



INNOVATIVE: Journal Of Social Science Research

Volume 4 Nomor 6 Tahun 2024 Page 6245-6258

E-ISSN 2807-4238 and P-ISSN 2807-4246

Website: <https://j-innovative.org/index.php/Innovative>

Bibliometric Analysis Of English Educational Research Indexed Scopus Q1 With Vosviewer In 2023

Jasmine Syifa Aqilah^{1✉}, Leroy Holman Siahaan², Lenny Solo³

English Education Department, Faculty of Educational Science, Panca Sakti University Bekasi

Email: guessitsjaz@gmail.com^{1✉}

Abstrak

Penelitian ini melakukan analisis bibliometrik terhadap penelitian tentang pendidikan bahasa Inggris yang terindeks di jurnal Scopus Q1 dengan menggunakan VOSviewer pada tahun 2023. Analisis ini bertujuan untuk mengidentifikasi tren dalam metodologi penelitian dan topik dalam pengajaran bahasa Inggris, dengan fokus pada keterampilan utama seperti mendengarkan, berbicara, membaca, dan menulis. Penelitian ini menggunakan metode kuantitatif, mengumpulkan data dari Scopus dan menganalisis hubungan kemunculan bersama antar istilah. Temuan ini menunjukkan dua kelompok topik utama: satu terkonsentrasi pada "keterampilan bahasa Inggris" dan hubungannya dengan teknik pengajaran saat ini seperti e-learning, terutama selama epidemi COVID-19, dan yang lainnya pada persyaratan bahasa dalam pendidikan militer. Temuan-temuan ini membantu memahami sejarah penelitian pendidikan bahasa Inggris dan menjadi dasar bagi penelitian-penelitian di masa depan dalam bidang ini.

Kata Kunci: *Analisis bibliometrik; keterampilan Bahasa; pendidikan Bahasa Inggris; Scopus Q1; tren penelitian; VOSviewer.*

Abstract

This study conducts a bibliometric analysis of research on English education indexed in Scopus Q1 journals using VOSviewer in 2023. The analysis aims to identify trends in research methodology and topics in English language teaching, focusing on key skills such as listening, speaking, reading, and writing. The study takes a quantitative method, collecting data from Scopus and analyzing co-occurrence connections between terms. The findings suggest two key clusters of topics: one concentrated on "English language skills" and their relationship to current teaching techniques like as e-learning, particularly during the COVID-19 epidemic, and the other on language requirements in military education. The findings help to understand the history of English language education research and lay the groundwork for future studies in the discipline. .

Keywords: *Bibliometric analysis; English education; language skills; research trends; Scopus Q1; VOSViewer.*

INTRODUCTION

Educational Research is one of the scientific fields of study that pays attention to how students learn and how they are educated, as well as how organizations, institutions, and other social interaction factors affect the learning process often done directly by going to the field, where researchers in the field of education make observations during the learning process. Educational research can be divided into three categories: descriptive research, correlational research, and experimental research. Researchers explore what is happening in educational institutions, point out the facts and factors that influence it, and finally provide solutions by creating learning technology or strategies, approaches, and media and even provide suggestions in the form of programs or school policies that can help provide solutions in the world of education.

This research challenge in the field of education then gave birth to new ideas in the use of tools to analyze the study results. One of them is currently gaining popularity in the research world, namely bibliometric analysis (Nguyen et al. 2020), this analytical tool is increasingly being discussed and reused in research. Bibliometric analysis is a popular and rigorous method for exploring and analyzing large amounts of scientific data, where the analysis is carried out bibliometrically using data on the number and authors of scientific publications as well as articles and citations which aim to measure the output of individuals or teams of researchers, institutions, and countries, identifies national and international networks, and maps the development of new fields of science and technology (multidisciplinary) Lukman, 2019). In the field of education itself or generally, in the field of humanities and social sciences, the use of this analysis is less common.

One of the most needed skills today is English. English is a global language, so those

who want to be one step ahead of people in general, need to even master English (Aizawa et al. 2023). English language learning has competency standards that include listening, speaking (structure/tenses), reading, and writing.

Research on English Education has been widely published and can be accessed by anyone (Alhaider 2023). This is because as time goes by, there are many new ideas and discoveries in the world of English Education. Many of them are research on the right English learning methods for certain levels, problems in teaching English found during the learning process, the most appropriate approach to learning English for certain levels, and so on.

Bibliometric analysis is often known as scientometrics (Kuzior and Sira 2022), where the use of this analysis allows researchers to explore the evolutionary nuances of a particular field and highlight emerging areas in the field (Donthu, 2021). In a bibliometric analysis, the focus is more on quantifying and measuring the influence of a study, while in a systematic literature review, the focus is more on presenting a comprehensive overview of existing research and providing a summary of key findings from relevant studies.

According to Virgil, the term bibliometrics is related to a field that uses mathematical and statistical techniques, ranging from counting to calculus, to study publishing and communication patterns in information distribution (Pipit Mulyah, Dyah Aminatun, Sukma Septian Nasution, Tommy Hastomo, Setiana Sri Wahyuni Sitepu 2020). Some of the disciplines that have implemented bibliometric analysis include the humanities, social sciences, natural sciences, formal sciences, and applied sciences.

Seeing that many studies have used this analysis, studies in the field of education can also be developed into many sub-studies, which so far educational research often uses data collection techniques by conducting interviews, surveys, and questionnaires (Rahman et al. 2023). Collecting data from research subjects using one or more educational research methods (Phuong 2023). After the data is collected, researchers analyze and interpret the data to arrive at valid findings. The most commonly used research analysis methods in educational research are qualitative, and quantitative methods, survey methods, expose methods, and descriptive methods. What about the use of bibliometric analysis in the field of education is still a matter of debate today. This quantitative research method involves using bibliographic data to study publication, authorship, and citation patterns in a particular field of study. But even in education, bibliometric analysis can be used to identify trends in research, map the intellectual structure of a field, and evaluate the impact of individual scholars and publications.

This study aims to analyze the extent of development regarding English Education

research indexed by Scopus Q1 in 2023 based on the Scopus database by providing bibliometric analysis, to see opportunities for future research. Based on the description above, the author is interested in raising the title "Bibliometric analysis of English Education research indexed by Scopus Q1 with VOSviewer in 2023".

METHOD

This research uses quantitative methods. The quantitative approach to bibliometric analysis is an approach used to measure the quantity and quality of information in a scientific literature or publication. This approach is done by collecting and analyzing bibliographic data, such as the number of publications, citation frequency, and the most cited authors. In bibliometric analysis, data can be collected from various sources, such as journals, books, conferences, and theses (Faiz and Siahaan 2022).

The quantitative approach to bibliometric analysis can provide important information about the development of science and research trends in a field of study. In bibliometric analysis, measurements such as author productivity index, citation concentration, and linkage index between articles or publications can be made (Ariyanto 2023).

The strategy used in this research is the survey method. Where this research chooses quantitative analysis.

RESULTS AND DISCUSSION

Results

A. Data Description

Research in English Education has been researched with good development from year to year. The researcher has collected 10 articles with the keywords "English listening, speaking, reading, writing skills" indexed by Scopus Q1 published in a period of 1 year, starting from January 2023 to December 2023. Research articles that are highly relevant to the keywords "English listening, speaking, reading, writing skills" have been researched using several methods to overcome existing problems in English language learning, such as using learning media development methods, applying appropriate learning models to the conditions of students and the environment, and by using technology-based media in learning.

To find out the next research that is still relevant to the discussion of problem-solving in English language learning, the researchers conducted research in the form of searching and analyzing research articles in the period January 2023 to December 2023 with the keywords "English listening, speaking, reading, writing skills".

Table. 1 Analyzed Articles

No	Authors	Title	Year	Number of citations	Publisher
1	Aizawa, Ikuya Rose, Heath Thompson, Gene Curle, Samantha	Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme	2023	72	Language Teaching Research
2	Makovskaya, Liliya Juraeva, Ijobat	The Relationship between Perception and Knowledge of Academic Vocabulary among EFL and EMI University Students	2023	1	Journal of Language and Education
3	Du, Guohui Man, Deliang	Mediating Effect of Metacognition on the Relationship Between Listening Self-efficacy and L2 Listening Comprehension	2023	5	Asia-Pacific Education Researcher
4	Rahman, Nur Khadirah Ab Yunus, Melor Md Nasri, Nurfaradilla Mohamad Rahman,	Proficiency Preparedness in Defence Workforce: A Survey of Cadet Officers' English Language Needs	2023	1	International Journal of Learning, Teaching and Educational Research

	Emily Abd				
5	Zheng, Luyan Lee, Keok Cheong	Examining the Effects of "Small Private Online Course and Flipped-Classroom"-Based Blended Teaching Strategy on First-Year English-Major Students' Achievements	2023	1	Sustainability (Switzerland)
6	De-La-Peña, Cristina Chaves- Yuste, Beatriz Luque- Rojas, María Jesús	EFL in Vocational Training: Improvement of Linguistic Competence from Affective Variables	2023	2	International Journal of Literacies
7	Casanova- Mata, Irene	Enhancing English Acquisition: Effects of among us Game-Based Gamification on Language Competence, Motivation, Attention, and Attitude towards the English Subject	2023	1	Education Sciences
8	Alhaider, Siham Mousa	Teaching and learning the four English skills before and during the COVID-19 era: perceptions of EFL faculty and students in Saudi higher education	2023	4	Asian-Pacific Journal of Second and Foreign Language Education

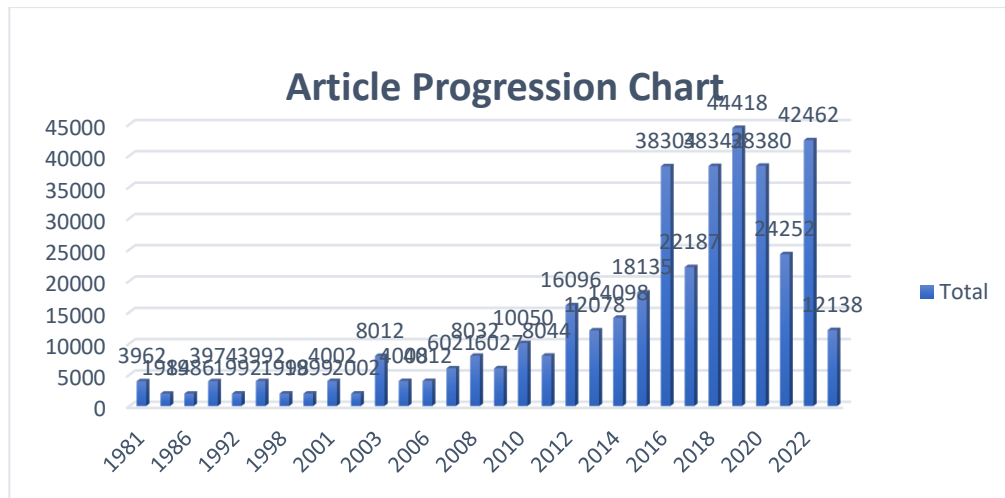
9	Phuong, Vo Tu	Factors Affecting the Learning of English Proverbs and Idioms of English-Majored Students at University of Khanh Hoa, Vietnam	2023	3	Eurasian Journal of Applied Linguistics
10	Sukavatee, Pornpimol Khlaisang, Jintavee	A Survey of Research into English Teaching Approaches and Instructional Media in Thailand	2023	2	LEARN Journal: Language Education and Acquisition Research Network

The table above is the article data used in this study, obtained from the Scopus database and Publish or Perish and then downloaded in RIS format to be analyzed bibliometrically using the VOSviewer application to determine methodological trends and topics are also good indicators of the development pattern of a research field. The 10 articles studied have been cited 92 times, with a different number of citations in each article. The highest number of citations was found in the article titled "Beyond the Threshold: Exploring English Language Proficiency, Linguistic Challenges, and Academic Language Skills of Japanese Students in an English Medium Instruction Program" written by Ikuya Aizawa, Heath Rose, Gene Thompson, Samantha Curle with 72 citations.

B. Presentation of Data

The development of research articles with the keywords English listening, speaking, reading, writing skills experienced good growth in the last 8 years, namely in 2016-2023, while in the first 34 years the growth in the number of research articles experienced stagnant development, where the number of publications only reached 71 articles in 1981-2015 and published articles were not always there every year. Then in the next 8 years, the number of research articles experienced quite good growth, where there were 129 published articles as shown in the graph below:

Figure 1. Article Progression Chart



There were 77 articles with the keywords English listening, speaking, reading, writing skills published in the period of 1 year, January 2023 - December 2023. Of the 76 articles, there was 1 article with the highest citation rate of 72 times published by Language Teaching Research with the title Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction program researched by Ikuya Aizawa, Heath Rose, Gene Thompson, and Samantha Curle.

Research related to the keywords English listening, speaking, reading, and writing skills continues to grow because research on four English skills is needed especially for students who want to continue their studies in the field or advanced level. Good English skills are also very necessary to be able to compete in the world of education and work which continues to develop. Research on English needs to be done a lot to know what problems exist and to find solutions to these problems so that it can produce conclusions about how English teaching should be done or given to students.

Of the 10 articles analyzed in this study, several diverse research methods were found. There were several research methods used, namely quantitative and qualitative with different approaches, including quantitative survey, case study, descriptive analysis, ex-post facto, systematic literature review, quasi-experiment, and experimental method.

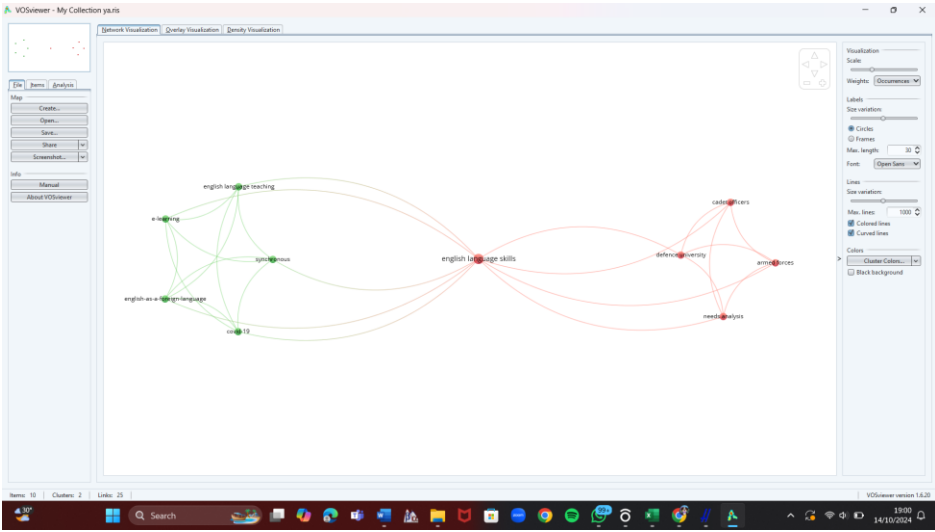
Table 2. Research Method used in Analyzed Articles

No	Author	Title	Method
1	I. Aizawa	Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme	Quantitative, quantitative survey
2	G. Du	Mediating Effect of Metacognition on the Relationship Between Listening Self-efficacy and L2 Listening Comprehension	Quantitative, quantitative survey
3	S.M. Alhaider	Teaching and learning the four English skills before and during the COVID-19 era: perceptions of EFL faculty and students in Saudi higher education	Quantitative, case study
4	V.T. Phuong	Factors Affecting the Learning of English Proverbs and Idioms of English-Majored Students at University of Khanh Hoa, Vietnam	Quantitative, descriptive analysis
5	P. Sukavatee	A Survey of Research into English Teaching Approaches and Instructional Media in Thailand	Qualitative, systematic literature review
6	C. De-La-Peña	EFL in Vocational Training: Improvement of Linguistic Competence from Affective Variables	Quantitative, ex-post facto
7	L. Zheng	Examining the Effects of "Small Private Online Course and Flipped-Classroom"-Based Blended Teaching Strategy on First-Year English-Major Students' Achievements	Quantitative, quasi-experiment
8	N.K.A. Rahman	Proficiency Preparedness in Defence Workforce: A Survey of Cadet Officers' English Language Needs	Quantitative, quantitative survey
9	I. Casanova-Mata	Enhancing English Acquisition: Effects of among us Game-Based Gamification on Language Competence, Motivation, Attention, and Attitude towards the English Subject	Quantitative, experimental method
10	L.	The Relationship between Perception and	Quantitative,

	Makovskaya	Knowledge of Academic Vocabulary among EFL and EMI University Students	quantitative survey
--	------------	--	---------------------

VOSViewer is software that helps the data analysis process, in the VOSViewer software there is a Network Visualization, Overlay Visualization, and Density Visualization menu. To see the keyword network, the Network Visualization menu is used.

Figure 2. Network Visualization



VOSViewer is software that helps the data analysis process, in the VOSViewer software there is a Network Visualization, Overlay Visualization and Density Visualization menu. To see the keyword network, the Network Visualization menu is used.

Table 3. Keywords Network

No	Cluster 1 (red)	Cluster 2 (green)
1	Armed forces	Covid-19
2	Cadet officers	E-Learning
3	Defence university	English language teaching
4	English language skills	English as a foreign language
5	Needs analysis	Synchronous

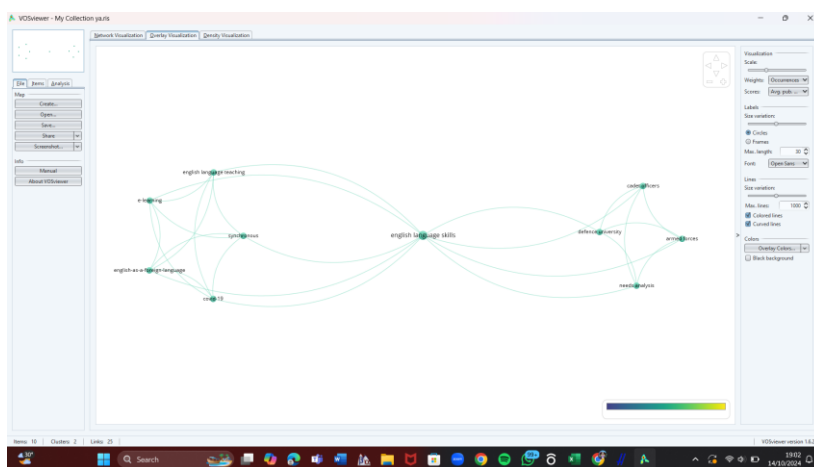
Each node represents one keyword. In this figure, the centralized primary keyword is "English language skills", which is the largest and most connected node. Larger nodes indicate keywords with higher occurrence in the analyzed dataset.

The lines connecting the nodes represent the relationship between the two keywords,

which means they often co-occur in the same article. A thicker line indicates a stronger relationship (link strength) or more frequent co-occurrence. The keywords in the overlay visualization are divided into two clusters, each represented by two different colors: green and red. The green cluster on the left includes several keywords namely "English language teaching", "English as foreign language", "COVID-19", "E-learning", and "Synchronous". The red cluster includes several keywords, namely "English language skills", "Needs analysis", "Cadet officers", "Armed forces", and "Needs analysis".

In the network visualization image above, it can be described that the keyword or topic "English language skills" is an important theme that connects various topics in the dataset and plays a central role because it is connected to other keywords from the 2 existing clusters (green cluster and red cluster). Keywords that are closer to each other have a closer relationship or appear more often together, while keywords that are further away have a weaker relationship between one keyword and another.

Figure 2. Overlay Visualization



The node color displayed by the VOSviewer software on the Overlay Visualization menu represents one keyword, with the node size varying based on the frequency of occurrence of the keyword in the dataset. Larger nodes indicate keywords that appear more frequently.

The links in the overlay visualization connect keywords that co-occur in the same article, with stronger links shown with thicker lines. The relationship between these keywords helps in understanding how keywords are used together in a study.

In this visualization, the color of the nodes corresponds to time. The scale at the bottom of the image shows a color gradation from yellow to blue, with yellow (or lighter colors) indicating keywords that are newer or appear more frequently in recent studies and green to blue indicating keywords that are older or appear in earlier or earlier studies. In this overlay visualization, it can be seen that all nodes have the same color, which is in the bluish-

green range, which means that there is no significant variation in the time of appearance or intensity in the use of keywords.

As can be seen in the overlay visualization, the central keyword is "English language skills", which is the largest node and most connected to other keywords indicating that this topic is central. Other keywords that are strongly connected to the main keyword "English language skills" are "COVID-19", "English as a foreign language", "e-learning", and "English language teaching" in the left cluster with bluish green nodes, indicating a strong relationship in related research and suggesting that there is research linking English language teaching with e-learning methods during the pandemic. While the right cluster with bluish-green nodes focuses on the keywords "defence university", "cadet officers", and "armed forces" indicating topics related to the need for English language analysis for military needs and defense education.

CONCLUSION

Based on the objectives, results, and discussion of research on bibliometric analysis of English language research with keywords English listening, speaking, reading, and writing skills based on the Scopus database, the following conclusions are obtained:

1. There are 10 topics consisting of 2 topic clusters and 16 dashes connecting one topic to another. The cluster on the left focuses on the topics "English language skills", "COVID-19", "English as a foreign language", "e-learning", and "English language teaching" with 9 connecting lines. The cluster on the right focuses on the topics "Defense university", "Cadet officers", "Armed forces", and "Needs analysis" with 7 connecting lines. The main keyword "English language skills", which is central and the most frequently discussed topic in English language research, is located in the center connecting both the right and left sides with a total of 16 connecting lines.
2. There are several methods used in the studies that have been analyzed, namely quantitative methods used in 9 studies and quantitative methods used in 1 study. The approaches used in quantitative methods include:
 - a. Quantitative survey, used by some researchers such as I. Aizawa, G. Du, N.K.A. Rahman, and L. Makovskaya.
 - b. Case study, used by S. M. Alhaider
 - c. Descriptive analysis, used by V. T. Phuong
 - d. Experiment/quasi-experiment, used by L. Zheng and I. Casanova-Mata to
 - e. Ex-post Facto, used by C. De-La-Peña by analyzing existing data to determine relationships between variables without direct manipulation

The approach used in qualitative research, namely:

- a. Systematic literature review, this approach was only used by P. Sukavatee

From the 10 journal articles analyzed bibliometrically, it can be concluded that the most widely used research method is quantitative method, which includes surveys, descriptive analysis, and experiments. Quantitative methods help researchers collect data on a large scale, make systematic measurements, and conclude results statistically. The use of survey methods is most widely used due to its ability to collect data with a wide population coverage and with high efficiency.

In addition, there was one study using qualitative methods with a systematic literature review approach that provided an in-depth focus on synthesizing existing literature to summarize previous research trends and offer more comprehensive insights.

Across the data, the dominance of quantitative methods reflects the trend of research aiming to provide results that can be objectively measured and analyzed, although there is a place for qualitative methods in situations where an in-depth understanding of the existing literature is required.

REFERENCE

- Aizawa, Ikuya, Heath Rose, Gene Thompson, and Samantha Curle. 2023. "Beyond the Threshold: Exploring English Language Proficiency, Linguistic Challenges, and Academic Language Skills of Japanese Students in an English Medium Instruction Programme." *Language Teaching Research* 27(4):837–61. doi: 10.1177/1362168820965510.
- Alhaider, Siham Mousa. 2023. "Teaching and Learning the Four English Skills before and during the COVID-19 Era: Perceptions of EFL Faculty and Students in Saudi Higher Education." *Asian-Pacific Journal of Second and Foreign Language Education* 8(1). doi: 10.1186/s40862-023-00193-6.
- Ariyanto, Komang. 2023. "Analisis Bibliometrik Trend Penelitian Pemodelan Matematis Menggunakan Database Google Scholar, Publish or Perish, Dan Vosviewer." *Indo-MathEdu Intellectuals Journal* 4(2):155–63. doi: 10.54373/imeij.v4i2.150.
- Faiz, Alwan, and Leroy Holman Siahaan. 2022. "The Effect of Using Game on Students' Motivation in Learning Vocabulary." *Tarbiatuna: Journal of Islamic Education Studies* 2(1):1–8. doi: 10.47467/tarbiatuna.v2i1.886.
- Kuzior, Aleksandra, and Mariya Sira. 2022. "A Bibliometric Analysis of Blockchain Technology Research Using VOSviewer." *Sustainability (Switzerland)* 14(13). doi: 10.3390/su14138206.
- Nguyen, Cuong Huu, Loc Thi My Nguyen, Trung Tran, and Tien Trung Nguyen. 2020. "Bibliographic and Content Analysis of Articles on Education from Vietnam Indexed in Scopus from 2009 to 2018." *Science Editing* 7(1):45–49. doi: 10.6087/kcse.188.
- Phuong, Vo Tu. 2023. "Factors Affecting the Learning of English Proverbs and Idioms of English-Majored Students at University of Khanh Hoa, Vietnam." *Eurasian Journal of Applied Linguistics*

9(1):35–47. doi: 10.32601/ejal.901004.

Pipit Mulyah, Dyah Aminatun, Sukma Septian Nasution, Tommy Hastomo, Setiana Sri Wahyuni Sitepu, Tryana. 2020. "濟無No Title No Title No Title." *Journal GEEJ7*(2).

Rahman, Nur Khadirah Ab, Melor Md Yunus, Nurfaradilla Mohamad Nasri, and Emily Abd Rahman. 2023. "Proficiency Preparedness in Defence Workforce: A Survey of Cadet Officers' English Language Needs." *International Journal of Learning, Teaching and Educational Research* 22(11):96–115. doi: 10.26803/ijlter.22.11.6.

Seraj, Prodhan Mahbub Ibna, Hadina Habil, and Md Kamrul Hasan. 2021. "Investigating the Problems of Teaching Oral English Communication Skills in an EFL Context at the Tertiary Level." *International Journal of Instruction* 14(2):501–16. doi: 10.29333/iji.2021.14228a.