Bima Abdi: Jurnal Pengabdian Masyarakat
p-ISSN: 2797-9407, e-ISSN: 2797-9423
Volume 5, nomor 3, 2025, hal. 648-657
Doi: https://doi.org/10.53299/bajpm.v5i3.2355

Optimizing Student's Technology Literacy Potency with Readlang: An Innovative Approaches to Language Learning

Nur Shiyam Mendrofa*, Malili Zebua, Lefis Niwati Gulo, Yasminar Amaerita Telaumbanua
The University of Nias, Gunungsitoli, Indonesia

*Coresponding Author: nurshiyammendrofa@gmail.com
Dikirim: 18-07-2025; Direvisi: 31-07-2025; Diterima: 03-08-2025

Abstrak: Pelatihan ini bertujuan untuk mengoptimalkan literasi teknologi mahasiswa melalui pemanfaatan aplikasi Readlang sebagai pendekatan inovatif dalam pembelajaran bahasa. Readlang adalah platform e-reader daring yang memungkinkan pengguna menerjemahkan kata atau frasa secara instan, menyimpan kosakata, dan berlatih dengan flashcard. Metode yang digunakan adalah pendekatan deskriptif kualitatif melalui lokakarya interaktif yang melibatkan sepuluh mahasiswa semester dua dari Program Studi Pendidikan Bahasa Indonesia dan Bahasa Inggris di Universitas Nias. Peserta diperkenalkan pada sembilan fitur utama Readlang dan dibimbing secara langsung dalam penerapannya. Hasil observasi menunjukkan bahwa meskipun sebagian peserta mengalami kendala teknis di awal, seperti kesulitan login dan pengoperasian fitur lanjutan, semua masalah dapat diatasi melalui pendampingan fasilitator. Evaluasi kuesioner menunjukkan peningkatan signifikan dalam pemahaman teknologi, kemandirian belajar, serta kepercayaan diri peserta dalam menggunakan platform digital untuk pembelajaran bahasa. Pelatihan ini memberikan kontribusi penting dalam menyiapkan mahasiswa untuk mengintegrasikan teknologi secara mandiri dan berkelanjutan dalam proses belajar mengajar.

Kata kunci: Readlang; literasi teknologi; pembelajaran Bahasa; pembelajaran mandiri; pelatihan digital

Abstract: This training aims to optimize students' technological literacy through the use of Readlang application as an innovative approach to language learning. Readlang is an online e-reader platform that allows users to translate words or phrases instantly, store vocabulary, and practice with flashcards. The method used was a qualitative descriptive approach through an interactive workshop involving ten second-semester students from the Indonesian and English Language Education Study Program at Nias University. Participants were introduced to the nine main features of Readlang and were guided directly in their application. Observation results showed that although some participants experienced technical obstacles at the beginning, such as difficulty logging in and operating advanced features, all problems could be overcome through facilitator assistance. Questionnaire evaluation showed significant improvement in participants' understanding of technology, learning independence, and confidence in using digital platforms for language learning. This training makes an important contribution in preparing students to integrate technology independently and sustainably in the teaching and learning process.

Keywords: Readlang; technology literacy; language learning; self-directed learning; digital training

INTRODUCTION

The rapid advancement of digital technology has significantly transformed the landscape of language teaching and learning, particularly in higher education. In this digital era, e-reading tools provide innovative ways to support vocabulary acquisition

and reading comprehension. One such tool is Readlang, an online platform that enables users to receive instant word or phrase translations in over 60 languages while reading authentic texts. This feature supports seamless reading experiences by minimizing interruptions and enhancing comprehension fluency.

Readlang's functionalities align with various language acquisition theories. For instance, Godwin-Jones (2018) highlights that digital glossing tools like Readlang reduce cognitive overload and facilitate contextual vocabulary development. According to Nation (2001), fluent reading requires learners to understand at least 95% of the words in a text, and digital tools can help bridge this gap. Moreover, Schmidt's Noticing Hypothesis underscores the importance of conscious attention to linguistic input for effective learning—something naturally supported by Readlang's real-time translation.

Furthermore, Hunt and Beglar (2005) emphasize the role of repeated exposure in vocabulary retention. Readlang supports this through its integrated spaced repetition system (SRS), allowing learners to review newly acquired vocabulary effectively. Ramezanali et al. (2021) also found that learners using digital reading tools experience greater vocabulary growth and autonomy compared to those using traditional methods. These studies affirm that digital tools offering autonomy, instant feedback, and personalized learning paths—such as Readlang—are effective in promoting language acquisition.

However, despite the availability of such tools, many university students—particularly in rural or under-resourced regions—are not yet proficient in using them for educational purposes. At Universitas Nias, preliminary observations indicated that students in the English and Indonesian Language Education Programs possessed only basic digital skills and limited experience with online learning tools. This gap highlights the need for targeted training to build their technological literacy and confidence in using digital platforms for language learning.

In response, a community-based training program was developed to introduce Readlang as an innovative and practical strategy for improving vocabulary skills, reading comprehension, and digital competence. This training was grounded in Kolb's experiential learning theory, which emphasizes learning through active engagement, reflection, conceptualization, and experimentation. By implementing a guided, workshop-based approach, students were encouraged to explore Readlang is features, reflect on their learning process, and apply their skills independently. It is expected that this training will empower students to integrate digital tools like Readlang into their daily learning practices and enhance their academic development in a sustainable manner.

THEORITICAL REVIEW

The integration of digital technology into education has significantly reshaped how students access and process learning materials. One platform that supports this development is Readlang, an online application that enables readers to translate texts instantly and generate personalized flashcards. This tool is designed to facilitate vocabulary acquisition and improve reading comprehension through authentic reading experiences. According to Topal (2025), Readlang offers learners the opportunity to engage with texts while receiving contextual support, helping them stay focused and

enhancing their comprehension. The study also emphasizes its potential use in higher education as part of learners' independent language practice.

In relation to students' technological literacy, research by Alakrash and Razak (2021) shows that learners are increasingly utilizing digital tools for language learning, particularly in vocabulary development. Their study reveals that students' use of digital resources, such as e-books and translation applications, plays a critical role in improving vocabulary knowledge. These findings underline the importance of introducing educational technology like Readlang as part of literacy development programs.

The use of Readlang also supports autonomous learning, where students are encouraged to explore texts and track their vocabulary progress independently. This aligns with the concept of learner-centered education, in which technology serves not only as a medium of delivery but also as a means to enhance engagement, motivation, and digital competence. By implementing Readlang in a structured workshop setting, students are not only exposed to new vocabulary but also trained in using digital tools effectively, thereby strengthening both their language and technological skills.

Thus, the application of Readlang in this training is grounded in theoretical insights that highlight the importance of digital platforms in supporting vocabulary learning and technological literacy. The combination of direct practice, reflection, and tool exploration allows learners to develop practical digital skills essential for modern language education.

RESEARCH OBJECTIVE

This activity aimed to improve students' digital literacy by introducing Readlang as a learning tool. It focused on helping students use Readlang to develop vocabulary, support reading comprehension, and build confidence in using technology for language learning.

IMPLEMENTATION METHOD

This community service program was conducted using a descriptive qualitative approach through a workshop model, emphasizing active participation, hands-on practice, and guided exploration. This approach is rooted in Kolb's experiential learning theory, which suggests that effective learning occurs when individuals engage in a four-stage cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). In the context of digital-based language training, this method enables participants to build knowledge through direct engagement with the Readlang application and reflection on their experiences.

The implementation of the workshop was also informed by the insights of Sälzer and Roczen (2018), who emphasize that digital literacy extends beyond technical skills to include the ability to use digital tools for self-directed learning. In this training, Readlang was introduced as a means to develop digital literacy through the comprehension of authentic texts and contextual vocabulary acquisition. This is supported by findings from Gafur, Arafah, and Abbas (2020), which reveal that web-based learning tools such as Readlang can significantly enhance students' reading comprehension and vocabulary knowledge, particularly in academic settings.

The participants of the training were ten students from the Indonesian and English Education Study Programs at Universitas Nias. They were selected voluntarily based on their interest and availability to engage fully in the training sessions. All participants demonstrated foundational digital literacy skills and moderate proficiency in English.

The workshop was structured progressively to guide participants in understanding and using the main features of Readlang. The sessions encouraged active interaction, where participants were not only introduced to the tool but also provided opportunities for direct practice, group discussions, and individual reflection. This design is in line with the findings of Stojanov (2023), who stated that workshop-based learning—featuring interactive tasks, group collaboration, and real-time feedback—can significantly improve learners' understanding of educational technologies. Additionally, the collaborative nature of workshops fosters mutual support among participants, which in turn enhances engagement and motivation (Hockly, 2018). All procedures adhered to ethical standards, including informed consent from participants and confidentiality of their data throughout documentation and reporting.

IMPLEMENTATION OF ACTIVITIES AND DISCUSSION

The training entitled "Optimizing Students' Technology Literacy Potency with Readlang: An Innovative Approach to Language Learning" was held on Saturday, May 17, 2025, in Classroom 2 of FKIP, the University of Nias. This activity was attended by ten second-semester students from the Indonesian and English Language Education Study Programs. The training aimed to improve students' technological literacy through the use of the Readlang platform in the language learning process.

The activity began with an introduction to the features of Readlang, followed by hands-on practice consisting of nine main activities, namely: opening the website, creating an account, selecting a language, reading texts, using the translation feature, saving new vocabulary, using flashcards, uploading audio or text files, and reviewing usage history. The implementation of the activity was observed and assessed using an observation sheet. The assessment was conducted based on six categories, namely: Perfect, Very Good, Good, Fair, Deficient, and Not.

We, fourth-semester students of the English Education Program, who conducted the training, consisted of three members. One of us was responsible for delivering a detailed presentation on the Readlang application, including its definition, functions, objectives, and step by step usage, which was then followed by a live practice session with the participants. Meanwhile, the other two observed the course of the training, took notes on the participants' activities, and provided assistance to those who encountered difficulties in following each step of the application usage. After the training was completed, we also distributed questionnaires to all participants in order to evaluate the effectiveness of the training and gather input for future implementation of similar activities.

The observation results showed that the majority of participants were able the procedure each session, as can be seen in the table below:

Table 1. Activities of Observation

No	Readlang Activity	Perfect	Very Good	Good	Fair	Deficient	Not
1	Opening the readlang site	0	10	0	0	0	0
2	Creating an account / Logging in	0	0	3	4	3	0

3	Selecting the target language	0	1	5	2	2	0
4	Starting to read from the Library	0	1	8	1	0	0
5	Using the instant translation feature	0	0	2	8	0	0
6	Saving new vocabulary	0	0	5	4	1	0
7	Studying vocabulary with flashcards	0	0	5	4	1	0
8	Uploading audio/files	0	0	5	4	1	0
9	Accessing usage history	0	0	10	0	0	0

After going through the steps of using Readlang, from logging in to accessing advanced features, most participants were able to follow the training well. However, some obstacles still arose, such as difficulty logging in, choosing the wrong language, and difficulty using certain features. These obstacles generally occurred because the participants were using Readlang for the first time. Thanks to the were recording, all problems were able to be overcome during the session.We can see in the procedure table a summary of some of the mistakes and obstacles experienced by the participants during the training:

Table. 2 Participants' Issues

No	Name	Reported Issues
1	R N	Login to Readlang took a long time due to forgotten email password and weak internet connection; later resolved by logging in via email account as advised by were recording.
		Made a mistake in using a feature, which caused the typed text to be deleted; after guidance from the were recording, the task was restarted.
		YouTube video failed to load because the Continue button was not clicked.
2	I L	Chose the wrong language in the language selection feature.
		Could not translate the text.
		YouTube video failed to load because the Continue button was not clicked.
3	S G	Could not log in to Readlang, needed help from the were recording.
		Unable to follow some explained features, were recording gave assistance.
		Failed to upload the intended video.
		Slow login process due to unstable internet connection.
4	A G	Unable the procedure some explained features, were recording gave assistance.
5	S W	Unable the procedure some explained features, were recording gave guidance.
6	D W	Unable the procedure some explained features, were recording gave guidance.
7	M G	Unable the procedure some explained features, were recording gave guidance.
8	P T	Unable the procedure some explained features, were recording gave guidance.
9	M G	Unable the procedure some explained features, were recording gave guidance.
10	R L	Unable the procedure some explained features, were recording gave guidance.

After the training was completed, all participants were asked to fill out an evaluation questionnaire to assess the effectiveness of the training in terms of prior knowledge, training quality, skill improvement, and overall satisfaction. The results showed that most participants had no prior knowledge or experience with the Readlang platform, as reflected in their responses to the relevant questions. This indicated that the training successfully introduced a new and useful tool to them.

In terms of the training process, all participants gave positive responses. They felt that the material was delivered clearly, the allocated time was sufficient, and the facilitators demonstrated strong mastery of the content. Moreover, the training provided

many opportunities for hands-on practice, and participants received optimal guidance from the facilitators throughout the sessions.

Regarding skill improvement, the questionnaire results showed that participants gained the ability to use Readlang independently. They reported that they were able to upload YouTube videos as teaching materials, integrate interactive media, save and share content, and felt more confident in utilizing technology for language learning purposes.

To provide a visual overview of the training implementation, below are some documentation materials that reflected the training process, participant involvement, assistance from the facilitators, and the atmosphere during the practice of using the Readlang application:

Figure 1. Training participants

Figure. 2 Training participants are being directed were recording while operating laptops

Figure 3. Were recording takes notes on what the trainees are doing and directs them

Figure 4. were recording explaining the steps of using readlang

Figure 5. Trainees follow the steps explained by were recording

DISCUSSION

The training entitled "Optimizing Students' Technology Literacy Potential with Readlang: An Innovative Approach in Language Learning" aims to introduce the Readlang platform as a modern digital tool in supporting language learning. This activity was carried out through workshop-based training involving ten second semester students from the Indonesian Language Education and English Language Education Study Programs at the University of Nias. The training was designed to build students' technological literacy by integrating the Readlang application in reading practice and vocabulary development.

During the implementation phase of the activity, participants were guided to perform nine main activities, namely: opening the Readlang website, creating an account, selecting a language, reading text, using the translation feature, saving new vocabulary, using flashcards, uploading audio or text files, and viewing usage history. These activities are structured to familiarize participants with Readlang's main features and encourage independent exploration. One facilitator delivered the theoretical material and practical usage steps, while the other two facilitators provided intensive assistance-observing participants' responses, helping those who were having difficulties, and documenting participants' progress. After the training, all participants were asked to complete a questionnaire to evaluate the effectiveness of the training and provide feedback.

Observations showed that there were variations in participants' ability to complete the Readlang activity. Although almost all participants could access the site and read the text well, some still had difficulties in more complex features, such as saving vocabulary, using flashcards, or uploading videos. These obstacles generally arose because participants had never used Readlang before. However, thanks to direct assistance from the facilitators, all obstacles were successfully overcome during the session. This reflects Vygotsky's Zone of Proximal Development (ZPD) concept (in Stojanov, 2023), which states that learning will be maximized if guided by more expert individuals-in this case, facilitators who act as a bridge between participants' initial abilities and their maximum potential.

This finding is in line with Topal's (2025) opinion that although Readlang is relatively user-friendly, advanced features remain challenging for novice users who have no prior digital experience. Godwin-Jones (2018) also emphasizes the importance of a proper introduction to digital tools so that participants do not feel frustrated and

demotivated. In the context of this training, the role of the facilitator was crucial to keep participants' spirits up and ensure all remained actively engaged throughout the session.

Evaluation results through questionnaires showed a clear improvement in participants' technological literacy and learning independence. The majority of participants initially had no experience using Readlang, but after the training they reported being able to use it independently. This reinforces the opinions of Alakrash & Razak (2021) and Zhong (2023) that digital literacy and self-directed learning can develop significantly in a technology-based environment if adequate assistance is provided at an early stage. Participants also claimed to be more confident in integrating Readlang into their learning contexts, such as using YouTube videos as teaching materials, saving translated vocabulary, and practicing independently using flashcards.

Kolb's (1984) experiential learning model was successfully applied in this training. Through the stages of concrete experience (direct practice with Readlang), reflective observation (recognizing difficulties and solutions), abstract conceptualization (understanding the function of Readlang in language learning), and active experimentation (using the application independently), participants experience a complete learning cycle. The structured training design also follows the framework of Hockly (2018) and Stojanov (2023) who emphasize the importance of collaboration, interaction and immediate feedback in workshop-based learning.

Thus, this training not only introduces Readlang as an innovative e-reader, but also contributes to improving students' technological literacy and readiness to integrate digital technology into the language learning process independently and sustainably.

CONCLUSION

The training on the use of Readlang as a language learning tool has a positive impact on improving students' technological literacy. Although some participants experienced difficulties in operating certain features, direct assistance from the facilitator greatly helped participants in understanding and mastering the application gradually. The evaluation results showed that participants became more confident, independent, and skilled in utilizing digital technology, especially in the context of language learning. Thus, this training not only successfully introduced Readlang as an innovative e-reader, but also improved students' readiness in integrating technology in future learning practices.

ACKNOWLEDGMENTS

This training is part of the assignment in one of the courses that we take in the English Language Education Study Program, Nias University. For this reason, we would like to thank the lecturers who have provided direction, motivation, and direct guidance during the planning process until the implementation of this training. Last but not least, our gratitude goes to all the training participants who have participated in this activity with enthusiasm and active participation. Hopefully this activity will be a meaningful experience for the development of technological literacy in language learning.

DAFTAR PUSTAKA

Abdi, B., Jurnal Masyarakat, P., Mendrofa, N. S., Zebua, M., Gulo, L. N., & Telaumbanua, Y. A. (2021). Optimizing Student's Technology Literacy Potency with Readlang: An Innovative Approaches to Language Learning. *Bajpm: Jurnal Pengabdian Masyarakat*, *1*(1), 1–7. https://doi.org/10.53299/bajpm.v1i1.11

Alakrash, H. M., & Razak, N. A. (2021). The role of digital tools in enhancing students' vocabulary acquisition. *Journal of Language and Linguistic Studies*, *17*(1), 456–469

Chapelle, C. A., & Sauro, S. (2017). *The handbook of technology and second language teaching and learning*. Wiley Blackwell.

Dudeney, G., Hockly, N., & Pegrum, M. (2013). *Digital literacies: Research and resources in language teaching*. Pearson.

Gafur, A., Arafah, B., & Abbas, H. (2020). The impact of web-based learning on vocabulary and comprehension. *International Journal of Language Education*, *4*(3), 78–90.

Godwin-Jones, R. (2018a). Challenging hegemonies in online learning. *Language Learning & Technology*, *22*(3), 4–12. http://hdl.handle.net/10125/44662

Godwin-Jones, R. (2018b). Contextualized vocabulary learning. *Language Learning & Technology*, *22*(3), 1–19. https://doi.org/10.10125/44651

Hockly, N. (2018). Digital literacy in English language teaching. *ELT Journal*, *72*(1), 83–86. https://doi.org/10.1093/elt/ccx050

Hunt, A., & Beglar, D. (2005). A framework for developing EFL reading vocabulary. *Reading in a Foreign Language*, *17*(1), 23–59.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Mangfirah, R., & Arridha. (2022). *Improving Students's Technical English Vocabulary Using Readlang Platform at State Polytechnic of Fakfak*.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.

Richards, J. C., & Schmidt, R. (2010). *Longman dictionary of language teaching and applied linguistics* (4th ed.). Pearson.

Ridout, S. (2013). Readlang: A multilingual e-reader tool. *EUROCALL Review*.

Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology*, *14*(2), 95–110.

Stojanov, A. (2023). Learning with ChatGPT 3.5 as a more knowledgeable other: An autoethnographic study. *International Journal of Educational Technology in Higher Education*, *20*(1), 35. https://doi.org/10.1186/s41239-023-00404-

Thorne, S. L. (2016). Language learning, ecological validity, and innovation under conditions of superdiversity. *Bellaterra Journal of Teaching & Learning Language & Literature*, *9*(1), 13–30.

Topal, I. H. (2025). A review of Readlang: Multilingual e-reader for language learners. *Journal of Digital Educational Technology*, *5*(1), ep2504. https://doi.org/10.30935/jdet/15857

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Zhao, Y. (2021). The use of digital tools in language education: A synthesis of research. *Educational Technology & Society*, *24*(3), 1–12.