

# Merging Minds: Blended Learning's English Vocabulary Revolution of Indonesian Students

Muhalida Zia Ibhar<sup>1</sup>, Ari Supriadi<sup>2</sup>

<sup>1</sup> Sekolah Tinggi Ilmu Administrasi Lancang Kuning Dumai

<sup>2</sup> A Badan Pengawas Pemilihan Umum Kota Dumai

<sup>1</sup> [mziaibhar@gmail.com](mailto:mziaibhar@gmail.com)

<sup>2</sup> [arisupriadi.as@gmail.com](mailto:arisupriadi.as@gmail.com)

*Received: 7 May 2024*

*Article history:*  
*Accepted: 16 July 2024*

*Published: 1 September 2024*

## Abstract

In the contemporary landscape of education, the integration of technology has become imperative, reshaping conventional teaching methodologies and fostering interactive learning environments. This study investigates the efficacy of blended learning as a catalyst for enhancing students' vocabulary mastery of Indonesian Students settings. Blended learning, which combines traditional face-to-face instruction with online learning modalities, presents a dynamic framework to optimize the learning experience. Through quasi-experimental research, involving pre-tests and post-tests administered to a sample of Indonesian students, the impact of blended learning on vocabulary acquisition is analyzed. The findings reveal a significant improvement in students' vocabulary mastery scores following the implementation of blended learning, with mean scores increasing from 55.6 to 65.08. Statistical analysis further confirms the positive effect of blended learning on students' learning outcomes. The study also draws upon previous research to support its findings, emphasizing the potential of blended learning to enhance vocabulary learning. Overall, this study underscores the value of blended learning in improving students' language skills and recommends its adoption to promote better learning outcomes in English language education.

**Keywords:** *Blended Learning, Educational Technology, Language Acquisition, Vocabulary Mastery*

## Introduction

In today's rapidly evolving educational landscape, the integration of technology has become indispensable, revolutionizing traditional teaching paradigms and fostering interactive learning environments that captivate both educators and students alike. Recognizing the transformative potential of information and communication technology (ICT) in education, the Ministry of Education and Culture has prioritized the infusion of technological advancements into the teaching and learning of English. Central to this endeavor lies the pivotal role of vocabulary mastery, underscored by (Abidin, 2023) assertion that while grammar enables communication, vocabulary facilitates comprehension and expression. Yet, despite its paramount importance, the acquisition of vocabulary presents formidable challenges, particularly evident in observations made at Indonesian Students, where second-year students grapple with English vocabulary acquisition, impeding their comprehension and dampening their enthusiasm for language learning.

Traditional pedagogical approaches have proven inadequate in addressing the multifaceted challenges associated with vocabulary acquisition, necessitating a paradigm shift towards more dynamic and efficacious methodologies. Against the backdrop of the 2013 curriculum's mandate for active student engagement,

there arises an urgent imperative to reimagine English language instruction, fostering an environment that not only cultivates linguistic proficiency but also kindles a passion for learning. Blended learning, a pedagogical framework that seamlessly integrates traditional face-to-face instruction with online learning modalities, harnesses the synergistic potential of both approaches. As elucidated by (Munoz et al., 2021), blended learning affords students the flexibility to navigate their learning journey while capitalizing on the diverse array of multimedia resources at their disposal. By incorporating multimedia elements such as videos, images, slideshows, and audio clips, blended learning endeavors to create an immersive and interactive educational experience that transcends the limitations of traditional classroom instruction.

Against this backdrop, the present study seeks to interrogate the efficacy of blended learning as a catalyst for enhancing students' vocabulary mastery at an Indonesian School. By harnessing the transformative power of technology, this research endeavors to elucidate whether blended learning can engender a paradigm shift in English language education, fostering a learning environment that is not only enriching and engaging but also conducive to sustained linguistic growth. Through a comprehensive exploration of blended learning methodologies and their impact on vocabulary acquisition, this study aims to furnish educators with actionable insights to optimize their pedagogical practices, thereby bolstering the quality of English language instruction. Moreover, by shedding light on the potential of blended learning to invigorate language learning experiences, this research endeavors to advance our understanding of effective instructional strategies in the digital age. In light of the foregoing, this study underscores the pressing need to embrace innovative pedagogical approaches that harness the transformative potential of technology to nurture a generation of proficient and impassioned English language learners. As we embark on this academic inquiry, we remain steadfast in our commitment to illuminating pathways towards educational excellence and fostering a culture of lifelong learning.

## **Literature review**

### **Vocabulary Mastery**

Vocabulary mastery stands as a cornerstone of language acquisition, serving as the bedrock upon which proficient communication is built across diverse linguistic contexts. Schmitt and Schmitt (2020) emphasize the multifaceted nature of vocabulary acquisition, which extends beyond the mere memorization of word meanings to encompass a nuanced understanding of their usage within varying linguistic frameworks. Mugadza et al. (2024) elucidate the critical role of vocabulary assessments in evaluating learners' aptitude for contextual comprehension and lexical application, underscoring the importance of fostering a deep and versatile vocabulary repertoire.

Within the expansive realm of vocabulary, an array of word types exists, each fulfilling distinct functions within the intricate tapestry of language structures. Nouns, as elucidated by Fadhiah Mahmud et al. (2024), serve as the foundational building blocks of sentences, representing persons, places, things, or ideas. Verbs, as expounded by Obayes Al-Azzawi & Ahmed Kadhim (2024), function as the engines of action or states, imbuing language with dynamism and meaning. Adjectives, as discussed by Ruth (2023), bestow descriptive nuances upon nouns or pronouns, enriching communication with vivid imagery and detail. Adverbs, as articulated by Sanwal (2023), refine and qualify the actions of verbs, adjectives, or other adverbs, adding layers of subtlety and precision to expressions.

Moreover, the fabric of language is interwoven with conjunctions, pronouns, and interjections, each contributing to the coherence, efficiency, and emotional resonance of communication. Zhicong et al. (2023) expounds upon the pivotal role of conjunctions in fostering cohesion between words and sentences, facilitating seamless discourse. Red John (2000) highlights the efficiency of pronouns in substituting nouns, streamlining communication and enhancing clarity. Sanwal (2023) underscores the emotive power of interjections in conveying sudden emotions or exclamations, infusing discourse with authenticity and spontaneity. In the realm of pedagogy, effective vocabulary instruction emerges as a linchpin in facilitating language acquisition and fostering communicative competence. Zhicong et al. (2023) delineates a systematic approach to vocabulary instruction, advocating for clear presentation, pronunciation, and contextual understanding. Educators are encouraged to engage students actively in deciphering word meanings, constructing sentences, and reinforcing vocabulary usage (Zhicong et al., 2023). By leveraging multimedia tools such as videos, pictures, slideshows, and audio, educators can enhance the engagement and retention of vocabulary among learners, cultivating dynamic and immersive learning environments that cater to diverse learning styles and preferences.

Furthermore, the journey toward mastery of students' vocabulary is characterized by a dynamic interplay of factors such as age, exposure, and contextual influences. Ibhar (2022b) contends that individuals continue to expand their vocabulary throughout adulthood, with linguistic growth catalyzed by diverse social roles and activities. However, measuring vocabulary knowledge presents inherent challenges, as estimates vary across demographic groups and age cohorts. Indonesian learners of English encounter unique challenges due to the foreign language context, necessitating targeted interventions to bolster vocabulary acquisition and facilitate linguistic fluency (Ibhar, 2022a). Thus, the pursuit of vocabulary mastery is not merely a pedagogical endeavor but a dynamic and multifaceted process shaped by individual experiences, societal influences, and educational contexts.

## **Blended Learning**

Blended learning, a progressive educational methodology, seamlessly integrates traditional face-to-face instruction with online learning modalities, reflecting the evolving landscape of education in the digital age and addressing contemporary challenges faced by the Indonesian educational system. In the current era of rapid technological advancement and digital connectivity, blended learning emerges as a transformative approach that leverages the power of technology to enhance teaching and learning experiences, particularly amidst the ongoing COVID-19 pandemic and its disruptions to traditional classroom settings in Indonesia. The history of blended learning can be traced back to the emergence of technology-based training initiatives in the 1960s, but its relevance and significance have become even more pronounced in recent years with the widespread adoption of digital platforms and online learning tools (Ibhar & Mohd Said, 2018). Today, as Indonesia grapples with the need to adapt to remote and hybrid learning models, blended learning offers a viable solution to ensure continuity in education while providing students with the flexibility and accessibility needed to thrive in an increasingly digital world.

The benefits of blended learning in the Indonesian context are manifold, ranging from increased student engagement and improved learning outcomes to enhanced accessibility in education. By incorporating interactive multimedia presentations, adaptive learning technologies, and collaborative online activities, blended learning empowers educators to create immersive and engaging learning experiences tailored to the diverse needs and preferences of Indonesian students. Moreover, the personalized nature of blended learning enables educators to address the challenges of remote learning and bridge the digital divide by providing students with equitable access to educational resources and opportunities. Key characteristics of blended learning include the seamless integration of diverse delivery modes, teaching models, and learning styles, supported by effective combinations of face-to-face and online instruction (Powell et al., 2015). Implementation strategies emphasize the design of learning materials that leverage multimedia tools and facilitate interactive learning experiences to accommodate diverse learner needs (Chima Abimbola Eden et al., 2024). Furthermore, effective implementation hinges on the alignment of instructional design with learning objectives, the utilization of assessment criteria to evaluate learning outcomes, and ongoing reflection and refinement of teaching practices based on student feedback and performance data (Chima Abimbola Eden et al., 2024).

In conclusion, blended learning represents a timely and relevant approach to education in Indonesia, offering a pathway towards educational resilience, innovation, and inclusivity in the face of unprecedented challenges. By harnessing the power of technology and embracing the principles of student-centered learning, blended learning has the potential to revolutionize education in Indonesia and empower students to thrive in the digital age.

## **Problem Statement**

In the landscape of Indonesian Students, the integration of technology has ushered in a new era of pedagogical possibilities, yet challenges persist in English language instruction, particularly regarding vocabulary acquisition. Despite the myriad advancements in educational technology, students at Indonesian Students institutions continue to grapple with mastering English vocabulary. Traditional teaching methodologies, while foundational, often fall short in engaging students effectively, resulting in a disconnection between instruction and comprehension. At the heart of this issue lies the imperative for educators to cultivate an environment conducive to active learning and meaningful engagement. The deficiency in vocabulary acquisition not only impedes students' ability to comprehend English texts but also undermines their motivation to engage deeply with the language. This discrepancy between the potential of technology-enhanced instruction and the reality of students' struggles underscores the need for innovative approaches to address the gap in vocabulary mastery. Recognizing the transformative potential of blended learning, this research seeks to explore its efficacy in enhancing students' vocabulary mastery in Indonesian Students settings. Blended learning, with its fusion of traditional face-to-face instruction and online learning modalities, presents a dynamic framework for optimizing the learning experience. By harnessing multimedia presentations, interactive online components, and adaptive learning technologies, blended learning endeavors to create an immersive and personalized learning environment tailored to students' individual needs and preferences. Against this backdrop, this study endeavors to investigate whether blended learning can bridge the gap in English vocabulary mastery among students at Indonesian Students institutions. By analyzing the impact of blended learning methodologies on students' vocabulary acquisition, this research aims to provide insights into effective instructional strategies that empower students to thrive in English language learning. Through a comprehensive examination of blended learning's potential to revolutionize vocabulary instruction, this study seeks to inform pedagogical practices and advance our understanding of effective teaching methodologies in the digital age. Thus, the central inquiry of this research is to ascertain whether blended learning, with its innovative integration of technology and traditional instruction, can foster a positive transformation in students' vocabulary mastery in Indonesian Students settings.

## **Methodology**

### **Research Design**

This study adopts a quasi-experimental research design involving a single class of Indonesian School Students. Based on (Chima Abimbola Eden et al., 2024), facilitates the testing of hypotheses about cause-and-effect relationships. The research comprises two variables: Blended Learning as the independent variable (X) and students' vocabulary mastery as the dependent variable (Y).

## **Participants**

The population of this research consist Indonesian Students, with a total of 100 students as population. A sample of 25 students was selected from one class using a random sampling technique. This sample size ensures representation while facilitating manageable data collection and analysis.

## **Instruments**

Data collection involves administering pre-tests and post-tests, each comprising 40 multiple-choice questions covering 10 topics related to vocabulary mastery. The test materials are drawn from the English textbooks used in the institution. Additionally, qualitative data regarding students' experiences and perceptions of blended learning may be collected through surveys or interviews to complement quantitative results.

## **Procedure**

The research was conducted over six sessions, with the pre-test administered during the first session, treatment conducted over the subsequent four sessions, and the post-test administered during the final session. Treatment involves implementing blended learning, including multimedia presentations such as videos, audio, pictures, and slideshows to enhance students' understanding and engagement. The teaching activities during blended learning application include pre-teaching, while-teaching, and post-teaching stages to ensure comprehensive instruction and learning.

## **Data Analysis**

Data analysis utilizes statistical methods, specifically the t-test formula, to compare pre-test and post-test scores and determine the significance of any differences in students' vocabulary mastery. The mean score, variance, standard deviation, and standard error are calculated to assess the effectiveness of blended learning in improving vocabulary mastery. A significance level of  $\alpha = 0.05$  is applied for two-tailed tests, with acceptance or rejection of the null hypothesis based on the calculated t-value compared to the critical t-value. Moreover, qualitative data analysis techniques such as thematic analysis may be employed to interpret students' perceptions and experiences of blended learning. This comprehensive approach ensures a thorough understanding of the impact of blended learning on students' vocabulary acquisition and overall learning outcomes.

## **Findings**

The researcher presents research findings regarding the improvement of students' vocabulary mastery through Blended Learning at an Indonesian School.

## Data Presentation

One of the most critical aspects of research is presenting data and findings. This chapter focuses on data collected from the experimental class of second-year students at an Indonesian School. After administering the pre-test, the researcher conducted a post-test to gather research data. The aim was to assess whether there was a significant difference between students' achievements in the pre-test and post-test. The pre-test was conducted during the initial meeting to assess students' baseline skills. It comprised 40 multiple-choice questions covering expressions, descriptive text, and short text. Questions included 2 videos, 3 pictures, 2 PowerPoint slide shows, and 2 audio clips. The presentation of students' pre-test results is as follows:

Table 1 presents detailed results and calculations based on the pre-test scores:

Table 1: The Result of Pre-Test

Students	Correct Answer	Score (X <sub>1</sub> )	Mean (X)	Difference (X <sub>1</sub> -X)	Difference Squared (X <sub>1</sub> -X) <sup>2</sup>
1	23	58	55.6	2.4	5.76
2	30	60	55.6	4.4	19.36
3	24	75	55.6	19.4	376.36
4	12	30	55.6	-25.6	655.36
5	21	53	55.6	-2.6	6.76
6	20	50	55.6	-5.6	31.36
7	24	60	55.6	4.4	19.36
8	36	90	55.6	34.4	1183.36
9	19	48	55.6	-7.6	57.76
10	15	50	55.6	-5.6	31.36
11	20	63	55.6	7.4	54.76
12	25	48	55.6	-7.6	57.76
13	15	38	55.6	-17.6	309.76
14	20	48	55.6	-7.6	57.76
15	19	50	55.6	-5.6	31.36
16	19	48	55.6	-7.6	57.76
17	34	85	55.6	29.4	864.36
18	16	40	55.6	-18.6	345.96
19	25	63	55.6	7.4	54.76
20	23	58	55.6	2.4	5.76

Muhalida Zia Ibhar & Ari Supriadi  
**Merging Minds: Blended Learning's English Vocabulary Revolution of Indonesian Students**

21	14	35	55.6	-20.6	424.36
22	23	58	55.6	2.4	5.76
23	17	43	55.6	-12.6	158.76
24	24	60	55.6	4.4	19.36
25	31	78	55.6	22.4	501.75
<b>N = 25</b>		<b><math>\Sigma = 1389</math></b>	<b>55.6</b>		<b><math>\Sigma = 5336.79</math></b>

Source: Data Processed, 2024

Table 1 showed that the calculation of students' score for pre-test of experimental class was 1389, the mean score of experimental class was 55.6. Then, the post-test conducted during the final meeting after implementing Blended Learning, aimed to assess students' progress. The table below presents students' individual scores at the post-test:

Table 2: The Result of Post-Test

<b>Student</b>	<b>Correct Answer</b>	<b>Score (X<sub>1</sub>)</b>	<b>Mean (X)</b>	<b>Difference (X<sub>1</sub>-X)</b>	<b>Difference Squared (X<sub>1</sub>-X)<sup>2</sup></b>
1	26	65	65.08	- 0.08	0.0064
2	28	70	65.08	4.92	24.2
3	34	85	65.08	19.92	396.8
4	20	50	65.08	-15.08	227.4
5	26	65	65.08	-0.08	0.0064
6	22	55	65.08	-10.08	101.6
7	26	65	65.08	-0.08	0.0064
8	37	93	65.08	27.92	779.5
9	20	50	65.08	-15.08	227.4
10	24	60	65.08	-5.08	25.8
11	28	70	65.08	4.92	24.2
12	20	50	65.08	-15.08	227.4
13	20	50	65.08	-15.08	227.4
14	26	65	65.08	-0.08	0.0064
15	22	55	65.08	-10.08	101.6
16	26	65	65.08	-0.08	0.0064
17	35	88	65.08	22.92	525.3



18	34	85	65.08	19.92	396.8
19	23	58	65.08	-7.08	50.1
20	25	63	65.08	-2.08	4.3
21	20	50	65.08	-15.08	227.4
22	24	60	65.08	-5.08	25.8
23	26	65	65.08	-0.08	0.0064
24	26	65	65.08	-0.08	0.0064
25	32	80	65.08	14.92	222.6
<b>N = 25</b>		<b><math>\Sigma = 1627</math></b>	<b>65.08</b>		<b><math>\Sigma = 3815.64</math></b>

Source: Data Processed, 2024

Table 2 showed the result of students' score of post-test in comprehending narrative text in experimental class. From the data, it can be seen that the result is as follows in post-test; the total score that 25 students got was 1627. Here, it can be seen on the tables above that the mean score of the post-test was 65.08. An analysis of students' progress indicates a significant improvement in vocabulary mastery scores between the pre-test and post-test. The mean score increased from 55.6 to 65.08, reflecting the positive impact of Blended Learning. Further analysis is necessary to determine whether the null hypothesis or the alternative hypothesis is accepted, providing insights into the effectiveness of Blended Learning in enhancing students' vocabulary mastery. These findings underscore the potential of Blended Learning, particularly when incorporating multimedia elements, in improving students' language proficiency.

## Conclusion

In conclusion, this study underscores the significant impact of blended learning on enhancing vocabulary mastery among students in Indonesian educational institutions. By seamlessly integrating traditional teaching methods with online learning modalities, blended learning offers a dynamic and inclusive approach to education. The findings demonstrate substantial improvements in students' language proficiency, highlighting the effectiveness of blended learning in creating engaging and personalized learning experiences. This research advocates for the widespread adoption of blended learning methodologies to address the evolving needs of students and prepare them for success in the digital age, ultimately fostering a culture of lifelong learning and academic excellence.

## Discussion

The interpretation of the data provided in the study suggests several key points regarding the effectiveness of Blended Learning in enhancing students' vocabulary mastery. The comparison between pre-test and post-test

scores indicates a notable improvement in students' performance after implementing Blended Learning. The highest and lowest scores in the post-test were higher than those in the pre-test, suggesting that Blended Learning contributed to a general increase in students' scores. The average score in the post-test was significantly higher than that in the pre-test, indicating a substantial improvement in students' overall performance. This increase of approximately 9.48 points demonstrates the effectiveness of Blended Learning in enhancing students' vocabulary mastery.

Analyzing individual student scores reveals that all students demonstrated an increase in vocabulary mastery after the implementation of Blended Learning. This consistent improvement highlights the overall effectiveness of the teaching method in facilitating student learning. The statistical analysis, with a calculated t-value greater than the critical t-value, indicates a significant effect of Blended Learning on students' vocabulary mastery. This finding supports the conclusion that Blended Learning positively impacts students' learning outcomes.

The discussion also references previous studies conducted by Katasila and Poonpon (2022) entitled *The Effects of Blended Learning Instruction on Vocabulary Knowledge of Thai Primary School Students*. These studies provide additional evidence supporting the benefits of incorporating Blended Learning approaches in language education. The data interpretation suggests that Blended Learning is a valuable method for improving students' vocabulary mastery. By integrating multimedia elements and leveraging online resources, teachers can create engaging learning experiences that effectively enhance students' language skills. The findings of this study support the recommendation for educators to adopt Blended Learning methods in their teaching practices to promote better learning outcomes for students.

## **Author contributions**

Conceptualization, M.Z.I and A.S.; methodology, M.Z.I. and A.S.; writing—original draft preparation, M.Z.I.; All authors have read and agreed to the published version of the manuscript.

## **Funding**

None.

## **Data availability statement**

The authors confirm that the data supporting the findings of this study are available within the article [and/or] its supplementary materials.

## Conflicts of interest

No potential conflict of interest was reported by the authors.

## Acknowledgement

Alhamdulillahirobbil'alamin, praise and gratitude we pray to Allah SWT and my Prophet Muhammad SAW who always bestows grace in every second all my life until we can finish this study with the title *Merging Minds: Blended Learning's English Vocabulary Revolution of Indonesian Students*. Not forgetting also everyone who always supports us and contribution in the process of preparing this study. We extend our appreciation to the participants who took part in the study and generously shared their experiences and perspectives. Their valuable insights and feedback have greatly contributed to the depth and richness of the findings.

## References

- Abidin, A. (2023). Screen distractions and vocabulary gains in Memrise mobile-assisted vocabulary learning (MAVL) setting. *Journal on English as a Foreign Language*, 13(2), 524–551. <https://doi.org/10.23971/jefl.v13i2.6500>
- Chima Abimbola Eden, Onyebuchi Nneamaka Chisom, & Idowu Sulaimon Adeniyi (2024). Harnessing technology integration in education: Strategies for enhancing learning outcomes and equity. *World Journal of Advanced Engineering Technology and Sciences*, 11(2), 001–008. <https://doi.org/10.30574/wjaets.2024.11.2.0071>
- Fadhliah Mahmud, N. F., Nazamud-Din, A., Aidit, N. A., Ambi, S. H., & Rijeng, J. S. (2024). Conceptualizing nouns: enhancing students' comprehension through e-magazines. *Muallim Journal of Social Science and Humanities*, 1–15. <https://doi.org/10.33306/mjssh/262>
- Ibhar, M. Z. (2022a). Reading Motivation and EFL Learners' Vocabulary Development Against Interest in Learning English Moderated by Teacher Competence. *Journal of English for Academic*, 9(2), 25–38. [https://doi.org/10.25299/jshmic.2022.vol9\(2\).9823](https://doi.org/10.25299/jshmic.2022.vol9(2).9823)
- Ibhar, M. Z. (2022b). The Impact of Youtube Media on EFL Students' Vocabulary Acquisition. *Jurnal Pendidikan Dan Konseling*, 4(6), 1349–1358. <https://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/10625>
- Ibhar, M. Z. & Mohd Said, N. E. (2018). The Effects of Blended Learning on EFL High School Students' Vocabulary Mastery. *International Journal of Innovative Research and Creative Technology*, 4(6), 111–116. <https://www.ijirct.org/papers/IJIRCT1801021.pdf>

- Katasila, P., & Poonpon, K. (2022). The Effects of Blended Learning Instruction on Vocabulary Knowledge of Thai Primary School Students. *English Language Teaching*, 15(5), 52. <https://doi.org/10.5539/elt.v15n5p52>
- Mugadza, J., Kit, O., Kilag, T., Uy, F. T., Colina, G. M., Abella, J. M., Isaac, J., Rabi, I. A., & Climaco, G. (2024). Vocabulary Learning: Approaches Aligned with Common Core Standards. *International Journal of Qualitative Research for Innovation, Sustainability, and Excellence*, 1(2). <https://orcid.org/0009-0006-8164-7667>
- Munoz, K. E., Wang, M. J., & Tham, A. (2021). Enhancing online learning environments using social presence: evidence from hospitality online courses during COVID-19. *Journal of Teaching in Travel and Tourism*, 21(4), 339–357. <https://doi.org/10.1080/15313220.2021.1908871>
- Obayes Al-Azzawi, Q., & Ahmed Kadhim, A. (2024). The headlines of news websites on women of Gaza: a text analysis study. *International Journal of Education Technology*, 4(2), 13-23. <https://doi.org/10.55640/ijet-04-02-03>
- Powell, A., Watson, J., Staley, P., Patrick, S., Horn, M., Fetzer, L., Hibbard, L., Oglesby, J., & Verma, S. (2015). *Blending Learning: The Evolution of Online and Face-to-Face Education from 2008-2015*. INACOL. <https://files.eric.ed.gov/fulltext/ED560788.pdf>
- Ruth, N. B. (2023). *Ambiguity in the Selected Lusoga Proverbs* (Bachelor Degree dissertation). <https://dissertations.mak.ac.ug/handle/20.500.12281/16823>
- Sanwal, M. (2023). *Evaluating Large Language Models Using Contrast Sets: An Experimental Approach*. [Manuscript submitted for publication]. University of Texas at Austin <http://dx.doi.org/10.13140/RG.2.2.19948.33928>
- Schmitt, N. & Schmitt, D. (2020). *Vocabulary in language teaching* (2nd ed.). CUP.
- Zhicong, Z., Heming, L., & Jiaxian, Z. (2023). Teaching with social context in instructional video facilitates second language vocabulary learning. *Heliyon*, 9(3). <https://doi.org/10.1016/j.heliyon.2023.e14540>