



Perpustakaan UKI

DESIGNINGTHEFISWRLEARNINGMODELEMPOWERINGENGL...

 Turnitin Dosen 7
 Turnitin Dosen - Jan
 Universitas Kristen Indonesia

Document Details

Submission ID

trn:oid::1:3454531384

Submission Date

Jan 9, 2026, 9:41 AM GMT+7

Download Date

Jan 9, 2026, 9:47 AM GMT+7

File Name

GENGLISHLEARNERSTHROUGHVOCABULARYMASTERYANDPEERCOLLABORATION.pdf

File Size

537.4 KB

16 Pages**9,461 Words****59,025 Characters**

9% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.





Filtered from the Report

- Bibliography




Exclusions

- 1 Excluded Source
- 4 Excluded Matches

Match Groups

-  **71 Not Cited or Quoted 8%**
Matches with neither in-text citation nor quotation marks
-  **1 Missing Quotations 0%**
Matches that are still very similar to source material
-  **0 Missing Citation 0%**
Matches that have quotation marks, but no in-text citation
-  **0 Cited and Quoted 0%**
Matches with in-text citation present, but no quotation marks

Top Sources

- 5%  Internet sources
- 5%  Publications
- 3%  Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

No suspicious text manipulations found.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- 71 Not Cited or Quoted 8%**
Matches with neither in-text citation nor quotation marks
- 1 Missing Quotations 0%**
Matches that are still very similar to source material
- 0 Missing Citation 0%**
Matches that have quotation marks, but no in-text citation
- 0 Cited and Quoted 0%**
Matches with in-text citation present, but no quotation marks

Top Sources

- 5% Internet sources
- 5% Publications
- 3% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Student papers		
	Hellenic Open University		2%
2	Internet		
	sinta.kemdiktisaintek.go.id		1%
3	Publication		
	Risqilia Ramandani, Nurita Apridiana Lestari, Eko Budiarto, Rizki Fitri Rahima Uul...		<1%
4	Publication		
	Alemayehu Leta Abo, Hailu Wubshet Degefu, Berhan Demeke Abeba. "Augmentin...		<1%
5	Publication		
	Afsheen Rezai, Reza Ahmadi, Parisa Ashkani, Gholam Hossein Hosseini. "Impleme...		<1%
6	Internet		
	www.repository.cam.ac.uk		<1%
7	Publication		
	Rini Afriani, Endang Sepdanius. "The influence of english in sports activities on vo...		<1%
8	Publication		
	"Work Integrated Learning-Directions for the Future", Springer Science and Busin...		<1%
9	Publication		
	Vahid Norouzi Larsari, Hui Geng, Joshua Vidal. "Chapter 20 Collaborative Creation...		<1%
10	Internet		
	repository.uhamka.ac.id		<1%

11	Student papers	Wesley Institute	<1%
12	Internet	erepository.uonbi.ac.ke	<1%
13	Publication	Robinson, David Haile. "African American Mentors Descriptions of Successful Men..."	<1%
14	Publication	Sabine Hoidn, Manja Klemenčič. "The Routledge International Handbook of Stude..."	<1%
15	Publication	Yuni Annisa Hafni Rambe, Rahma Yunita Ansi, Endang Dorisday Sitorus. "Mening..."	<1%
16	Internet	www2.mdpi.com	<1%
17	Internet	jprpk.com	<1%
18	Publication	Shahida Mariam, Kausar Fiaz Khawaja, Muhammad Nawaz Qaisar, Farooq Ahmad...	<1%
19	Internet	fis.cld.bz	<1%
20	Internet	aisberg.unibg.it	<1%
21	Internet	www.frontiersin.org	<1%
22	Publication	Julia Bondarchuk, Oleksandr Khomenko, Olena Vasylenko, Olena Yanchuk. "Innov..."	<1%
23	Publication	Xiaoli Su, Hongbiao Yin. "'Like porcupines and hedgehogs': Building positive teac..."	<1%
24	Publication	Yongchun Mao, Chuang Chen, Yiyu Deng, Zihao Cao. "Critical reading in design e..."	<1%

25	Internet	jle.hse.ru	<1%
26	Internet	ojs.uph.edu	<1%
27	Internet	papers.iafor.org	<1%
28	Internet	www.coursehero.com	<1%
29	Publication	Arifi Dwi Fadila, Faurina Anastasia. "Students' Perceptions of English Blended Lea...	<1%
30	Publication	María Carmen Martínez-Murciano, David Pérez-Jorge. "Effects of excessive video ...	<1%
31	Publication	Imran Nazeer, Nida Mushtaq Khan, Aman Nawaz, Jawaria Rehman. "An Experime...	<1%
32	Publication	Petersen, Matthew D.. "The Role of Leadership in Elementary Technology Integra...	<1%
33	Publication	Sunday Abidemi Itasanmi, Johannes N. Mampane. "Push and pull factors influenc...	<1%
34	Internet	repository.uki.ac.id	<1%

DESIGNING THE FISWR LEARNING MODEL: EMPOWERING ENGLISH LEARNERS THROUGH VOCABULARY MASTERY AND PEER COLLABORATION

Lamhot Naibaho*

*English Education Study Program, Faculty of Letter and Languages,
Universitas Kristen Indonesia, Jakarta, Indonesia
Email: lnaibaho68@gmail.com*

Aarce Tehupeiory

*Postgraduate Program, Magister of Law, Universitas Kristen Indonesia, Jakarta, Indonesia
Email: aartje.tehupeiory@uki.ac.id*

Gunawan Tambun Saribu

*Faculty of Letter and Languages, English Literature Study Program,
Universitas Kristen Indonesia, Jakarta, Indonesia
Email: gunawan.tambunsaribu@uki.ac.id*

Geby Arni Siregar

*Terunas Harapan Nusantara Junior High School, Bekasi, Indonesia
Email: gebysiregar2@gmail.com*

APA Citation: Naibaho, L., Tehupeiory, A., Saribu, G. T., & Siregar, G. A. (2025). Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration. *English Review: Journal of English Education*, 13(1), 189-204. <https://doi.org/10.25134/erjee.v13i1.10535>

Received: 11-09-2024

Accepted: 13-12-2024

Published: 28-02-2025

Abstract: The recent Covid-19 pandemic has compelled universities to modernize their learning systems through technology while ensuring the enhancement of students' academic achievements. However, various institutional challenges hinder this process, requiring effective learning solutions. To address these challenges, universities need adaptable learning models applicable in both online and offline settings. This study focuses on developing an English language learning model that enhances vocabulary acquisition through structured stages: Finding, Saving, Writing, and Reading (FISWR). The model encourages students to actively search for new vocabulary, store and memorize it, construct sentences using the words, and practice reading their written sentences aloud in front of tutors or peers. Employing a Research and Development (RnD) design, this study is conducted at Indonesian Christian University with the following objectives: a) to empirically identify students' needs for learning models, b) to assess the feasibility of the models based on expert evaluations, c) to evaluate the effectiveness of the developed models in improving communication skills and vocabulary acquisition, and d) to analyze students' perceptions of the models. The expected outcome is the development of a comprehensive, adaptable, and validated English learning model for university-level implementation.

Keywords: FISWR model; english language learning; vocabulary acquisition; student-centered learning; R&D.

INTRODUCTION

Academic achievement has long been a focal point in educational research, serving as a key indicator of students' success. It influences multiple aspects of life, including self-esteem, motivation, and future career opportunities (Kassaw & Demareva, 2023; Alam, Mohanty, 2024; Park, 2024). Among the various factors affecting academic performance, cognitive abilities play a crucial role, particularly in language learning. Vocabulary acquisition is a fundamental aspect of English language proficiency, as it directly impacts communication skills, comprehension, and overall

linguistic competence (Naibaho & Ambrosia, 2019; Schmitt, 2019; Wawire & Zuilkowski, 2021). However, many students struggle with vocabulary retention and meaningful application, highlighting the need for structured pedagogical approaches that enhance both acquisition and usage.

Recent studies have explored different vocabulary learning strategies, including direct instruction, contextual learning, and digital tools (Nazeer, Mukhtar & Azhar, 2023; Eichstaedt, 2023; Zhang, Li & Zhou, 2023). While technology has provided new opportunities for online and

Lamhot Naibaho, Aarce Tehupeiory, Gunawan Tambun Saribu, Geby Arni Siregar

Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration

blended learning, its effectiveness in vocabulary acquisition remains dependent on pedagogical design rather than mere access to digital platforms. This suggests that a well-structured learning model is necessary to foster active student engagement and long-term vocabulary retention (Naibaho, 2022).

In response to these challenges, this study introduces the FISWR (Finding, Saving, Writing, and Reading) model, a structured approach to vocabulary acquisition that promotes self-directed learning and communicative practice. Unlike traditional teacher-centered methods, FISWR encourages students to actively search for vocabulary, store and memorize new words, construct meaningful sentences, and practice reading them aloud in peer-supported settings. This model aligns with student-centered learning principles by fostering autonomy, peer collaboration, and active participation in the learning process (Akhmetova, 2023; Hoidn & Reusser, 2020).

While online learning environments and Learning Management Systems (LMS) have facilitated education in recent years, research indicates that technological tools alone do not guarantee language mastery (Fageeh, 2024; Netanda, 2020; Naibaho, Saxena, Sharma, Alfurhood, Pallavi, & Pant, 2023). The FISWR model addresses these pedagogical gaps by integrating independent vocabulary learning strategies with oral and written reinforcement, ensuring that students not only acquire vocabulary but also use it effectively in communicative contexts.

This study aims to develop and evaluate the FISWR model within a Research and Development (R&D) framework, focusing on its design, effectiveness, and practical application in English language learning. Specifically, the research seeks to answer the following questions: What is the design of the FISWR English language learning model? How effective and practical is the FISWR model in improving vocabulary acquisition and communication skills? Given time, budget, and resource constraints, this study is conducted within the scope of Indonesian Christian University, with expected outcomes contributing to both theoretical advancements in language pedagogy and practical applications in higher education.

In recent years, various studies have examined the effectiveness of different language learning strategies and pedagogical models in improving students' academic outcomes, particularly in vocabulary acquisition and communicative

competence (Ortikov, 2024; Niyozov, Bijanov, Ganiyev, & Kurbonova, 2023). These models emphasize the need for active learning, cognitive engagement, and self-regulated strategies to enhance long-term retention and application of vocabulary in real-life communication. However, despite the wealth of research available, there remains a gap in integrating structured vocabulary acquisition techniques with communicative reinforcement in a student-centered framework.

Second Language Acquisition (SLA) research highlights several key vocabulary learning strategies, including explicit instruction, contextual learning, peer interaction, and digital integration. Many studies suggest that storytelling-based learning, peer questioning, and structured memorization techniques significantly contribute to language mastery (Larsari, Geng, & Vidal, 2023; ElKoshiry & Hegazy, 2024). Storytelling provides meaningful contexts for vocabulary exposure, allowing learners to internalize language structures naturally. Meanwhile, peer questioning encourages active engagement, as learners construct their understanding through interactive discussions. Memory-based strategies, such as vocabulary journals and spaced repetition, have also proven effective in helping students retain and retrieve words efficiently in real communication settings.

Although these strategies have been widely implemented, many traditional learning models lack an integrated approach that connects vocabulary acquisition, structured writing, and verbal reinforcement. Most conventional approaches focus either on explicit vocabulary instruction or communicative practice separately, rather than bridging the two into a continuous learning cycle (Azizi, Namaziandost & Ashkani, 2022; Hanemann & Robinson, 2022). This gap underscores the need for a comprehensive model that systematically develops vocabulary while simultaneously strengthening students' speaking and writing skills.

Existing student-centered learning models, such as Project-Based Learning (PBL), Task-Based Language Teaching (TBLT), and Communicative Language Teaching (CLT), emphasize interactive and real-world applications of language learning (Khamroeva, 2024; Yaqobi, 2022). However, while these approaches enhance engagement and motivation, they often lack structured mechanisms for vocabulary retention and written application. Research indicates that students frequently struggle with long-term retention when vocabulary learning is not reinforced through active usage. The FISWR (Finding, Saving, Writing, and Reading)

model seeks to fill this gap by integrating four essential steps in vocabulary learning. The first step, "Finding," encourages students to actively search for and identify new vocabulary in various sources such as texts, conversations, and media. The second step, "Saving," focuses on storing and memorizing vocabulary systematically using personal vocabulary banks or digital tools. The third step, "Writing," involves applying vocabulary in structured sentence formation and paragraph development, reinforcing its contextual use. Finally, the "Reading" component requires students to practice pronunciation, fluency, and verbal expression through peer-supported reading and discussion.

Unlike traditional rote memorization techniques, the FISWR model emphasizes student autonomy, providing learners with opportunities to personalize their vocabulary learning while ensuring reinforcement through collaborative writing and verbal articulation. This aligns with constructivist learning principles, where learners build knowledge through active participation and peer interaction (Le & Nguyen, 2024; Hailikari, Irtanen, Vesalainen & Postareff, (2022). With the rise of technological advancements in education, many digital tools have been developed to support vocabulary acquisition. Learning Management Systems (LMS), vocabulary apps, and AI-powered feedback tools are widely used to facilitate learning beyond the classroom (Naibaho, Saxena, Sharma, Alfurhood, Pallavi & Pant, 2023). However, while these tools enhance accessibility, they do not inherently address the need for structured reinforcement in real communication settings. Studies show that students retain vocabulary more effectively when digital learning is complemented by peer interactions and practical application.

By incorporating both traditional and digital learning approaches, the FISWR model ensures that vocabulary acquisition is not just passive exposure but an interactive, communicative process (Bajac & Fišer, 2024; Khorrami, 2024). Through structured writing exercises and verbal reinforcement, learners engage in meaningful activities that bridge vocabulary retention and usage, making it more effective than conventional teacher-centered approaches. The importance of integrating structured vocabulary acquisition with communicative reinforcement to enhance SLA outcomes. While previous models such as PBL, TBLT, and CLT provide student-centered learning experiences, they often lack the structured vocabulary development cycle needed for long-term retention (Bouchahed, 2024; Naibaho, 2021;

Chen, 2024). The FISWR model fills this gap by providing a systematic approach that combines active vocabulary discovery, memorization, writing practice, and verbal reinforcement. Additionally, as technology continues to evolve in education, this model can be further enhanced with digital tools, ensuring that students develop both independent learning strategies and communicative competence in the second language acquisition process.

METHOD

The research design employed in this study is Research and Development (R&D). This method is essential for obtaining data on user needs through a needs assessment, followed by the development of products designed to address these needs, with a focus on evaluating their effectiveness. The R&D approach was chosen to align with the study's objective of developing an effective learning strategy through the FISWR model. This design incorporates both research activities, such as a needs analysis and literature review, as well as product development, testing, and validation.

The study will involve 120 students from the English Language study program during the odd semester as research participants. These students will serve as subjects for developing and testing the FISWR learning model. The R&D process in this study consists of three primary stages: needs assessment, design and development, and testing and validation. The needs assessment stage involves analyzing current challenges in English language learning, identifying the difficulties faced by students, and determining the key components necessary for effective vocabulary acquisition. The insights gathered from this phase will serve as the foundation for designing the FISWR model. The design and development phase will focus on constructing the learning model, outlining the methodologies, instructional techniques, and digital and physical resources required for effective implementation. The final stage, testing and validation, involves evaluating the practicality and effectiveness of the model through a series of trials, expert validation, and student feedback.

During the validation process, the FISWR model will be assessed through focus group discussions with educational experts and lecturers at Universitas Kristen Indonesia. This validation phase will include content validation, ensuring that the model aligns with pedagogical principles, and construct validation, which assesses its internal consistency. After validation, a pilot study will be conducted with students to evaluate the practicality

and effectiveness of the model in real classroom settings. Data will be collected on student motivation, participation, and learning outcomes to measure the impact of the FISWR model on their vocabulary acquisition.

The data collection process consists of several critical steps. First, an initial survey will be conducted at the English Education study program, Faculty of Letters and Language Education, Universitas Kristen Indonesia. This survey aims to assess the current state of English language instruction and identify key areas for improvement. Respondents will then be selected based on their willingness to participate and their experience with English language learning, ensuring that their insights contribute meaningfully to the study. The next step involves developing research instruments, including questionnaires, documentation checklists, and interview sheets, which will be used to gather data from participants. Following this, the data collection process will take place, wherein students' responses and observations will be recorded systematically.

After the data collection phase, the analysis and organization of findings will be carried out to determine the essential components of the FISWR learning strategy. The designed model and its supporting materials will then be submitted to language learning experts and software specialists for validation. Once validated, the model will be tested on small student groups comprising participants from different study programs to ensure a broad perspective on its applicability. The evaluation process will involve analyzing expert feedback and student responses to determine the model's strengths and areas for improvement.

The study will employ a Likert-scale questionnaire to measure participants' perceptions of the FISWR model. The responses will be rated using a five-point scale: strongly good, good, rather good, bad, and strongly bad. The interpretation of scores will be structured as follows: 0%-20% indicates "strongly good," 21%-40% signifies "good," 41%-60% corresponds to "rather good," 61%-80% represents "bad," and 81%-100% indicates "strongly bad." This scoring system will allow for a structured evaluation of students' and lecturers' perceptions of the model.

The study will also incorporate a structured validation and refinement process to improve the model before field trials. The research findings will be displayed in tabular form to provide a clear visualization of the validation and trial questionnaire results. The evaluation results, along with feedback from experts, lecturers, and

students, will be analyzed to refine and perfect the FISWR model. The revised version of the model will then be prepared for broader implementation through field trials.

The field trials will involve implementing the FISWR English language learning model in real classroom settings. Lessons will be conducted using the model to assess its effectiveness in enhancing vocabulary acquisition. The data collected during these trials will be used to evaluate student engagement and performance to determine whether the model meets its intended educational goals. Based on the results of the field trials, necessary final adjustments will be made to improve the model's efficiency before its final implementation. The ultimate outcome of this study is the production of a fully developed FISWR English language learning model that is ready for broader application in English language instruction. Ethical approval for this study was obtained from Universitas Kristen Indonesia's Ethics Committee. Participants provided informed consent before data collection, ensuring voluntary participation. All personal data were kept confidential, and participants had the right to withdraw from the study at any stage without consequences. The study adheres to ethical guidelines for human subject research, ensuring that all procedures align with international standards for educational research.

RESULTS AND DISCUSSION

The model developed was named the FISWR English language learning model. Educators utilize diverse learning models in the teaching and learning process. Therefore, selecting an appropriate learning model is crucial to motivating students and catering to their individual learning styles. The right model enhances engagement and ensures the optimal achievement of learning objectives (Jayalath & Esichaikul, 2022; Halverson & Graham, 2019; Sandars, et al., 2020; Barkley & Major, 2020). The development of the FISWR model is grounded in the theory of learning elements, which identifies five fundamental components of a learning model: a) syntax, referring to the operational steps of learning; b) social system, which represents the prevailing atmosphere and norms in learning; c) principles of reaction, describing how teachers should perceive, treat, and respond to students; d) support system, encompassing all facilities, materials, tools, or learning environments that aid learning; and e) instructional and nurturant effects, representing both the intended learning outcomes (instructional

effects) and the incidental learning benefits beyond the targeted goals (nurturant effects) (Thankachan, 2020; Kong & Chookhampaeng, 2024).

The FISWR model is specifically designed to enhance students' mastery, comprehension, and practical use of English across speaking, writing, reading, and listening skills. The model facilitates independent and peer-assisted learning by guiding students to identify unfamiliar vocabulary, document it in a personal vocabulary book, construct sentences using the newly acquired vocabulary, and present their written sentences in front of a peer, tutor, or instructor. In addition to these overarching goals, the FISWR model aims to: a) improve students' achievement in language learning and skill development, b) provide a flexible learning model that accommodates diverse learning preferences and fosters self-regulated learning, and c) cultivate students' ability to manage learning resources and effectively comprehend texts.

The FISWR model is characterized by several distinctive features. First, it promotes student responsibility in learning by requiring them to independently search for unfamiliar vocabulary from various sources, document and categorize their findings, memorize selected words, and apply them in sentence construction. This cyclical process reinforces vocabulary retention and practical usage. Second, the model emphasizes the integration of all language skills (reading, writing, listening, and speaking) to enhance comprehension and fluency. Third, peer questioning is embedded within the model, allowing learners to engage in interactive exercises that develop their memory, pronunciation, writing, and listening abilities. Finally, the model encourages active participation and communication, ensuring that students engage meaningfully in the learning process. Upon completing the learning cycle, students are expected to demonstrate improved vocabulary acquisition and the ability to use new words accurately in both spoken and written communication.

In addition to defining the learning objectives, the FISWR model incorporates essential structural components that define its framework. Every learning model must include five fundamental characteristics: syntactic, social system, reaction principle, support system, and instructional impact (Panadero & Lipnevich, 2022; Chiu, Liu, Barrett, Liaw, Hwang & Lin, 2023; Jalinus, Verawardina, Nabawi & Darma, 2021; Atkinson, Mejía-Laguna, Ribeiro, Cappellini, Kayi-Aydar & Lowie, 2025).

These elements shape the overall structure and effectiveness of the learning model.

The FISWR English language learning model follows a structured learning flow that systematically enhances students' English proficiency by integrating reading, writing, speaking, and listening skills. The learning process begins with the stage of finding vocabulary from reading and listening sources, where students actively search for new vocabulary from various materials such as English newspapers, magazines, fiction and non-fiction books, advertisements, brochures, films, news broadcasts, blogs, and academic articles. This step exposes students to authentic language use across diverse contexts and fosters vocabulary acquisition in meaningful ways (Li, Liao & Zhong, 2025; Malykhin, Bondarchuk, Tersina & Voitanik, 2024).

The next stage involves compiling a list of new vocabulary, where students identify and underline unfamiliar words in texts. Each student is required to gather 20-25 new words daily from these sources. Once identified, the words are transferred to a personal memory book, in which students look up their meanings in a dictionary and record multiple definitions. This practice is essential for reinforcing contextual learning and aiding long-term retention (Zeng, Kuo, Chen, Lin, & Shen 2025; Andriani & Drajati, 2024; Rice & Tokowicz, 2020).

In the memorization stage, students test their recall by covering the meanings of recorded words and attempting to remember them independently. Words that are difficult to recall are marked and rewritten in a pocket notebook for focused memorization. Additionally, students create flashcards or post vocabulary on hanging papers in their study spaces for frequent review. This approach follows the principles of spaced repetition, which is known to improve vocabulary retention in second language acquisition (Javorsky, 2024).

Following vocabulary acquisition, students move on to writing sentences using the words they have memorized. This activity helps them understand the usage of new vocabulary within proper grammatical structures. They are required to construct at least two sentences for each memorized word. The repetition of sentence-writing tasks strengthens their ability to apply vocabulary contextually, improving both written and spoken communication skills (Mister, 2023; Naibaho, 2022).

The classroom learning process in the FISWR model consists of three phases: opening activities,

Lamhot Naibaho, Aarce Tehupeiory, Gunawan Tambun Saribu, Geby Arni Siregar

Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration

core activities, and closing activities. The opening activities begin with a brief prayer led by the teacher or a student, followed by an attendance check and brainstorming session to engage students and activate prior knowledge. The core activities involve storytelling sessions, where students narrate stories in English or translate them between English and Indonesian. This activity enhances their speaking, listening, and analytical thinking skills. Additionally, peer questioning exercises provide opportunities for students to test each other's vocabulary knowledge and comprehension in an interactive manner (Chen, Chang, Hwang & Zou, 2023). The closing activities include comprehension exercises based on the lesson, feedback from the instructor, and assignments for further practice. The session concludes with a short prayer to reinforce a supportive and engaging learning environment.

The social system of the FISWR model fosters both independent and collaborative learning. From the vocabulary acquisition stage to sentence-writing tasks, students are encouraged to manage their own learning materials and track their progress. During classroom sessions, however, the teacher assumes a facilitator role, guiding students through integrated language activities. Storytelling and peer questioning ensure student engagement and active participation, fostering a sense of collaboration while reinforcing individual accountability in learning (Vesala-Varttala, Pál & Kóris, 2024).

The reaction principle of the FISWR model emphasizes teacher feedback. Instructors help students refine their pronunciation and ensure they can effectively use new vocabulary in spoken and written communication. Constructive feedback is provided to address errors and strengthen language acquisition. This aligns with the communicative approach to language teaching, which prioritizes interaction and meaning-making as central components of language learning (Littlewood, 2004).

A strong support system is necessary for the effective implementation of the FISWR model.

This includes access to diverse learning materials, adequate classroom infrastructure, and digital tools that facilitate vocabulary acquisition and practice. Technology-enhanced learning environments, such as digital flashcards and language-learning apps, can supplement traditional methods and further improve students' retention rates (Tyas & Naibaho, 2021).

The instructional impact of the FISWR model is significant, as it enables students to develop all four language skills simultaneously. Since every classroom session incorporates reading, writing, listening, and speaking activities, students are continually exposed to and practice English in a balanced manner. Furthermore, the model encourages students to explore topics of personal interest when selecting vocabulary sources, increasing motivation and engagement in the learning process (Tyas & Naibaho, 2021). The accompaniment impact includes improved reading habits, critical thinking skills, semantic and pragmatic language comprehension, self-directed learning, and enhanced time management abilities. Additionally, the model promotes academic honesty, as students are required to independently source and test their vocabulary knowledge without external assistance.

By structuring vocabulary acquisition, memorization, contextual application, and interactive classroom activities into a single framework, the FISWR model ensures a comprehensive and engaging language learning experience. It aligns with modern educational approaches that emphasize learner autonomy, collaborative engagement, and active communication. This model provides students with the necessary skills to function effectively in English-speaking environments and equips them with learning strategies that foster lifelong language development. The syntactic element of the FISWR model outlines the specific stages involved in the learning process. These structured steps guide students through vocabulary acquisition, retention, and application in a systematic manner as follows:

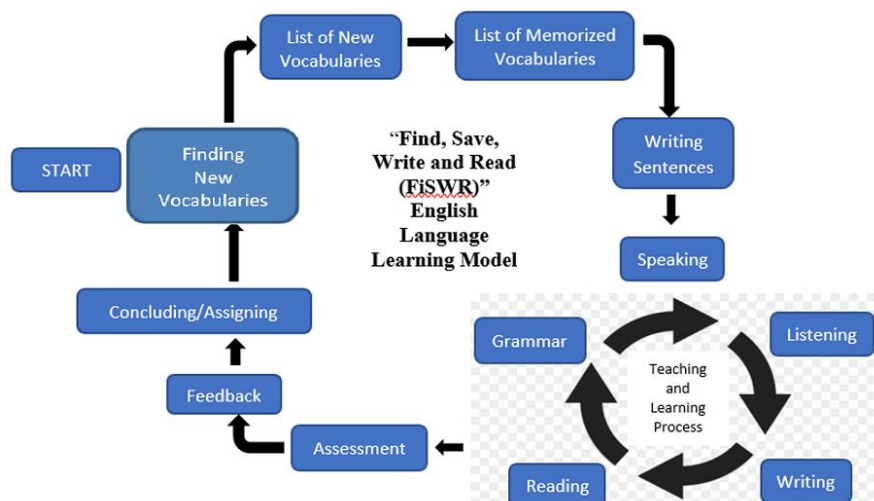


Figure 1. Syntactic elements of FISWR english language learning model

The validity of the FISWR model was assessed to ensure that it meets the requirements of a high-quality learning framework, including relevance, theoretical and empirical grounding, and internal consistency among its components. The model underwent validation by three subject-matter experts before proceeding to content and construct validation. Content validity focused on evaluating the model's relevance to current pedagogical trends and its alignment with second language acquisition (SLA) theories, while construct validity examined the internal consistency between the model's stages, underlying theories, and expected learning. The validation process took place between March 3-10, 2019, using a structured validation sheet designed by the researcher. The experts provided several key recommendations for enhancing the model's framework and instructional effectiveness. First, they suggested a clearer justification for why existing learning models such as Jigsaw and Group Investigation (GI) may be less effective in developing communication and collaboration skills, thereby reinforcing the need for an alternative model like FISWR. Second, they emphasized the importance of incorporating

problem-solving elements within the learning process, aligning with inquiry-based learning principles that encourage students to engage with real-world issues. Third, they recommended enhancing the motivation phase by integrating phenomena-based learning strategies such as visual demonstrations, storytelling, video materials, and case studies to stimulate interest and activate prior knowledge. Finally, they suggested refining the presentation and assessment strategies in the third phase of the model by including peer-group presentations or interactive displays of student work to foster collaborative learning and reinforce language acquisition. Following these expert recommendations, the FISWR model was revised and finalized to integrate the proposed enhancements. The updated version reflects a stronger alignment with contemporary language learning strategies, emphasizing student-centered engagement and self-regulated learning. The revised model has been documented in the FISWR Model Handbook. The following section summarizes the model validity result as found in Table 7.

Table 1. FISWR model validity results

No	FISWR Model Category	Average Validation Score	Content Validity	Construct Validity	%	Reliability
1	FISWR model development needs	4	Very valid	Very valid	100%	Reliable
2	Current knowledge (state of the art of knowledge)	4	Very valid	Very valid	100%	Reliable
3	FISWR Model theoretical support	4	Very valid	Very valid	100%	Reliable
4	Planning	4	Very valid	Very valid	100%	Reliable
5	Learning environment management	4	Very valid	Very valid	100%	Reliable
6	Use of evaluation techniques	4	Very valid	Very valid	100%	Reliable

Lamhot Naibaho, Aarce Tehupeiory, Gunawan Tambun Saribu, Geby Arni Siregar

Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration

Overall Validation	All categories	4	Very valid	Very valid	100%	Reliable
--------------------	----------------	---	------------	------------	------	----------

The validity assessment of the FISWR model was conducted through content validity and construct validity, as shown in the revised table. Content validity ensures that the model aligns with theoretical foundations and current educational best practices, while construct validity evaluates its internal consistency and alignment with learning objectives. Results indicate that all aspects of the FISWR model received an average validation score of 4, categorized as very valid with 100% reliability. The evaluation covered six key categories: development needs, relevance to contemporary knowledge, theoretical support, planning, learning environment management, and evaluation techniques. These results confirm that the FISWR model is well-grounded in theory and applicable in real-world learning environments.

The validation process involved three expert reviewers, who assessed the model using structured instruments. Their feedback emphasized the model's ability to integrate collaborative learning principles, enhance language acquisition strategies, and support learner autonomy. Moreover, experts recommended adjustments in instructional phases, particularly in motivation strategies, problem-based learning approaches, and evaluation techniques to maximize engagement. Overall, the FISWR model was deemed valid and reliable for implementation in English language learning contexts. This validation supports its potential as an effective framework for improving student vocabulary acquisition, peer interaction, and independent learning.

Table 2. *Summary of FISWR model implementation results*

No	Learning Stage	Indicator	Average Score	Category	Reliability (%)
1	Finding Vocabulary	Teacher motivation for vocabulary acquisition	4.0	Strongly Good	90%
		Teacher guidance on the FISWR learning process	4.5	Strongly Good	95%
2	Vocabulary Listing & Memorization	Students identifying & recording new words	5.0	Strongly Good	100%
		Self-testing and vocabulary recall	4.0	Strongly Good	90%
		Memorization using pocket books & hanging papers	4.5	Strongly Good	95%
3	Sentence Writing	Constructing sentences using memorized vocabulary	3.5	Good	75%
4	Teaching & Learning Activities	Opening activities (prayer, attendance, brainstorming)	4.5	Strongly Good	95%
		Core activities (storytelling, peer questioning)	4.0	Strongly Good	90%
		Teacher-led grammar instruction	5.0	Strongly Good	100%
5	Closing Activities	Comprehension exercises & feedback	4.5	Strongly Good	95%
		Additional assignments & closing reflections	4.0	Strongly Good	90%
Overall	Implementation Score	Average Implementation Rating	4.17	Strongly Good	89.05%

The results presented in Table 2 summarize the implementation of the FISWR learning model based on key learning stages, observed indicators, and evaluation scores. The findings indicate that the model was effectively implemented across different stages of learning, achieving an overall strong evaluation with an average score of 4.17, categorized as "strongly good" with a reliability percentage of 89.05%.

In the initial stage of vocabulary acquisition, teacher motivation and guidance played a crucial role in engaging students in identifying and documenting new words. This stage received an average score of 4.0 to 4.5, demonstrating that students responded positively to teacher-led instruction and support. The vocabulary listing and memorization stage showed the highest effectiveness, with students successfully

identifying, recording, and memorizing new words. The use of self-testing strategies, pocket books, and hanging papers contributed to vocabulary retention, as reflected in an average score ranging from 4.0 to 5.0, all categorized as "strongly good."

The sentence writing stage, which required students to construct sentences using newly acquired vocabulary, received a slightly lower rating, with an average score of 3.5. While still classified as "good," this stage may require additional reinforcement to improve students' confidence and accuracy in sentence formation.

The teaching and learning activities, which integrated reading, writing, listening, and speaking, demonstrated strong effectiveness. The opening activities, which included prayer, attendance, and brainstorming, achieved a high score of 4.5, indicating that students were actively engaged from the start. Core activities, including storytelling and peer questioning, were rated at 4.0, showing that these interactive methods effectively

encouraged student participation. Teacher-led grammar instruction received the highest rating of 5.0, confirming its essential role in guiding students toward mastering language structures. In the closing activities, comprehension exercises, feedback, and additional assignments were well received, with scores ranging from 4.0 to 4.5, reinforcing the importance of structured reinforcement and assessment.

Overall, the implementation results suggest that the FISWR model is a highly effective approach for language learning, fostering engagement, vocabulary retention, and skill development. However, minor refinements, particularly in the sentence writing stage, could further enhance students' ability to construct meaningful and grammatically correct sentences. The strong reliability of the model implementation, with an agreement threshold exceeding 75%, confirms that the approach is both practical and replicable in broader educational settings.

Table 3. Consolidated data on the implementation of the FISWR learning model in the trial

No	Stages	Indicators	Meeting I (Mean)	Meeting II (Mean)	Meeting III (Mean)	Category	Reliability (%)
1	Finding Vocabularies	The teacher motivates students to learn English	4.0	4.0	4.0	Strongly good	90%
		The teacher conveys the learning objectives	3.5	3.5	4.0	Good	75-90%
		The teacher provides direction for the FISWR process	4.5	4.5	4.5	Strongly good	95%
2	List of New Vocabulary	Students identify 20-25 difficult words from reading materials daily	5.0	5.0	5.0	Strongly good	100%
		Students transfer words to a memory book	4.0	4.0	4.0	Strongly good	90%
		Students look up meanings in a dictionary and record definitions	4.5	4.5	4.5	Strongly good	95%
3	List of Memorized Vocabulary	Students review recorded words and test their recall	5.0	5.0	5.0	Strongly good	100%
		Students rewrite forgotten words into a pocketbook	4.5	4.5	4.5	Strongly good	95%
		Daily memorization of words recorded in pocketbooks and on hanging papers	5.0	5.0	5.0	Strongly good	100%
4	Writing Sentences	Students write two sentences per learned word	3.5	3.5	4.0	Good	75-90%
		Students practice reading their written sentences aloud	4.0	4.0	4.0	Strongly good	90%

Lamhot Naibaho, Aarce Tehupeiori, Gunawan Tambun Saribu, Geby Arni Siregar

Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration

5	Teaching and Learning Process	Opening Activities: Praying, attendance, and brainstorming	4.5	4.5	4.5	Strongly good	95%
	Core Activities: Storytelling, peer questioning, and vocabulary practice	4.0	4.5	4.5	Strongly good	90-95%	95%
	Closing Activities: Exercises, feedback, and additional assignments	4.5	4.5	4.5	Strongly good	95%	95%

The consolidated table presents the results of the implementation of the FISWR learning model over three meetings. The findings indicate a consistent improvement in students' engagement, participation, and comprehension throughout the trial period. The table summarizes the mean scores from two observers, categorizing the effectiveness of each stage in the learning process.

In the Finding Vocabulary stage, students demonstrated high motivation to learn English, as evidenced by a stable mean score of 4.0 across all meetings. The teacher's role in conveying learning objectives and providing direction for the FISWR process improved slightly by the third meeting, with the mean score increasing from 3.5 to 4.0, suggesting better understanding and adaptation to the model.

For the List of New Vocabulary stage, students consistently identified and documented 20-25 new words per day from various sources, achieving the highest rating of 5.0 across all three meetings. The process of transferring words into a memory book and looking up definitions also remained consistently strong, with mean scores ranging from 4.0 to 4.5. These findings indicate that students effectively maintained their vocabulary acquisition process throughout the learning sessions.

The List of Memorized Vocabulary stage showed highly positive results, with students actively reviewing, recalling, and rewriting vocabulary in pocketbooks and on hanging papers. The reliability of this stage remained at 95-100 percent, reinforcing that students followed the self-assessment and memorization techniques outlined in the model.

In the Writing Sentences stage, students demonstrated a slight increase in their ability to construct sentences using new vocabulary. The mean scores improved from 3.5 to 4.0 by the third meeting, suggesting gradual progress in applying acquired vocabulary in written form. Additionally, their confidence in reading sentences aloud remained stable, with a mean score of 4.0.

The Teaching and Learning Process showed a high level of engagement, particularly in the Opening Activities, which included prayers, attendance, and brainstorming. These activities consistently received a rating of 4.5, indicating that students were actively participating from the start of each session. The Core Activities, which integrated storytelling, peer questioning, and vocabulary exercises, also improved slightly across meetings, reflecting students' growing confidence in language use. The Closing Activities, which involved exercises, feedback, and additional assignments, maintained a high rating of 4.5, highlighting the structured nature of the model in reinforcing learning.

Overall, the results indicate that the FISWR learning model effectively supports vocabulary acquisition, self-regulated learning, and active student participation. The high reliability scores suggest that the model can be implemented consistently with minimal variations in effectiveness. The findings also reinforce the role of structured language learning in improving students' proficiency in English, particularly through interactive and repetitive exposure to vocabulary-building activities.

Table 4. Students' response questionnaire data on learning activities with the FISWR english language learning model

No	Statements	SA	A	D	SD	Total
1	The learning carried out can help make it easier for you to master English.	8	21	3		32
2	The lessons that have been carried out and the understanding you have gained are the result of my and the group's construction.	7	24	1		32

3	The learning that has been carried out can provide opportunities and practice English language skills.	7	24	1	32
4	With the learning that has been carried out, it can provide opportunities and practice English language skills.	7	23	2	32
5	The learning atmosphere in the learning that you have carried out is fun.	4	24	4	32
6	Instructions at each stage of the systematic FISWR model learning are clear.	6	24	2	32
7	Instructions at each stage of learning the FISWR model are easy to understand.	5	25	2	32
8	Instructions at each stage of learning the FISWR model are easy to understand.	8	22	2	32
9	The FISWR learning model can motivate me to be more active in learning.	5	25	2	32
10	The teacher guides during the learning process and helps me in practicing my English skills.	4	26	2	32
11	The FISWR learning model motivates me to be able to write well.	6	24	2	32
12	The FISWR learning model motivates me to be able to communicate in English well.	4	25	3	32
13	The FISWR learning model makes me feel happy and interested in learning English.	6	21	3	32
Total		104	308	29	416
Percentage		25%	74.03%	0.67%	100%

Legend: SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree

The results of the student response questionnaire, as presented in Table 4, indicate a highly positive reception of the FISWR English language learning model. The majority of students agreed that the learning approach facilitated their mastery of English, with 74.03% responding with "agree" and 25% responding with "strongly agree." Only a minimal percentage, 0.67%, expressed disagreement with certain aspects of the model.

The table further highlights that most students found the structured instructions at each stage of the FISWR model to be clear and easy to follow, with a strong agreement in responses to statements regarding the clarity and effectiveness of the instructional design. Additionally, students acknowledged that the model provided ample opportunities to practice English skills, particularly in writing and communication.

A notable finding is that 100% of the students reported feeling motivated to engage in learning activities, with many expressing that the FISWR model encouraged active participation and self-directed learning. The responses also indicate that the model positively influenced students' confidence in using English, both in speaking and writing, which aligns with its intended goal of fostering independent language acquisition.

The overall results suggest that the FISWR model creates an engaging and effective learning environment. However, the small percentage of students who expressed disagreement may indicate a need for additional support or adaptation of the model to cater to different learning styles. These findings reinforce the model's practicality and effectiveness, supporting its potential for wider implementation in English language education.

The development of the FISWR English language learning model aimed to enhance students' English proficiency by integrating structured vocabulary acquisition, memorization, and application through interactive learning activities. The model was evaluated based on three primary criteria: validity, practicality, and effectiveness. Validation results from three experts confirmed that the model meets the required standards after multiple revisions, ensuring both theoretical and empirical soundness. The practical aspect was assessed through classroom implementation observations, analyzing student engagement and identifying obstacles encountered during the learning process. The effectiveness of the model was determined by evaluating students' communication and collaboration skills, both descriptively and statistically.

Lamhot Naibaho, Aarce Tehupeiori, Gunawan Tambun Saribu, Geby Arni Siregar

Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration

The validation of the learning model, as presented in Table 10, confirms that the FISWR model demonstrates both content and construct validity. A learning model must meet content validity and construct validity standards to be recognized as a viable educational research product (Nicastro, 2024). Content validity ensures that the model addresses a specific need and remains relevant within the current educational framework, while construct validity assesses the logical coherence of the model's components and its alignment with the underlying learning theories (Mathieu, Luciano, D'Innocenzo, Klock & LePine (2020). The findings align with prior research which emphasizes that an effective learning model should maintain consistency between its theoretical foundation and instructional implementation.

The content validity of the FISWR model is particularly relevant in the context of educational policies such as Permenristek Dikti No. 44 of 2015, which mandates that doctoral research incorporate innovation and novelty through a transdisciplinary approach. This model introduces new elements to English language instruction, particularly in promoting communication skills as a core component of 21st-century competencies. The model's novelty lies in its structured vocabulary acquisition strategy, systematic reinforcement mechanisms, and integration of collaborative learning techniques. Compared to conventional models, the FISWR model enhances students' engagement with authentic language materials and fosters independent learning.

One of the significant contributions of this study is the introduction of an educational product specifically designed to improve students' communication and collaboration skills. The model was developed through empirical field studies and literature-based insights into collaborative learning methodologies. It addresses existing gaps in language learning models by prioritizing active vocabulary acquisition, peer interaction, and real-world language application. Unlike traditional language instruction methods that primarily focus on passive learning through syllabus-based material comprehension, the FISWR model ensures that students acquire, store, and use vocabulary dynamically.

The results of the study also highlight areas for improvement in English language skill development. Existing language learning models do not sufficiently emphasize active vocabulary acquisition and its integration into communication practices. While many models focus on syllabus-

based comprehension, the FISWR model provides an interactive approach by encouraging students to engage with vocabulary through structured steps: finding, saving, writing, and reading. By allowing students to select vocabulary from sources that align with their interests, the model fosters intrinsic motivation and a more personalized learning experience. The storytelling component further enhances language skills by requiring students to articulate and process information in meaningful ways.

The theoretical foundation of the FISWR model aligns with established criteria for collaborative learning. Effective collaborative learning environments require positive interdependence, where students rely on one another to succeed. This is supported by the findings which emphasize that fostering positive interdependence can be achieved through structured teacher facilitation. The FISWR model ensures that teachers act as mediators and facilitators, encouraging communication and peer collaboration—elements that are often underdeveloped in conventional English learning models.

The structural components of the FISWR model align with best practices in collaborative learning. These include differentiated student roles within groups, heterogeneous group composition, positive interdependence, and teacher facilitation. Collaborative learning is most effective when students are assigned interdependent tasks, reinforcing both accountability and cooperative learning behaviors (Borbor & Mero, 2024). In this regard, the FISWR model promotes meaningful engagement by integrating structured vocabulary acquisition with interactive peer activities.

The role of the FISWR model in meeting 21st-century educational demands is further substantiated by its emphasis on communication and collaboration skills. The findings indicate that students engaged in the FISWR learning process exhibited improved language proficiency and interactive learning behaviors. Observational data from student activities, as seen in Table 3, show an increase in mutual assistance interactions, particularly between high- and low-ability students. The analysis of student responses further supports this conclusion, with most students reporting that the model facilitated a deeper understanding of learning materials through active engagement and structured interaction.

Despite its strengths, the study acknowledges several limitations. The primary limitation is the relatively small sample size, which may affect the generalizability of the findings. Additionally, the

study was conducted within a limited timeframe, restricting the scope of long-term performance assessment. Future research should expand the sample size and incorporate longitudinal data collection to assess the sustained impact of the FISWR model. Another potential area for improvement is the integration of digital tools to enhance vocabulary acquisition and provide adaptive learning pathways tailored to individual student needs.

The overall findings affirm the effectiveness of the FISWR model as an innovative and structured approach to English language learning. The model demonstrates strong validity, practicality, and effectiveness in fostering communication and collaboration skills. Moving forward, further refinements and technological enhancements could strengthen its impact and applicability across diverse learning environments.

CONCLUSION

The findings from the development and trial implementation of the FISWR model indicate that it is a valid, practical, and effective approach to enhancing students' English language skills. The validation process confirmed that the FISWR model meets both content and construct validity, ensuring its theoretical and empirical foundation. The model is practical as it can be effectively implemented by teachers, and it also demonstrates effectiveness in improving student engagement and language acquisition. The implementation of the FISWR model led to a significant increase in student activities, including attentiveness to teacher instructions, active vocabulary acquisition, memorization, sentence construction, and the integration of reading, writing, speaking, and listening skills. This improvement was facilitated by the teacher's role as a mediator and facilitator, which encouraged collaboration and communication among students. Through structured learning steps, students developed greater independence in mastering English vocabulary and applying it in meaningful contexts. The structured sequence of *Finding, Identifying, Saving, Writing, and Reading* within the FISWR model ensures that students actively engage with the learning process. They are encouraged to take responsibility for identifying and understanding unfamiliar vocabulary, systematically documenting it, and applying it in spoken and written communication. The peer questioning and interactive classroom approach provide an additional platform for students to reinforce their comprehension and retention. Given its structured

yet flexible nature, the FISWR model aligns well with the demands of 21st-century language education. It fosters critical language skills while enabling students to develop autonomy in learning. Teachers also benefit from the structured format, which allows them to manage, evaluate, and monitor students' progress effectively.

Further research is recommended to explore the long-term impact of the FISWR model on students' language proficiency, particularly in diverse learning environments. Additional studies could also investigate its adaptability to different educational contexts and student needs. This study contributes to the development of innovative pedagogical models that enhance language learning and communication skills in higher education settings.

ACKNOWLEDGEMENT

The research team extends its deepest gratitude to the Directorate of Research, Technology, and Community Service of the Directorate of Higher Education, Research, and Technology for funding this research up to the writing of this article as a result of the research through the Applied Research Grant scheme. This support has allowed the research outputs to be achieved and fulfilled as part of the researchers' responsibility in reporting on the implementation of the research.

REFERENCES

- Akhmetova, G. S. (2023). Lexical semantic modeling as a means of effective vocabulary acquisition and expansion. *Bulletin of the Karaganda university Pedagogy series*, 112(4), 123-132.
- Alam, A., & Mohanty, A. (2024). Happiness Engineering: impact of hope-based intervention on life satisfaction, self-worth, mental health, and academic achievement of Indian school students. *Cogent Education*, 11(1), 2341589.
- Andriani, M., & Drajiati, N. A. (2024). Looking for a Fun Way to Learn English Vocabulary? Discover the Magic of Gamification with Digital Flashcards. *Voices of English Language Education Society*, 8(2).
- Atkinson, D., Mejía-Laguna, J., Ribeiro, A. C., Cappellini, M., Kayi-Aydar, H., & Lowie, W. (2025). Relationality, interconnectedness, and identity: A process-focused approach to second language acquisition and teaching (SLA/T). *The Modern Language Journal*, 109(S1), 39-63.
- Azizi, Z., Namaziandost, E., & Ashkani, P. (2022). Active learning as an approach to fostering EFL learners' speaking skills and willingness to communicate: A mixed-methods inquiry. *Issues in Language Teaching*, 11(2), 93-128.

Lamhot Naibaho, Aarce Tehupeiori, Gunawan Tambun Saribu, Geby Arni Siregar

Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration

- Bajac, M., & Fišer, M. (2024). Digital Transformation and New Educational Paradigm. *Social Informatics Journal*, 3(1), 1-8.
- Bajac, M., & Fišer, M. (2024). Digital Transformation and New Educational Paradigm. *Social Informatics Journal*, 3(1), 1-8.
- Barkley, E. F., & Major, C. H. (2020). *Student engagement techniques: A handbook for college faculty*. John Wiley & Sons.
- Borbor Echeverria, J. A., & Mero Alay, B. S. (2024). *Effects of collaborative learning on students' motivation and engagement* (Bachelor's thesis, La Libertad: Universidad Estatal Península de Santa Elena, 2024).
- Bouchahed Hani, T. Z. (2024). Exploring Teachers' Attitudes Toward the Implementation and Impact of Teaching methods on the Students' Language Proficiency in Algerian Middle Schools.
- Chen, C. Y., Chang, S. C., Hwang, G. J., & Zou, D. (2023). Facilitating EFL learners' active behaviors in speaking: a progressive question prompt-based peer-tutoring approach with VR contexts. *Interactive Learning Environments*, 31(4), 2268-2287.
- Chen, D. (2024). *A hybrid approach to teaching Chinese through digital humanities, CALL, and project-based learning*. Taylor & Francis.
- Chiu, W. Y., Liu, G. Z., Barrett, N. E., Liaw, M. L., Hwang, G. J., & Lin, C. C. (2023). Needs analysis-based design principles for constructing a context-aware English learning system. *Computer Assisted Language Learning*, 36(1-2), 176-204.
- Deepa, V., Sujatha, R., & Baber, H. (2021). Ageing and Learning Agility-Mediating role of learning perception and Moderating role of technology leverage. *International Journal of Lifelong Education*, 40(5-6), 514-531.
- Eichstaedt, M. (2023). *Comparing the Efficacy of Print and Digital Flashcards for Vocabulary Acquisition in an Elementary Education Setting* (Doctoral dissertation, University of St. Francis).
- El Koshiry, A. M., & Hegazy, A. Z. (2024). Using a Digital Storytelling-Based Electronic Program to develop primary stage pupils' EFL reading comprehension skills. *Fusion: Practice & Applications*, 16(1).
- Fageeh, A. I. (2024). Maximizing learning management systems in online college English education: views from France and Saudi Arabia. *Social Sciences & Humanities Open*, 9, 100868.
- Hailikari, T., Virtanen, V., Vesalainen, M., & Postareff, L. (2022). Student perspectives on how different elements of constructive alignment support active learning. *Active Learning in Higher Education*, 23(3), 217-231.
- Halverson, L. R., & Graham, C. R. (2019). Learner engagement in blended learning environments: A conceptual framework. *Online learning*, 23(2), 145-178.
- Hanemann, U., & Robinson, C. (2022). Rethinking literacy from a lifelong learning perspective in the context of the Sustainable Development Goals and the International Conference on Adult Education. *International Review of Education*, 68(2), 233-258.
- Hoidn, S., & Reusser, K. (2020). Foundations of student-centered learning and teaching. In *The Routledge international handbook of student-centered learning and teaching in higher education* (pp. 17-46). Routledge.
- Homayouni, M. (2022). Peer assessment in group-oriented classroom contexts: On the effectiveness of peer assessment coupled with scaffolding and group work on speaking skills and vocabulary learning. *Language Testing in Asia*, 12(1), 61.
- Jalinus, N., Verawardina, U., Nabawi, R. A., & Darma, Y. (2021). Developing blended learning model in vocational education based on 21st century integrated learning and industrial revolution 4.0. *Turkish Journal of Computer and Mathematics Education*, 12(9), 1276-1291.
- Javorsky, K. (2024). Beyond Memorization: Transforming Vocabulary. *Differentiated Instruction, Equity, and Inclusion in Language Education*, 1.
- Jayalath, J., & Esichaikul, V. (2022). Gamification to enhance motivation and engagement in blended eLearning for technical and vocational education and training. *Technology, Knowledge and Learning*, 27(1), 91-118.
- Kassaw, C., & Demareva, V. (2023). Determinants of academic achievement among higher education student found in low resource setting, A systematic review. *Plos one*, 18(11), e0294585.
- Khamroeva, S. (2024). Differences Between Communicative Language Teaching (CLT) And Task-Based Language Teaching (TBLT). *Modern Science and Research*, 3(2), 315-323.
- Khorrami, K. (2024). *Computational modeling of early language acquisition with multimodal neural networks* (Doctoral dissertation, Ph. D. thesis, Tampere University).
- Kong, Y., & Chookhampaeng, C. (2024). Developing a Teaching Model to Enhance Computational Thinking for Higher Vocational College Students. *Journal of Ecohumanism*, 3(8), 4979-4995.
- Larsari, V. N., Geng, H., & Vidal, J. (2023, July). Collaborative Creation of Digital Storytelling-Based Task for EFL Grammar Acquisition: Using Gamification and Its Effect on EFL Sixth-Grade Students' Learning in Flipped, Blended, and Traditional Classes. In *International*

- Conference on Future of Education (pp. 239-253). Singapore: Springer Nature Singapore.
- Le, H. V., & Nguyen, L. Q. (2024, June). Promoting L2 learners' critical thinking skills: the role of social constructivism in reading class. In *Frontiers in Education* (Vol. 9, p. 1241973). Frontiers Media SA.
- Li, Y., Liao, R., & Zhong, D. (2025). From theory to practice: assessing the impact of innovative English teaching on college students' language proficiency. *Innovation: The European Journal of Social Science Research*, 1-22.
- Malykhin, O., Bondarchuk, J., Tersina, I., & Voitanik, I. (2024). Unlocking success: strategic approaches to enhancing communicative competence in English learning. *Amazonia Investiga*, 13(76), 90-102.
- Mathieu, J. E., Luciano, M. M., D'Innocenzo, L., Klock, E. A., & LePine, J. A. (2020). The development and construct validity of a team processes survey measure. *Organizational Research Methods*, 23(3), 399-431.
- Mister, B. (2023). *From potential words to actual words: Supporting adult ESL learners to develop productive oral vocabulary* (Doctoral dissertation, University of Wollongong).
- Naibaho, L. (2021). The Analysis of Pre-Service EFL Teachers' Teaching Implementation. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(3), 3372-3381.
- Naibaho, L. (2022). Exploring digital technology integration in learning innovation. *International Journal of Academic Research and Development*, 7(6), 17-23.
- Naibaho, L., & Ambrosia, Y. (2019). Students' Perception on Guessing Game Use in Learning Vocabulary at SMPK Ignatius Slamet Riyadi.
- Naibaho, L., Saxena, P. R., Sharma, K., Alfurhood, B. S., Pallavi, L., & Pant, B. (2023, May). Integration of Artificial Intelligence in Software Defined Networking Technology through Developing Machine Learning Algorithms. In *2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)* (pp. 513-517). IEEE.
- Naibaho, L., Saxena, P. R., Sharma, K., Alfurhood, B. S., Pallavi, L., & Pant, B. (2023, May). Integration of Artificial Intelligence in Software Defined Networking Technology through Developing Machine Learning Algorithms. In *2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)* (pp. 513-517). IEEE.
- Nazeer, I., Mukhtar, S., & Azhar, B. (2023). Exploring the Effectiveness of Vocabulary Acquisition Strategies in Foreign Language Learning. *Harfo-Sukhan*, 7(3), 1-14.
- Netanda, R. S. (2020). *Supporting Learning through Learning Management Systems in an ODL Environment amid Covid-19: Technology Accessibility and Student Success*.
- Nicastro, O. (2024). *The Development and Content Validity of an Assessment Instrument in Simulation for Advanced Practice Provider Fellowship Programs: An Exploratory Study* (Doctoral dissertation, University of Northern Colorado).
- Niyozov, N., Bijanov, A., Ganiyev, S., & Kurbonova, R. (2023). The pedagogical principles and effectiveness of utilizing ChatGPT for language learning. In *E3S Web of Conferences* (Vol. 461, p. 01093). EDP Sciences.
- Ortikov, U. K. U. (2024). The effectiveness of technology-enhanced language learning methods. *Oriental renaissance: Innovative, educational, natural and social sciences*, 4(3), 162-179.
- Panadero, E., & Lipnevich, A. A. (2022). A review of feedback models and typologies: Towards an integrative model of feedback elements. *Educational Research Review*, 35, 100416.
- Park, S. (2024). Longitudinal relationships between grit, self-esteem, and academic achievement among Korean primary school students. *School Psychology International*, 45(5), 522-544.
- Rice, C. A., & Tokowicz, N. (2020). A review of laboratory studies of adult second language vocabulary training. *Studies in Second Language Acquisition*, 42(2), 439-470.
- Sandars, J., Correia, R., Dankbaar, M., de Jong, P., Goh, P. S., Hege, I., ... & Pusic, M. (2020). Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic. *MedEdPublish*, 9, 82.
- Schmitt, N. (2019). Understanding vocabulary acquisition, instruction, and assessment: A research agenda. *Language Teaching*, 52(2), 261-274.
- Thankachan, T. C. (2020). Peace Value Model: Theoretical And Practical Implications. *Educational Extracts*, 54.
- Tyas, E. H., & Naibaho, L. (2021, June). Effective School Management in Industrial Revolution Era 4.0. In *2nd Annual Conference on blended learning, educational technology and Innovation (ACBLETI 2020)* (pp. 212-216). Atlantis Press.
- Vesala-Varttala, T., Pál, Á., & Kóris, R. (2024). Fostering sustainability competences through co-creation of digital storytelling: Effects of COVID-19 on higher education students' reflective learning. *Journal of University Teaching and Learning Practice*, 21(3).
- Wawire, B. A., & Zuilkowski, S. S. (2021). The role of vocabulary and decoding language skills in reading comprehension: a cross-linguistic perspective. *International Multilingual Research Journal*, 15(1), 23-42.

Lamhot Naibaho, Aarce Tehupeiory, Gunawan Tambun Saribu, Geby Arni Siregar

Designing the FISWR learning model: Empowering english learners through vocabulary mastery and peer collaboration

Yaqobi, S. T. (2022). *The Effectiveness of Communicative Language Teaching and Task-Based Technology in Promoting International Graduate Students' Communicative Competence and Willingness to Communicate in English: A Case Study* (Doctoral dissertation, Texas Tech University).

Zeng, Y., Kuo, L. J., Chen, L., Lin, J. A., & Shen, H. (2025). Vocabulary Instruction for English Learners: A Systematic Review Connecting Theories, Research, and Practices. *Education Sciences*, 15(3), 262.

Zhang, Z., Li, H., & Zhou, J. (2023). Teaching with social context in instructional video facilitates second language vocabulary learning. *Heliyon*, 9(3).