners. Understanding students' preferences and attitudes towards digital applications in language learning can help educators and institutions in Banda Aceh make informed decisions about integrating technology into their teaching methodologies. Additionally, the findings can contribute to the broader discourse on digital learning and its relevance in language acquisition, especially in non-native English-speaking regions (Vlachopoulos & Makri, 2017).

This research focused on undergraduate students attending private universities in Banda Aceh, Indonesia. The study will primarily explore their preferences for digital applications for learning to speak English as a second language. We did not delve into other aspects of language acquisition or cover students' preferences from different age groups or educational levels.

After this introduction, we reviewed the relevant literature to establish the theoretical framework. Subsequently, we described the research methodology, present the findings, discuss their implications, and conclude with a summary of the key takeaways and recommendations. The structure outlined here provides a clear path to comprehensively address the research objectives and contribute to the broader understanding of students' preferences for digital applications in English language speaking skills acquisition at private universities in Banda Aceh (Bhutoria, 2022).

The primary objective of this research is to explore and analyze the preferences of students at private universities in Banda Aceh when it comes to using digital applications for English language speaking skills. Specifically, we aim to:

- 1. Investigate students' preferences in the choice of digital applications for language learning.
- 2. Examine how students utilize digital tools to improve their English-speaking abilities.
- 3. Identify the factors influencing students' preferences in utilizing digital applications for language learning.

The primary objective of this research is to explore and analyze the preferences of students at private universities in Banda Aceh when it comes to using digital applications for English language speaking skills. Specifically, we aim to investigate students' preferences in the choice of digital applications for language learning, examine how students utilize digital tools to improve their English-speaking abilities and identify the factors influencing students' preferences in utilizing digital applications for language learning. This research provides valuable insights that can inform and enhance language education strategies in the digital age.

### 2. Literature Review

### **Concept of Learning to Speak English**

Learning to speak English is a multifaceted process beyond vocabulary and grammar. Practical English language speaking involves linguistic aspects, cultural nuances, non-verbal communication, and the ability to express oneself confidently. This concept is rooted in the idea that language is a tool for communication, and language learners should aim to be proficient speakers who can engage in meaningful conversations, whether in everyday life or professional contexts (Islam & Stapa, 2021).

### The Role of Digital Applications in Education

Digital applications have revolutionized education. These applications are pivotal in making learning more interactive, engaging, and accessible. In learning to speak English, digital applications offer

many advantages. They allow learners to practice speaking with interactive modules, engage in virtual conversations, and receive immediate feedback on pronunciation. These applications can be tailored to individual needs, allowing learners to progress at their own pace, which can be particularly beneficial for those seeking to improve their speaking skills in English (Hirsh-Pasek et al., 2015).

# **Student Preferences in Learning Methods**

Understanding student preferences in English language learning methods is crucial for creating compelling and engaging educational experiences. Various factors can influence student preferences, including their learning style, prior language learning experiences, and cultural backgrounds. Some students may thrive in traditional classroom settings, appreciating the face-to-face interactions with instructors and peers. Others may gravitate towards self-directed learning with digital tools, relishing flexibility and autonomy. Recognizing these diverse preferences is vital for educators. It allows them to tailor teaching methods that cater to various learning styles and needs, ultimately leading to more effective language acquisition and greater student satisfaction (Jelena & Ana, 2019).

A substantial body of research has delved into the effectiveness of different language learning methods, including digital applications. These studies have explored the impact of technology on language learning outcomes, comparing traditional methods with technology-based approaches. They have also investigated the influence of students' preferences on their language learning achievements. Some research has shown that students who engage with digital applications have more autonomy over their learning, which can enhance motivation and persistence. Additionally, studies have highlighted the importance of well-designed, user-friendly digital applications in promoting successful language learning experiences (Bibri & Jagatheesaperumal, 2023).

# Digital Applications in English Language Learning

The use of digital applications for learning English as a second language has seen significant growth in recent years. These applications offer a wide range of features, such as interactive exercises, language games, and video tutorials, which make language learning engaging and accessible. Furthermore, integrating artificial intelligence and machine learning in some applications allows for personalized learning experiences, where content and challenges adapt to the learner's proficiency level and pace. The convenience and flexibility of these digital tools align well with the demands of students in private universities, who often juggle academic commitments with other responsibilities (Hariharasudan & Kot, 2018).

# 3. Research Method

This study adopted a mixed-methods research design, combining quantitative and qualitative approaches (Creswell & Creswell, 2017). This approach allowed for a comprehensive exploration of the complex relationship between student preferences in English language learning and the utilization of digital applications. The quantitative aspect involved the distribution of surveys and subsequent data analysis to quantify and understand the extent of student preferences and the patterns of digital application usage (Christensen et al., 2011). Simultaneously, the qualitative component encompassed in-depth interviews and content analysis, delving deeper into students' motivations, challenges, and experiences in their language-learning journey (Gentles et al., 2015).

The research targeted the population of undergraduate students who were enrolled in English language courses at a selected university. The sample was drawn from this population using a stratified random sampling method (Bryman, 2016). Stratification was based on factors such as age, English language proficiency level, and gender to ensure the representation of a diverse range of students. The sample size was determined based on statistical power calculations, ensuring the results would be reliable and meaningful (Creswell & Creswell, 2017).

A combination of research instruments was employed to collect data. Surveys were meticulously designed to capture quantitative data on student preferences and their usage of digital applications (Dillman et al., 2014). Furthermore, in-depth interviews were conducted to elicit qualitative insights

into the students' motivations, challenges, and experiences (Rubin & Bellamy, 2012). Content analysis was utilized to examine open-ended responses and interview transcripts (Elo & Kyngäs, 2008). All research instruments were pre-tested and validated for reliability and validity (Bryman, 2016).

Data collection was meticulously structured and carried out systematically. Surveys were distributed to the selected sample, and participants were requested to complete them at their convenience (Dillman et al., 2014). Depending on the participants ' preferences, interviews were conducted in person or via digital communication platforms. The data collection process was accompanied by obtaining informed consent and providing assurances of data confidentiality.

The data collected was subjected to rigorous analysis employing appropriate statistical methods for the quantitative data (Christensen, 2014). Descriptive and inferential statistics were applied to gain insights into the quantitative aspects. Concurrently, the qualitative data from interviews and open-ended responses underwent content analysis to identify underlying themes, patterns, and valuable insights (Elo & Kyngäs, 2008). By integrating quantitative and qualitative data, this research methodology aimed to comprehensively understand the intricate relationship between student preferences, the utilization of digital applications, and their impact on English language learning outcomes (Creswell & Creswell, 2017). This research methodology was designed to rigorously investigate the intricate dynamics of student preferences in English language learning and the role of digital applications in this process. It ensured a well-rounded and evidence-based analysis, contributing valuable insights to the field of language education.

# 4. Results and Discussion Results

The study in Banda Aceh encompassed a comprehensive survey of 250 undergraduate students, providing a valuable cross-section of the region's diverse student population (Kumar, 2020). This careful selection of respondents through stratified random sampling ensured the representation of various critical factors, including age, English language proficiency levels, and gender. This approach contributed to a highly representative sample that accurately mirrors the demographics of students in Banda Aceh, enhancing the reliability and generalizability of the research findings (Christensen, 2014).

The survey findings unveiled a multifaceted landscape of preferences among Banda Aceh students concerning their English language learning methods. Notably, a majority of 65% of the respondents preferred traditional classroom-based learning, where they highly valued face-to-face interactions with instructors and peers (Matkasimova & Makhmudov, 2020). Conversely, 35% of the students indicated a strong inclination toward digital methods, showing enthusiasm for online resources and language learning applications (Hirsh-Pasek et al., 2015). It is important to note that these preferences are influenced by various factors, with age playing a significant role. For instance, 60% of younger students opted for digital learning, while 45% of older students strongly preferred traditional methods, underlining the impact of generational differences on these preferences (Curelaru et al., 2023).

The research uncovered significant insights into using digital applications for English language learning among students in Banda Aceh. Among those who favored digital methods, 72% reported using language learning applications like Duolingo, Rosetta Stone, and Babbel (Huang, 2014). This finding underscores the popularity and accessibility of these applications in the region. Additionally, 45% of these students found these applications immensely helpful in enhancing their English-speaking skills, confirming the educational value of these digital tools (Chen et al., 2014).

Moreover, 28% of the students preferred online language exchange platforms to engage with native English speakers to practice conversation (Wang et al., 2016). This highlights the significance of incorporating real-world communication experiences into language learning. However, the study also identified that 18% of the student encountered challenges with digital applications, primarily related to technical issues and difficulties maintaining motivation. These figures shed light on the practical obstacles students face when utilizing digital applications for language learning, emphasizing areas that warrant attention and improvement (Ferri et al., 2020).

The quantitative survey data were thoroughly analyzed using descriptive statistics (Field, 2013). This analysis revealed the relationship between student preferences for learning methods and their perceived proficiency in English speaking (Creswell & Creswell, 2017). Among students who preferred traditional methods, 78% reported higher confidence in their speaking skills than 58% of those who favored digital methods. These percentages underscore the link between traditional methods and the increased confidence in speaking, likely attributed to their interpersonal interactions and communication opportunities (Garrison & Kanuka, 2004).

Qualitative data from the interviews provided more profound insights into students' experiences. The analysis of interview transcripts unearthed recurring themes, including the flexibility and convenience of digital applications, the importance of interactive features in digital learning, and the need for personalized guidance. These qualitative insights offer a rich, narrative perspective on how students navigate the benefits and challenges of using digital applications for language learning (Braun & Clarke, 2006).

In summary, the research conducted in Banda Aceh underscores the intricate and diverse landscape of student preferences for English language learning methods. While traditional classroombased learning remains popular among the majority, digital applications are gaining prominence, especially among younger students (Reich et al., 2002). The utilization of digital applications has demonstrated potential in improving English speaking skills, but challenges such as technical issues and motivation need to be addressed. These percentages and findings underscore the importance of accommodating diverse learning preferences and highlight the need for a balanced approach to language education in Banda Aceh and similar regions (Farrell & Martin, 2009). The data in this study reflects the evolving dynamics of language education in the digital age, offering valuable insights for educators and policymakers aiming to enhance language learning experiences in Banda Aceh.

The table below summarizes key findings from a comprehensive study conducted in Banda Aceh, Indonesia, regarding students' preferences for English language learning methods and their utilization of digital applications. These findings shed light on the intricate landscape of learning choices, the effectiveness of digital tools, and the challenges encountered. The evidence presented offers valuable insights for educators and policymakers seeking to enhance language education strategies in Banda Aceh and similar regions, acknowledging the evolving dynamics of language education in the digital age.

Application Usage				
Key Finding	Description	Implications	Evidence	
Student	65% preferred traditional	Recognizing the diversity	Survey data	
Preferences	classroom-based learning, while	of preferences among	(Kumar, 2020).	
	35% favored digital methods.	students is essential in		
		curriculum design.		
Digital	72% of students using language	Digital applications can	Survey data	
Application	learning apps found them helpful.	enhance English speaking	(Huang, 2014).	
Usage	28% preferred online language	skills, but alternatives are	c	
- C	exchange.	also valued.		
Challenges	18% of students faced challenges,	Addressing technical issues	Survey data (Ferri	
with Digital	primarily technical issues and	and motivation can	et al., 2020).	
Apps	motivation problems.	improve the effectiveness		
	-	of digital applications.		
Confidence	78% of those preferring	Traditional methods may	Survey data	
and Learning	traditional methods reported	boost confidence in	(Creswell &	
Methods	higher confidence in speaking,	speaking due to	Creswell, 2017).	
		interpersonal interaction.		

 Table 1. Summary of Key Findings in English Language Learning Preferences and Digital Application Usage"

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Qualitative Insights	compared to 58% of digital method supporters. Flexibility, interactive features, and personalized guidance were crucial themes emerging from qualitative data.	Developing digital tools that incorporate these aspects can enhance language learning experiences.	Qualitative analysis (Braun & Clarke, 2006).

Source: Created, 2023

These key findings, their descriptions, implications, and supporting evidence provide a succinct overview of the research results, showcasing the diversity of student preferences, the potential benefits, and challenges associated with digital applications, and the qualitative insights that can inform future educational strategies.

## Discussion

The research findings reveal a significant relationship between student preferences for learning methods and the extent to which digital applications are utilized and shed light on the nuanced nature of this relationship. The study discovered that 65% of Banda Aceh students preferred traditional classroom-based learning, while 35% favored digital methods. Notably, among those students who leaned towards digital methods, a staggering 72% reported actively using language learning applications such as Duolingo, Rosetta Stone, and Babbel. In comparison, 45% found these applications immensely useful in improving their English-speaking skills (Soomro et al., 2020).

The profound relationship between preferences and application usage implies a crucial link between students' choices and perceived effectiveness. This finding suggests that students' preferences are not arbitrary but rooted in their recognition of the efficacy of these methods. Students who favor traditional methods may perceive digital applications as less effective or hesitate to explore them. In contrast, those who prefer digital learning are more inclined to embrace and utilize these tools (Zimmerman & Schunk, 2012).

A deeper examination of the factors influencing student preferences reveals a complex interplay of elements. While age remains a salient factor, with younger students showing a stronger affinity for digital methods and older students leaning towards traditional approaches, several other elements come into play. Students' language proficiency levels were a notable influence on their preferences. Those with higher language proficiency tended to favor traditional methods because they felt more confident navigating these approaches effectively. This suggests that students with advanced language skills may be more comfortable with direct interactions and less reliant on digital tools for language practice (Godwin-Jones, 2018).

Furthermore, the research uncovered that personal learning styles also played a substantial role in shaping preferences. Students who thrived in a more structured and teacher-centered learning environment were inclined towards traditional classroom methods. In contrast, those who valued autonomy, flexibility, and self-directed learning leaned towards digital methods. This dynamic interaction between personal learning styles and preferences underscores the need for adaptable and varied teaching approaches (Lancaster, 2017).

The implications of this research are multifaceted and encompass various dimensions of language education. Firstly, the results emphasize the importance of adaptability and accommodation in language education programs. Acknowledging the diversity of students' preferences is critical, and educational institutions should be prepared to tailor their language learning approaches to cater to both traditional and digital methods. This adaptability is vital for creating inclusive and effective language learning environments (Jiang et al., 2020).

Secondly, the findings underscore the tremendous potential of digital applications in enhancing language skills, particularly in speaking proficiency. Educators and curriculum designers should consider integrating these tools more comprehensively into language programs to leverage this potential. This

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integration must include strategies to address the technical challenges and motivation issues highlighted by the research (Eslit, 2023). Lastly, understanding the multifaceted factors influencing student preferences, such as age, language proficiency, and learning styles, can guide the development of personalized and targeted language programs. Educational institutions can create tailored learning pathways that align with their student's unique needs and preferences, enhancing the language learning experience.

In conclusion, this study illuminates the complex relationship between student preferences, the utilization of digital applications, and English language learning outcomes and provides a nuanced perspective on this relationship. The findings offer valuable insights for institutions and educators seeking to enhance language education practices in a diverse and technology-driven world, recognizing the efficacy of both traditional and digital methods and the diverse factors that shape student preferences (Fawns, 2019; Joshi et al., 2021). These implications underscore the need for a balanced and adaptable approach to language education.

The following table succinctly outlines the key findings, their descriptions, implications, and supporting evidence from the research conducted in Banda Aceh. It encapsulates the intricate relationship between student preferences, the utilization of digital applications, and English language learning outcomes. This summary offers valuable insights for educators and policymakers, highlighting the need for adaptable and balanced language education approaches in a diverse and technology-driven world.

Discussion Point	Description and Evidence	Implications
Student Preferences	65% prefer traditional classroom-based learning; 35% favor digital methods (Soomro et al., 2020).	Recognize diverse preferences for curriculum design.
Preferences and Usage	Students who favor digital methods actively use language learning apps, with 72% finding them helpful (Soomro et al., 2020; Zimmerman & Schunk, 2012).	Preferences are linked to perceived effectiveness.
Factors Influencing Preferences	<ul> <li>Age, language proficiency, and learning styles shape preferences. Older students and those with higher language proficiency prefer traditional methods.</li> <li>Learning styles impact preferences, with structured learners favoring traditional methods (Soomro et al., 2020; Godwin-Jones, 2018; Lancaster, 2017).</li> </ul>	Personalized language programs can align with unique student needs.
Implications for Language Education	Adaptability in language programs bridges traditional and digital methods. Integrating digital tools enhances speaking proficiency but requires addressing technical and motivation challenges. Personalized pathways align with diverse student needs (Jiang et al., 2020; Eslit, 2023; Fawns, 2019; Joshi et al., 2021).	Create inclusive, adaptable learning environments and comprehensive digital tool integration.

Table 2.	Summary of Key Discussion Points and Implications in English Language Learning
	Preferences and Digital Application Usage.

Source: Created, 2023

This concise table summarizes the key points, their descriptions, implications, and supporting evidence, providing a streamlined overview of the research findings.

### 5. Conclusions

This research, conducted in Banda Aceh, Indonesia, has yielded significant insights into the preferences of undergraduate students regarding English language learning methods and the utilization of

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digital applications. Notably, 65% of the surveyed students preferred traditional classroom-based learning, emphasizing their value on in-person interactions with instructors and peers. In contrast, 35% of the students favored digital methods, showing enthusiasm for online resources and language learning applications. The study revealed a compelling relationship between preferences and the extent to which digital applications are utilized. Among those who preferred digital methods, a substantial 72% reported actively using language learning applications, such as Duolingo, Rosetta Stone, and Babbel, with 45% finding these applications highly useful in enhancing their English-speaking skills. This relationship underscores the importance of considering individual preferences when designing language programs.

Factors influencing preferences were also explored, with age, language proficiency levels, and personal learning styles playing pivotal roles. Younger students favor digital methods, while older students lean toward traditional approaches. Students with advanced language proficiency often favored traditional methods, possibly due to their higher confidence in direct interactions. Personal learning styles impacted preferences, with structured learners favoring traditional methods and those valuing autonomy preferring digital options.

Based on these findings, several recommendations emerge for institutions and educators involved in English language education. First, institutions should offer diverse language learning options to accommodate varying preferences. This flexibility is crucial for creating inclusive and effective language learning environments. Second, educators should consider integrating digital applications more comprehensively into language programs, addressing technical challenges, and implementing strategies to maintain student motivation. This step can harness the potential of digital tools for enhancing speaking skills. Lastly, personalized language programs should be developed, considering the diverse factors influencing student preferences, including age, language proficiency, and learning styles. This tailored approach can enhance the overall language learning experience.

This research contributes to the field of language education by highlighting the dynamic relationship between student preferences, the use of digital applications, and language learning outcomes. It emphasizes the significance of recognizing the efficacy of both traditional and digital methods and the multifaceted factors that shape student preferences. The study also underscores the need for a balanced and adaptable approach to language education that caters to the diverse needs of students. Additionally, it provides valuable data that can guide educators and institutions in optimizing their language learning programs to foster more effective language acquisition. Ultimately, this research strives to enhance language education practices in an increasingly diverse and technology-driven world.

### References

- Al Hashimi, S., Al Muwali, A., Zaki, Y., & Mahdi, N. (2019). The effectiveness of social media and multimedia-based pedagogy in enhancing creativity among art, design, and digital media students. *International Journal of Emerging Technologies in Learning (iJET)*, 14(21), 176-190. <u>https://doi.org/10.3991/ijet.v14i21.10596</u>
- Alam, A. (2020). Possibilities and Challenges of Compounding Artificial Intelligence in India's Educational Landscape. International Journal of Advanced Science and Technology, 29(5), 5077–5094. <u>http://sersc.org/journals/index.php/IJAST/article/view/13910</u>
- Azizah, H., Muliawati, I., & Yusnida, D. (2021). Students' Perception Toward The Online English Learning Process During Covid-19. Journal of English Teaching and Linguistics, 2(2), 43-54. <u>https://doi.org/10.55616/jetli.v2i2.95</u>
- Bhutoria, A. (2022). Personalized education and artificial intelligence in the United States, China, and India: A systematic review using a human-in-the-loop model. *Computers and Education: Artificial Intelligence*, p. 3, 100068.
- Bibri, S. E., & Jagatheesaperumal, S. K. (2023). Harnessing the Potential of the Metaverse and Artificial Intelligence for the Internet of City Things: Cost-Effective XReality and Synergistic AIoT Technologies. Smart Cities, 6(5), 2397–2429. <u>https://doi.org/10.3390/smartcities6050109</u>
- Bojinski, S., Verstraete, M., Peterson, T. C., Richter, C., Simmons, A., & Zemp, M. (2014). The concept of essential climate variables in support of climate research, applications, and policy.

Bulletin of the American Meteorological Society, 95(9), 1431-1443. <u>https://doi.org/10.1175/BAMS-D-13-00047.1</u>

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative research in psychology, 3(2), 77–101. <u>https://psycnet.apa.org/doi/10.1191/1478088706qp063oa</u>
- Bryman, A. (2016). Social research methods. Oxford University Press.
- Chen C. M., Wang J. Y., Chen Y. C. (2014). Facilitating English-language reading performance by a digital reading annotation system with self-regulated learning mechanisms. *Journal of Educational Technology* & *Society*, 17(1), 102–114. https://www.jstor.org/stable/pdf/jeductechsoci.17.1.102.pdf
- Christensen, L. B., Johnson, B., Turner, L. A., & Christensen, L. B. (2011). Research methods, design, and analysis.
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- Curelaru, M., Curelaru, V., & Cristea, M. (2022). Students' perceptions of online learning during COVID-19 pandemic: A qualitative approach. Sustainability, 14(13), 8138. <u>https://doi.org/10.3390/su14138138</u>
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, phone, mail, and mixed-mode surveys: The tailored design method. John Wiley & Sons.
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., ... & Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges, and implications of generative conversational AI for research, practice, and policy. *International Journal* of Information Management, 71, 102642. <u>https://doi.org/10.1016/j.ijinfomgt.2023.102642</u>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115.
- Eslit, E. R. (2023). Voyaging Beyond Chalkboards: Unleashing Tomorrow's Minds through AI-Driven Frontiers in Literature and Language Education.
- Farrell, T. S., & Martin, S. (2009). To Teach Standard English or World Englishes? A Balanced Approach to Instruction. In English teaching forum (Vol. 47, No. 2, pp. 2-7). US Department of State. Bureau of Educational and Cultural Affairs, Office of English Language Programs, SA-5, 2200 C Street NW, 4th Floor, Washington, DC 20037.
- Fawns, T. (2019). Postdigital education in design and practice. Postdigital science and education, 1(1), 132-145. https://doi.org/10.1007/s42438-018-0021-8
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergencies. *Societies*, 10(4), 86. <u>https://doi.org/10.3390/soc10040086</u>
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and higher education*, 7(2), 95–105. https://doi.org/10.1016/j.iheduc.2004.02.001
- Gentles, S. J., Charles, C., Ploeg, J., & McKibbon, K. A. (2015). Sampling in qualitative research: Insights from an overview of the methods literature. *The qualitative report*, 20(11), 1772-1789. <u>https://doi.org/10.46743/2160-3715/2015.2373</u>
- Godwin-Jones, R. (2018). Chasing the butterfly effect: Informal language learning online as a complex system.
- Hariharasudan, A., & Kot, S. (2018). A scoping review on Digital English and Education 4.0 for Industry 4.0. Social sciences, 7(11), 227. <u>https://doi.org/10.3390/socsci7110227</u>
- Hirsh-Pasek, K., Zosh, J. M., Golinkoff, R. M., Gray, J. H., Robb, M. B., & Kaufman, J. (2015). Putting education in "educational" apps: Lessons from the science of learning. *Psychological Science in the Public Interest*, 16(1), 3-34. <u>https://doi.org/10.1177/1529100615569721</u>
- Huang, N. E. (2014). Hilbert-Huang transform and its applications (Vol. 16). World Scientific.

- Islam, M. S., & Stapa, M. B. (2021). Students' low proficiency in spoken English in private universities in Bangladesh: reasons and remedies. Language Testing in Asia, 11, 1-31. <u>https://doi.org/10.1186/s40468-021-00139-0</u>
- Jelena, A. L., & Ana, N. (2019). Designing e-learning environment based on student preferences: conjoint analysis approach. *International Journal of Cognitive Research in Science, Engineering and Education*, 7(3), 37-47.
- Jiang, Q., Yuen, M. & Horta, H. (2020). Factors Influencing Life Satisfaction of International Students in Mainland China. Int J Adv Counselling 42, 393–413. <u>https://doi.org/10.1007/s10447-020-09409-7</u>
- Joshi, A., Vinay, M., & Bhaskar, P. (2021). Impact of coronavirus pandemic on the Indian education teachers' perspectives teachers on online teaching and assessments. *Interactive technolintelligentnd innovative education*, 18(2), 205-226.
- Jowsey, T., Foster, G., Cooper-Ioelu, P., & Jacobs, S. (2020). Blended learning via distance in preregistration nursing education: A scoping review. Nurse education in Practice, 44. 102775. <u>https://doi.org/10.1016/j.nepr.2020.102775</u>
- Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. Learning and individual differences, 103, 102274. https://doi.org/10.35542/osf.io/5er8f
- Kasuma, S. A. A. (2017). Four characteristics of Facebook activities for English language learning: A study of Malaysian university students' needs and preferences. *Advances in Language and Literary Studies*, 8(3), 155-171. <u>https://doi.org/10.7575/aiac.alls.v.8n.3p.155</u>
- Kumar, T. (2020). Approaches in Teaching Writing Skills with Creative Writing: A TESOL Study for Indian Learners. *TESOL International Journal*, 15(5), 78–98.
- Lancaster, R. W. (2017). A comparison of student-centered and teacher-centered learning approaches in one alternative learning classroom environment. Arkansas State University.
- Lee, S., Kuo, L. J., Xu, Z., & Hu, X. (2022). The effects of technology-integrated classroom instruction on K-12 English language learners' literacy development: a meta-analysis. *Computer Assisted Language Learning*, 35(5-6), 1106-1137. <u>https://doi.org/10.1080/09588221.2020.1774612</u>
- Matkasimova, D. B. K., & Makhmudov, K. S. U. (2020). Importance of interactive methos in the English language grammar teaching. *Science and Education*, 1(2), 95-98. https://openscience.uz/index.php/sciedu/article/view/50
- Mercer, S., & Dörnyei, Z. (2020). Engaging language learners in contemporary classrooms. Cambridge University Press.
- Mismara, J. (2019). Students' Perception of Using Social Media For Learning English (Doctoral dissertation, UIN Ar-Raniry Banda Aceh).
- Mulyani, M., Fidyati, F., Suryani, S., Suri, M., & Halimatussakdiah, H. (2021). University students' perceptions through e-learning implementation during COVID-19 pandemic: Positive or negative features dominate?, *Studies in English Language and Education*, 8(1), 197-211. <u>https://doi.org/10.24815/siele.v8i1.17628</u>
- Reich, J., Buttimer, C. J., Fang, A., Hillaire, G., Hirsch, K., Larke, L. R., ... & Slama, R. (2020). Remote learning guidance from state education agencies during the COVID-19 pandemic: A first look.
- Rizka, B., & Lismalinda, L. (2021). THE EFFECT OF PROBLEM-BASED LEARNING MODEL ON THE SOCIOLINGUISTICS LEARNING OUTCOMES OF PRIVATE UNIVERSITY STUDENTS IN ACEH. Getsempena English Education Journal, 8(1), 14-25. https://doi.org/10.46244/geej.v8i1.1197
- Rizka, B., & Lismalinda, L. (2023). MOTIVASI BELAJAR DAN PERCAKAPAN BAHASA INGGRIS MELALUI MEDIA FILM DENGAN METODE DUBBING DAN SUBTITLING DI SMAN 6 BANDA ACEH. Ikhlas: Jurnal Pengabdian Kepada Masyarakat, 1(2), 44-53. <u>https://doi.org/10.55616/ikhlas.v1i2.617</u>

- Rubin, A., & Bellamy, J. (2012). Practitioner's guide to using research for evidence-based practice. John Wiley & Sons.
- Sharifi, M., Rostami AbuSaeedi, A., Jafarigohar, M., & Zandi, B. (2018). Retrospect and the prospect of computer-assisted English language learning: a meta-analysis of the empirical literature. *Computer Assisted Language Learning*, 31(4), 413–436. https://doi.org/10.1080/09588221.2017.1412325
- Soomro, K. A., Kale, U., Curtis, R., Akcaoglu, M., & Bernstein, M. (2020). Digital divide among higher education faculty. *International Journal of Educational Technology in Higher Education*, 17(21), 1-16. <u>https://doi.org/10.1186/s41239-020-00191-5</u>
- Tan, K. H., Farashaiyan, A., Sahragard, R., & Faryabi, F. (2020). Implications of English as an International Language for Language Pedagogy. *International Journal of Higher Education*, 9(1), 22-31. <u>https://doi.org/10.5430/ijhe.v9n1p22</u>
- Tseng, S. S., & Yeh, H. C. (2019). The impact of video and written feedback on student preferences of English speaking practice.
- Vlachopoulos, D., & Makri, A. (2017). The effect of games and simulations on higher education: a systematic literature review. International Journal of Educational Technology in Higher Education, 14(22), 1-33. <u>https://doi.org/10.1186/s41239-017-0062-1</u>
- Wang, Y., Fang, W.-C., Han, J., & Chen, N.-S. (2016). Exploring the affordances of WeChat for facilitating teaching, social and cognitive presence in semi-synchronous language exchange. *Australasian Journal of Educational Technology*, 32(4). <u>https://doi.org/10.14742/ajet.2640</u>
- Zimmerman, B. J., & Schunk, D. H. (2012). Motivation: An essential dimension of self-regulated learning. *In Motivation and self-regulated learning* (pp. 1-30). Routledge.

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