



THE IMPACT OF TECHNOLOGY INTEGRATION ON TOEFL PERFORMANCE: ONLINE PLATFORMS AND LANGUAGE APPS AT UNIVERSITAS MUHAMMADIYAH ACEH

Lina Farsia^{1*}, Sarair²

^{1,2}Prodi Tadris English, Universitas Muhammadiyah Aceh, Banda Aceh, Indonesia

*Email : lina.farsia@unmuha.ac.id¹

Diterima Oktober 2024; Disetujui Desember 2024; Dipublikasi 31 Januari 2025

Abstract: *This study investigates the use of technology by students at Universitas Muhammadiyah Aceh in their preparation for the TOEFL exam. A quantitative descriptive approach was employed, with data collected through a structured questionnaire. The findings reveal that 90% of respondents regularly utilize technology, particularly smartphones and laptops, alongside online platforms such as YouTube, Magoosh, and Duolingo. These tools were found to be effective in providing access to study materials and practice tests, with students emphasizing their convenience and accessibility. Additionally, students reported positive impacts on their English language learning, citing increased motivation, improved time management, and greater confidence in their TOEFL preparation. The study highlights the significant role of technology in enhancing learning efficiency and recommends that educational institutions further integrate technological tools to support students in standardized test preparation.*

Keywords : *Technology in Education, TOEFL Preparation, Language Learning, Digital Platforms, Learning Effectiveness.*

Abstrak: Penelitian ini menyelidiki penggunaan teknologi oleh mahasiswa Universitas Muhammadiyah Aceh dalam persiapan mereka untuk ujian TOEFL. Pendekatan deskriptif kuantitatif digunakan, dengan data dikumpulkan melalui kuesioner terstruktur. Hasil penelitian menunjukkan bahwa 90% responden secara rutin memanfaatkan teknologi, terutama smartphone dan laptop, serta platform online seperti YouTube, Magoosh, dan Duolingo. Alat-alat ini terbukti efektif dalam menyediakan akses ke materi pembelajaran dan tes latihan, dengan mahasiswa menekankan kenyamanan dan aksesibilitasnya. Selain itu, mahasiswa melaporkan dampak positif terhadap pembelajaran bahasa Inggris mereka, seperti peningkatan motivasi, manajemen waktu yang lebih baik, dan kepercayaan diri yang lebih tinggi dalam persiapan TOEFL. Penelitian ini menyoroti peran penting teknologi dalam meningkatkan efisiensi pembelajaran dan merekomendasikan agar institusi pendidikan lebih banyak mengintegrasikan alat-alat teknologi untuk mendukung persiapan mahasiswa dalam menghadapi ujian standar.

Kata kunci : *Teknologi Pendidikan, Persiapan TOEFL, Pembelajaran Bahasa Inggris, Platform Digital, Efektivitas Pembelajaran.*

INTRODUCTION

TOEFL (Test of English as a Foreign Language) is used to evaluate non-native speakers' English proficiency. In addition to being an academic accomplishment, passing the TOEFL is an essential step for

The Impact Of Technology Integration On TOEFL....

Muhammadiyah University Aceh students to complete their coursework before their final defense. According to a rector's decree, all students at Universitas Muhammadiyah Aceh are required to take the TOEFL. English majors must receive a minimum passing score of 450, while non-majors must receive 410.

Students are under a lot of pressure to perform well on the TOEFL exam in order to meet these requirements. This makes it imperative that they comprehend how technology, particularly online platforms, language-learning applications, and virtual resources, can assist them in obtaining the necessary passing grade. As a result, the use of technology in TOEFL preparation has emerged as a critical element that needs more research. Eighth-semester English students at Universitas Muhammadiyah Aceh report feeling anxious when taking the TOEFL, in part because they haven't prepared, according to recent research by Sarair et al. (2022). Therefore, technology is also essential in helping students get ready to improve their skills.

The use of technology to prepare for the TOEFL has grown in popularity in this age of globalization and technological development. Virtual resources, language-learning applications, and online platforms provide fresh strategies that may affect how students study for this test. Examining how students use these technologies to prepare for the TOEFL is crucial. Do they favor online resources that offer specialized TOEFL preparation modules, or do they typically utilize mobile language learning applications? Do students' comprehension and English language proficiency improve as a result of using virtual resources like exam simulations or interactive learning materials?

Determining the advantages, difficulties, and effects of technology on student performance at was crucial to comprehending its role in TOEFL preparation. The study also shed light on how students used different digital tools and resources while they were learning. Through a thorough comprehension of technology use in this setting, the study described how technology helps students a improve their English language proficiency and TOEFL exam results.

The research provided deeper insights into how the integration of technology improved the quality of student preparation, allowing them to achieve the passing grade set for the TOEFL in accordance with university policy. This was made possible by gaining a more thorough understanding of the role of technology in TOEFL preparation. The study also investigated whether students' approaches to using technology varied according to their educational background, level of language proficiency, or other personal characteristics. Examining these variations yielded useful data for creating more targeted and customized TOEFL preparation plans to satisfy the unique requirements of students. Therefore, the background of this study described and investigated the connection between student performance at this university, technology, and TOEFL preparation.

LITERATURE REVIEW

The Concept of Utilizing Technology to Improve TOEFL Scores

Through a variety of strategies, students in particular can improve their TOEFL (Test of English as a Foreign Language) scores through efficient and well-guided technology use. In this context, a number of ideas

or theories are pertinent to using technology to enhance general English language proficiency. Some ideas that can be used are listed below:

a. Mobile Learning

Learning on the Go Everyone can benefit from using mobile learning as a learning tool, especially when preparing for the TOEFL. The ability of mobile learning platforms (whether iOS-based or Android-based) to assist students in improving their TOEFL performance is one of its main benefits.

Numerous language-learning apps for iOS and Android have been created recently, providing a variety of engaging and instructive features. British Council EnglishScore, Grammar TOEFL® Test Exercise, Practice for TOEFL® Test Pro, and other TOEFL preparation apps are available for download on the Google Play Store, iOS App Store, and other mobile app stores. These apps, which come in both free and paid versions, offer a number of features aimed at boosting students' motivation and ability to raise their TOEFL scores.

Several studies have demonstrated the benefits of using mobile learning to enhance language acquisition, especially in raising TOEFL scores. In her study of D3 STTAL students, Irine (2018) found that students' TOEFL scores significantly improved when they received English instruction based on mobile learning. Research by Pratiwi et al. (2023) supports this finding, stating that mobile learning of English with the goal of improving TOEFL scores had a positive impact on student attitudes toward language learning, motivation to improve language proficiency, collaborative learning models, and language skills.

b. Blended Learning

A teaching strategy known as blended learning incorporates aspects of both online and in-person instruction. According to Santiana et al. (2021), who quote Watson et al. (2015), blended learning is a hybrid learning model that combines elements of online and traditional instruction to offer a more individualized and contemporary learning environment.

According to Thorne (2013), blended learning is a hybrid system that concurrently integrates two elements or approaches: multimedia and e-learning. Online animated text, video streaming, virtual classrooms, and more are all part of the instruction. By utilizing the advantages of both approaches, this blended approach produces a comprehensive and integrated learning experience. Furthermore, Horn & Staker (2015) stress that integrating online and offline (physical) components can result in a more effective and engaging learning environment.

Blended learning is an alternative approach to language instruction that can boost students' motivation and interest in raising their TOEFL scores. According to Hasanah (2022), learning in both online and offline formats demonstrated favorable signs for raising students' awareness of the value of mastering English and improving TOEFL scores. Furthermore, Saputra (2022) concluded that the hybrid (offline and online) teaching model yielded significant results in improving students' TOEFL scores. In his research on UIN Salatiga students, Saputra (2022) indicated an average increase of 20 to 30 points in students' TOEFL scores after the implementation of the blended learning model.

c. Computer-Assisted Language Learning (CALL)

Experts in the use of technology to improve language learning have taken notice of the Computer-Assisted Language Learning (CALL) method of instruction. CALL is a teaching approach that supports and enhances language learning outcomes by using computers (Levy, 2002). By offering a variety of digital media that can be used effectively and efficiently, computer technology plays a critical role in assisting language teaching and learning (Levy, 2002). Beatty (2013) adds that by leveraging contemporary computer features and digital media, CALL has the potential to revolutionize. According to Stanley (2013), the CALL model can improve students' language proficiency by fostering a more creative and interesting learning environment.

RESEARCH METHODOLOGY

In order to investigate how Universitas Muhammadiyah Aceh students use technology to study for the TOEFL exam, this study uses a quantitative descriptive design. The quantitative method is used to collect numerical data that gives an unbiased picture of how frequently and in what ways students use technology. With this design, the study focuses on measuring particular factors like the kinds of technology for laptops, smartphones, language learning apps, how often they are used, and how well students believe these tools help them become more fluent in English. Because the research is descriptive, the data can be presented in detail, providing a clear picture of how technology aids students in their learning process, display of the information, providing a clear data presentation that provides a clear picture of how technology aids students in their educational journey.

Additionally, a structured questionnaire was given to 30 Universitas Muhammadiyah Aceh students who were actively preparing for the TOEFL exam in order to gather data for this study. For the participants' convenience and accessibility, the survey was conducted online. It contained closed-ended questions intended to collect quantitative information on technology use, including the kinds of gadgets (laptops, smartphones) and online resources (YouTube, Magoosh, Duolingo) used to prepare for the TOEFL. The effectiveness of these tools in enhancing students' English language proficiency was also investigated through the questionnaire. The information gathered shed light on how frequently and in what ways students use technology, as well as how it affects their confidence and motivation to study for tests.

Furthermore, the data collected from the questionnaire were analyzed using descriptive statistical methods to identify patterns and trends in technology use among the 30 students preparing for the TOEFL exam. The most often used platforms and devices, along with the students' opinions of their efficacy, were highlighted in the frequency distributions and percentages that were computed to summarize the responses. A clear picture of how often students used technology to prepare for the TOEFL, which tools they preferred, and how these tools affected their confidence and motivation was painted by this analysis. The data could be easily interpreted by using descriptive approach, thereby making it potential to make insightful deductions about how technology can improve students' language learning experiences.

FINDING AND DISSCUSSION

Finding

In this section, we have considered the findings according to data obtained from the questionnaires focusing on the students’ perspective towards the use of the technology and online platforms to help them in improving their TOEFL test result, including their challenges in using them. Finally, we have suggested ways to optimally utilize the technology and online platforms according to some very useful documents from the authors and our experiences as teachers.

Table 1. Students’ Perspective on the use of the technology for TOEFL preparation.

NO	Statement	Responses			
		Always	Often	Seldom	Never
1a	How often do you utilize technology in (such as computer, smartphone) for TOEFL preparation?	50%	40%	10%	0%
2a	What kind of technology do you often prefer to use in TOEFL preparation?	PC	Laptop	Smartphone	Other
		10%	30%	60%	0%
3a	What kind of applications/software do you regularly use for TOEFL preparation?	Language learning apps	Online Platforms	TOEFL software	Other
		15 %	55%	30%	0%
4a	What is your perspective on the effectiveness of the use of technology in helping you understanding TOEFL materials?	Very effective	Effective	Less effective	Not effective
		65%	30%	5%	0%
5a	Do you believe that the use of the technology makes you easier in TEOFL learning process compared to conventional method (such as books and classroom learning)?	Yes	Neutral	Not sure	No
		75%	10%	5%	0%
6a	How does the use of technology affect your time management in TOEFL preparation?	Very positive	Positive	Neutral	Negative
		50%	35%	10%	5%
7a	Do you TOEFL score increase after utilizing technology when preparing for the test?		Yes		No
			90%		10%
8a	How does the technology contribute to	Very significant	Significant	Less significant	Not sure
		50%	40%	10%	0%

<i>the development of your confidence in taking the TOEFL test?</i>		<i>Yes</i>	<i>No</i>	<i>Not Sure</i>
<i>9a</i>	<i>Do you feel more motivated in learning TOEFL by using technology compared to traditional method?</i>	<i>80%</i>	<i>10%</i>	<i>10%</i>
<i>10a</i>	<i>Are there any obstacles you encounter while using technology in preparing for TOEFL?</i>		<i>30%</i>	<i>70%</i>

The data presented in the table illustrates the students' perspective and experience in using both technology and online platform for TOEFL preparations. Based on the results of the questionnaire, the majority of students at Universitas Muhammadiyah Aceh were accustomed to using technology as part of their preparation for taking the TOEFL test. This indicated that the use of technology has become an integral part of their study strategies. Students utilize various types of technological devices, such as laptops, smartphones, and PCs, which allow them to access study materials anytime and anywhere. The most favored technological media among students are portable devices like smartphones and laptops, due to their ease of use in any location. Moreover, the results of this questionnaire show that a large majority of respondents feel more motivated to study TOEFL when using technology, indicating that technology has a strong appeal and can enhance the drive to learn. Students also stated that they regularly use learning apps, educational websites, and software specifically designed for TOEFL practice. Their familiarity with this technology allows them to tailor their study methods to their individual needs, making TOEFL preparation more efficient and effective.

Table 2. Students' Perspective on the use of online platforms for TOEFL preparation

<i>NO</i>	<i>Statement</i>	<i>Responses</i>			
		<i>Always</i>	<i>Often</i>	<i>Seldom</i>	<i>Never</i>
<i>1b</i>	<i>How often do you use online platform in preparing for TOEFL?</i>	<i>50%</i>	<i>40%</i>	<i>10%</i>	<i>0%</i>
<i>2b</i>	<i>Which online platforms or language learning apps do you primarily use for TOEFL preparation?</i>	<i>YouTube</i>	<i>Magoosh</i>	<i>Duolingo</i>	<i>Other</i>
		<i>60%</i>	<i>20%</i>	<i>10%</i>	<i>10%</i>
<i>3b</i>	<i>How frequently do you use online platforms or apps for TOEFL preparation?</i>	<i>Daily</i>	<i>Weekly</i>	<i>Monthly</i>	<i>Never</i>
		<i>56%</i>	<i>30%</i>	<i>10%</i>	<i>0%</i>
<i>4b</i>	<i>How effective do you find online</i>	<i>Very effective</i>	<i>Effective</i>	<i>Less effective</i>	<i>Not effective</i>
		<i>70%</i>	<i>20%</i>	<i>10%</i>	<i>0%</i>

<i>platforms and apps in improving your English language skills for the TOEFL exam?</i>					
		<i>Reading</i>	<i>Speaking</i>	<i>Listening</i>	<i>Writing</i>
5b	<i>Which specific skills (e.g., reading, listening, speaking, writing) do you practice the most using online platforms or apps?</i>	20%	5%	60%	15%
		<i>Strongly agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>
6b	<i>Do you believe that online resources provide sufficient practice materials for the TOEFL exam?</i>	50%	40%	10%	0%
		<i>Much better</i>	<i>Better</i>	<i>About the same</i>	<i>Worse</i>
7b	<i>How do online platforms and apps compare to traditional study methods (e.g., textbooks, in-person classes) in preparing for the TOEFL?</i>	50%	40%	10%	0%
		<i>Very satisfied</i>	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>
8b	<i>How satisfied are you with the quality of feedback or assessments provided by online platforms and apps?</i>	50%	40%	10%	0%
		<i>Frequently</i>	<i>Occasionally</i>	<i>Rarely</i>	<i>Never</i>
9b	<i>Do you use any virtual resources (e.g., online forums, study groups, webinars) to supplement your TOEFL preparation?</i>	30%	50%	20%	0%
		<i>Yes</i>	<i>No</i>	<i>Not sure</i>	
10b	<i>Would you recommend using online platforms, apps, or virtual resources for TOEFL preparation to other students?</i>	80%	0%	20%	

The result of the questionnaires illustrate the majority of the students of the University of Muhammadiyah Aceh were quite familiar with the use of online platforms, such as YouTube, educational websites, TOEFL learning apps like Magoosh and Duolingo, and online practice platforms, were the most commonly used media by students in their TOEFL preparation. These platforms offer a variety of highly useful features for students, such as TOEFL test simulations, structured practice exercises, and result analysis that helps them identify their strengths and weaknesses in English language skills. Moreover, students have a very positive perspective on the

impact of using online platforms to improve their TOEFL scores. Most of them believe that online platforms have made a significant contribution to enhancing their English skills, particularly in reading comprehension, listening, as well as speaking and writing abilities. Students also reported feeling more prepared and confident when taking the TOEFL exam, thanks to the practice they have done through online platforms. This indicates that technology, especially online platforms, plays a crucial role in helping students achieve their academic goals, namely obtaining a high TOEFL score.

Discussion

The section covers the findings of the students' perspective on the use of the technology teacher education challenges in brief from the past to the present, respectively. Accordingly, the use of the technology and online platform has a significant impact on the students' perspective and motivation in learning language to prepare them for the TOEFL test. In regard with familiarity of the use of the technology in TOEFL test preparation, based on the findings, it is clear that the students of Muhammadiyah University are used to utilizing many kinds of technology in helping the for preparing for TOEFL test. In fact, the use of technology in TOEFL preparation has revolutionized how they approach studying for the test. It not only makes learning more accessible but also allows for more personalized, efficient, and engaging study methods.

Moreover, from the students' perspective, the use of technology offers both convenience and enhanced learning opportunities. Language applications, lessons and tutorial videos, and online courses provide students the flexibility to set their own pace of learning, enabling them to focus on areas they find most challenging, such as listening comprehension or speaking fluency. In addition, the flexibility provided by these tools are very appreciative, allowing the students to access study materials, practice tests, and tutorials anytime and anywhere. It also develops a sense of autonomy, which can motivate students to take greater responsibility for their own learning and improve their time management skills. The findings also reported that students prefer to use portable technology such as laptop and mobile phones because they can ensure flexibility in learning and thus help them to manage their time well.

Furthermore, students also believe that the integration of technology in TOEFL learning is more effective than conventional classroom learning because it is more enjoyable and more engaging because it provides interactive learning tools, enable collaboration among students and also with teachers in online learning forums and immediate feedback, which enable them to correct their mistakes in real time. Jasrial (2024) reported that utilizing technology especially for grammar sections has proven to increase students' motivation in learning and hence develop their mastery in grammar because the technology provides many engaging tools and instant feedback so that the students find learning more attractive and engaging. Therefore, it can be concluded that technology has a significant impact on the students' paradigm in learning language especially for TOEFL preparation.

Respectively, the students of Muhammadiyah University also believe that learning for TOEFL preparation by using technology can boost their confidence towards it. Previously, they claim that TOELF test is quite

difficult and almost impossible to achieve a high score based on their ability. However, by utilizing technology, they find that learning for the test is actually very attractive and engaging. In fact, the students also claimed that due to their high confidence, they obtained higher score in the test compared to after learning for the test by using conventional method.

Consequently, when asked about whether they recommend using the technology in preparing for TOEFL for other students, the majority of the students would highly recommend that it is not only used in TOEFL learning but also for other kinds on language learning. This implicates the significant role of technology in learning that can develop the students' motivation and mastery in learning.

Based on the above facts, it is affirmative that technology plays a significant role in reshaping students' perspectives when learning for TOEFL preparation. By offering flexible, interactive, and diverse learning experiences, it has made the process more accessible, engaging, and effective. As students become more comfortable with digital tools and resources, their confidence in learning and using English grows, enhancing their chances of success in the TOEFL test. The continued integration of technology into language learning will likely further transform educational practices and students' attitudes toward language acquisition in the future.

In addition, when asked about their familiarity about the use of online platforms in learning, the majority of the students reported that they are quite familiar with several kind of online platforms that they use for TOELF preparation. Students also reported that they often use online tools such as Youtube, Magoosh, and Duolingo for helping them in learning. Interestingly, of the online tools available for language learning, Youtube is the most used by the students. The reason underline this choice is because this platform is free to access, makes it accessible to learners who may not have the sufficient budget for paid programs. Another reason is Youtube offers a vast range of contents covering most aspects of TOEFL learning materials cater different levels of language learners, from beginners to advance. Moreover, other online platforms also provide such benefit and engagement although they are not as complete as Youtube. Therefore, students tend to prefer using this online platform as their best alternative for language learning especially for TOEFL preparation.

When asked about the sections of the TOEFL test that they prefer to enhance by using online platforms, the majority of the students reported that they prefer to utilize these online tools to enhance their listening skill. It is because online platforms offer accessibility, variety of resources, and interactive features. Khairat (2024) reported that online platforms such as Youtube has proven to be able to boost students' confidence and motivation in enhancing their listening skill because they provide authentic language resource and interesting engagement. However, while they are highly effective for general listening comprehension, students should complement them with TOEFL-specific practice to ensure they are familiar with the test format and question types.

Consequently, the students believe that online platforms offer a variety of interactive learning resources, such as videos, quizzes, and simulations, which help students to engage with content in ways that are more dynamic. This finding aligns with the result reported by Suryani (2021) who states that students are more attracted to studying for TOEFL test via virtual classroom as part of online platforms because it is more

interactive and more dynamic. Moreover, instant feedback on exercises enables them to monitor progress and identify areas for improvement. However, some students express concerns about relying solely on digital resources, citing challenges such as distractions from other online activities, the need for strong self-discipline, and the absence of real-time, face-to-face interaction that traditional classes offer. Despite these concerns, many students agree that the integration of technology and online platforms in TOEFL preparation significantly improves their overall learning experience, offering diverse tools that cater to different learning styles.

CONCLUSION AND SUGGESTION

Conclusion

This research shows that the use of the technology and online platforms offer a significant positive effect on students' perspective and motivation in learning before taking TOEFL test. The research mostly focuses on students' familiarity with the implementation of technology and online platforms as the assistance tools in preparing them for TOEFL test. The study indicates that the majority of the students appreciate the benefits they can get by using those tools and they suggest that there is a significant improvement on the result of their test after using both technology and online platforms. However, this research only focuses on the use of these tools on TOEFL preparation, how they can motivate the students in improving their TOEFL test result, not for English teaching.

Suggestion

As a result, the author recommends more research on the usage of technology and online resources, with an emphasis on the difficulties that English teachers might encounter when incorporating these resources into language instruction. Even though this study emphasizes the advantages for students, it is equally critical to look at the real-world challenges teachers face, like training, obtaining dependable technology, and converting conventional teaching techniques to online learning environments. A more thorough grasp of how technology can be used successfully in diverse learning environments can be obtained by looking into these issues. Future studies should also look at how technology affects students' overall language skills over the long run, not just how well they prepare for the TOEFL. Developing strategies that guarantee that both teachers and students gain from technological advancements will be made easier with an understanding of these dynamics.

REFERENCES

- Arsyad, S., Waluyo, B., & Maisarah, I. (2024). Enhancing TOEFL performance and student motivation through integrated flipped and gamified learning in online settings. *Human Behavior and Emerging Technologies*, 2024. <https://doi.org/10.1155/2024/1054242>
- Beatty, K. (2013). Teaching and Researching: Computer-Assisted Learning (Second Edition). *Applied Linguistics in Action Series*. Routledge.
- Deborah, P. 2013. *Longman Preparation Course for the TOEFL Test - IBT 2nd Edition*. Longman Press.

- Deterding, S., Dixon, D., Khaled, R & Nacke, L. (2011). From Game Design Elements to Gamefulness: Defining Gamification. *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments, MindTrek 2011*. 11. 9-15. 10.1145/2181037.2181040.
- Hasanah, N. (2022). TOEFL For Santri: Peningkatan Softskill Bahasa Asing Menuju Era Society 5.0. *Maspul Journal of Community Empowerment*, 4(2), 380-385. Retrieved from <https://ummaspul.e-journal.id/pengabdian/article/view/4625>
- Horn, M. B., & Seeker, H. 2015. *Blended: Using Disruptive Innovation to Improve Schools*. Jossey-Bass.
- Irine S. 2018. Pengembangan Mobile Learning berbasis Android untuk Meningkatkan Hasil Belajar TOEFL Mahasiswa D3 Angkatan XII di Sekolah Tinggi Teknologi Angkatan Laut. *Jurnal Mahasiswa Teknologi Pendidikan (vol 9 no 1)*. Dapat diakses pada: <https://ejournal.unesa.ac.id/index.php/jmtp/article/view/22376>
- Jasrial, D., Zaim, M., & Yunita, W. (2024). The Effect of Digital Media on Grammar Mastery for TOEFL Preparation. *Journal of English Education and Teaching*, 8(2), 386–399. <https://doi.org/10.33369/jeet.8.2.386-399>
- Khairat, N. (2024). The Use of YouTube to Enhance Learners' English Listening Skills. *Surakarta English and Literature Journal*, 7(2), 134–147. <https://doi.org/10.52429/selju.v7i2.265>
- Kurt, S. (2021). Adaptive learning: What is it, what are its benefits and how does it work? Educational Technology. <https://educationaltechnology.net/adaptive-learning-what-is-it-what-are-its-benefits-and-how-does-it-work/>
- Levy, M. (2002). *CALL by design: Discourse, products and processes*. *ReCALL*, 14(1), 58-84. doi:10.1017/S0958344002000617
- McGonigal, J. 2011. *Reality is Broken: Why Games make us better and How They Can Change the World*. The Penguin Press. New York.
- Mustaqim, M. (2016). Metode Penelitian Gabungan Kuantitatif Kualitatif/ Mixed Methods Suatu Pendekatan Alternatif. *Intelegensia: Jurnal Pendidikan Islam*, 4(1). DOI: <https://doi.org/10.34001/intelegensia.v6i1.1351>
- Pratiwi, D. I., Atmaja, D. S., & Prasetya, H. W. (2021). Multiple E-Learning technologies on practicing TOEFL structure and written expression. *JEES (Journal of English Educators Society)*, 6(1), 105-115. <https://doi.org/10.21070/jees.v6i1.1194>
- Pratiwi, D. I., Amumpuni, R. S., Fikria, A., & Budiastuti, R. E. (2023). Enhancing students' learning outcomes through MALL in TOEFL preparation class for railway mechanical technology. *International Journal of Language Education*, 7(2), 185-198.
- Santiana, S., Pujasari, R. S., & Fatimah, A. S. (2021). Blended Learning Strategy: Alternatif pembelajaran TOEFL bagi guru-guru MGMP Non-Bahasa Inggris. *Jurnal Inovasi Pengabdian Masyarakat Pendidikan*, 1(2), 144–161. <https://doi.org/10.33369/jurnalinovasi.v1i2.15883>
- Saputra, H. (2022). Pelatihan TOEFL sebagai upaya meningkatkan kemampuan bahasa inggris dan pengembangan karier bagi Mahasiswa Fakultas Syariah UIN Salatiga. *Penamas: Journal of Community Service*, 2(2), 140–146. <https://doi.org/10.53088/penamas.v2i2.479>

- Sarair, S., Farsia, L., & Baidah, A. (2022). Anxiety over TOEFL Listening Comprehension Among eight-semester Students. *Pedagogik: Jurnal Ilmiah Pendidikan dan Pembelajaran Fakultas Tarbiyah Universitas Muhammadiyah Aceh*, 9(2, Oktober), 152-167.
- Setiawan, I. (2023). Kualitatif, Kuantitatif, dan Metode Gabungan, diakses dari <https://widuri.ac.id/kualitatif-kuantitatif-dan-metode-gabungan/>
- Sharpe, P. J., & Matthiesen S. J. (2019). *Barron's TOEFL iBT: Barron's Educational Series*. Kaplan Inc.
- Stanley, G. (2013). *Language Learning with Technology – Ideas for Integrating Technology in the Classroom*. Cambridge: Cambridge University Press
- Suryani, N. Y. (2021). The Effectiveness of Virtual Classroom in TOEFL Preparation. *Acitya: Journal of Teaching and Education*, 3(2), 198–209. <https://doi.org/10.30650/ajte.v3i2.2199>
- Thorne, S. L. (2013). Language Learning, Ecological Validity, and Innovation Under Conditions of Superdiversity. *Bellaterra Journal of Teaching & Learning Language & Literature*, 6(2): 1-27.
- Watson, J. & Powell, A. (2015). Blending Learning: The Evolution of Online and Face-to-Face Education from 2008–2015. iNACOL, *The International Association for K–12 Online Learning*. Dapat diakses pada <http://www.inacol.org/>

▪ *How to cite this paper :*

- Farsia, L. & Sarair. (2025). The Impact Of Technology Integration On TOEFL Performance: Online Platforms And Language Apps At Universitas Muhammadiyah Aceh. *Jurnal Dedikasi Pendidikan*, 9(1), 301–312.