

TESL UNDERGRADUATES' READINESS IN RESEARCH WRITING AT INSTITUTE OF TEACHER EDUCATION

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Abstract

This study investigates the research writing readiness of TESL undergraduates by examining their knowledge in research fundamentals and their ability to use sources, citations, and references. Using a quantitative survey, data were collected from 70 respondents. Pearson correlation analysis revealed a strong positive relationship ($r = 0.609$) between knowledge of research fundamentals and writing ability, highlighting the importance of research competence for writing a research paper. A moderate positive correlation ($r = 0.431$) was also found between citation skills and writing readiness. These findings suggest that students with stronger research and citation skills are better prepared for research writing. The results have practical implications for teacher education institutions (ITE) and the Ministry of Education (MOE), emphasizing the need to enhance research-based courses in teacher training programs. Strengthening these components will better equip future teachers to engage in action research and contribute to educational innovation. This study concludes that improving research competencies is essential to enhancing teachers' research writing ability towards professional development, eventually contributing to the field of education. Future research should explore qualitative perspectives to gain deeper insights into the specific challenges faced by preservice teachers in conducting research.

Keywords: Research fundamentals, research writing readiness, TESL undergraduates, citations and references, teacher education

Abstrak

Kajian ini bertujuan untuk menilai tahap kesediaan pelajar TESL dalam penulisan penyelidikan dengan memberi tumpuan kepada pengetahuan asas penyelidikan dan keupayaan menggunakan sumber, rujukan, dan sitasi. Kajian ini menggunakan kaedah kuantitatif melalui soal selidik dalam kalangan 70 responden. Dapatan menunjukkan terdapat hubungan positif antara pengetahuan asas penyelidikan dengan kesediaan menulis artikel, dengan korelasi kuat ($r = 0.609$). Walaupun hubungan antara penggunaan rujukan dan kesediaan menulis artikel adalah sederhana ($r = 0.431$), ia tetap menunjukkan kepentingan penggunaan rujukan dalam penulisan penyelidikan. Implikasi kajian ini menyarankan agar institusi pendidikan guru dan Kementerian Pendidikan Malaysia (KPM) menyediakan latihan berterusan untuk meningkatkan kemahiran penyelidikan. Kesimpulannya, pengetahuan penyelidikan yang kukuh adalah asas dan penting dalam penulisan artikel penyelidikan bagi bakal guru TESL.

Kata kunci: Asas penyelidikan, kesediaan penulisan penyelidikan, pelajar TESL, sitasi dan rujukan, pendidikan guru

INTRODUCTION

Conducting research is essential in advancing knowledge, fostering innovation, and informing policy decisions across various fields (Causadias et al., 2023). Within the field of education, research plays a significant role in improving teaching practices and identifying strategies that enhance student outcomes (Kang et al., 2024). However, equipping pre-service teachers with the skills and confidence to conduct research remains a challenge for many teacher education programs. Developing proficiency in research involves mastering fundamental concepts, including research design, data collection, and analysis, along with competencies in managing sources, references, and citations (Vigh, 2024). These skills not only contribute to teachers' professional development but also enable them to engage in inquiry-based learning with reflective practices, such as action research, which directly contributes to their effectiveness in the classroom (Slade et al., 2019; Despoina et al., 2020).

Statement of Problem

Developing research competence and academic writing skills is crucial for pre-service teachers to engage in reflective practice and continuous professional development. However, many teacher education programs face persistent challenges in equipping these future educators with the skills to conduct research and engage in academic writing independently (Afdal, 2017). Research knowledge is foundational not only for enhancing teaching practices but also for addressing classroom challenges through evidence-based solutions. Research knowledge is vital for enhancing teaching practices and addressing classroom challenges, yet pre-service teachers often struggle to bridge theoretical knowledge with practical application (Vigh, 2024). This gap affects their ability to undertake classroom research and innovative teaching approaches confidently. causes in carrying out classroom research and innovative teaching approaches confidently.

Additionally, Vigh (2024) also noted that pre-service teachers frequently encounter difficulties in academic writing, including structuring research reports and applying proper citation practices. These challenges suggest a need to explore the relationship between their research knowledge and academic writing skills, which are both essential for successful professional and academic engagement. Despite the importance of these competencies, many programs inadequately prepare TESL undergraduates to develop and integrate these skills effectively (Afdal, 2017).

This study focuses on TESL undergraduates' readiness to engage in research, examining their research knowledge, academic writing abilities, and the relationship between these competencies. By addressing these gaps, the study aims to provide insights into improving teacher education programs to better prepare educators for research-based practice.

RESEARCH OBJECTIVES AND QUESTIONS

This study aims to explore the readiness of TESL undergraduates in research writing, focusing on two key areas: (1) their knowledge of research fundamentals and (2) their ability to manage sources, references, and citations effectively. Hence, guided by three research objectives as follows:

1. To assess TESL undergraduates' knowledge of research fundamentals.
2. To explore their ability to use sources, references, and citations.
3. To investigate the relationship between research knowledge and research writing ability.

These objectives are basis to the following research questions:

1. What is the TESL undergraduates' knowledge of the fundamentals of research?
2. What is the TESL undergraduates' ability in using sources, references, and citations with regard to research writing?
3. To what extent does TESL undergraduates' research knowledge and citation management skills influence their research writing abilities?

The research hypotheses are structured to test the following relationships:

Null Hypothesis (H_0): There is no significant relationship between TESL undergraduates' knowledge of research fundamentals and their ability to use sources, references, and citations.

Alternative Hypothesis (H_1): There is a significant positive relationship between TESL undergraduates' research fundamentals and their ability to use sources, references, and citations in research writing.

Limitations of the Study

Although this study provides valuable insights, several limitations must be taken into considerations. First, the sample is limited to 70 TESL undergraduates from a single teacher education institute (ITE), which may restrict the generalisability of the findings to other contexts. Additionally, the study relies on self-reported data through questionnaires, which may introduce biases related to participants' perceptions and reporting accuracy. Future research should consider including multiple data collection methods, such as interviews or focus groups, to triangulate the findings, with solidified responses. Moreover, this study does not explore how other external factors, such as institutional support or previous research experience, may influence students' research readiness. Hence, future research could further explore external reasons on the influence of research practices among teachers.

LITERATURE REVIEW

Research knowledge is essential in teacher education, empowering preservice teachers to reflect on their practices and adopt evidence-based strategies to enhance classroom learning. Studies have highlighted that research knowledge equips teachers to identify classroom challenges, analyze student performance, and apply innovative approaches to improve teaching effectiveness (Afdal, 2017; Caspersen & Smeby, 2023). This corresponds to Constructivist Learning Theory, which posits that learners construct new knowledge by integrating prior experiences with current learning (Piaget, 1950; Vygotsky, 1978). For preservice teachers, acquiring research knowledge encourages inquiry-based teaching, bridging the gap between theory and practice (Cohen et al., 2018). Despite its importance, many teacher education programs still lack emphasis on research knowledge development, leaving a gap in preservice teachers' preparedness for reflective and evidence-based teaching.

Similarly, academic writing is mandatory in teacher education, enabling preservice teachers to convey research findings and contribute to the academic discourse. However, challenges such as poor understanding of research design, difficulties with citation practices, and limited writing proficiency hinder their ability to produce quality research (Vigh, 2024). Academic writing requires not only linguistic skills but also to critically analyze and synthesize prior to presenting the research coherently. As noted by Despoina et al. (2020), low self-efficacy often intensifies these difficulties, resulting in poor confidence and disengagement in academic writing. These challenges highlight the need for targeted interventions in teacher education programs to enhance academic writing skills, particularly among TESL undergraduates.

Research knowledge and academic writing are closely connected; both are essential for developing research competency among preservice teachers. Research knowledge provides the foundation for conducting investigations, while academic writing is the channel to deliver the findings. Mydin et al. (2021) emphasize that integrating research knowledge with writing practices in teacher education programs enhances preservice teachers' ability to engage in meaningful academic discourse. However, gaps remain in understanding how these two elements interact, particularly in the context of TESL preservice teachers. Existing studies have yet to explore the extent to which research knowledge influences research writing competence among TESL preservice teachers in Malaysia. This study seeks to address these gaps and to examine the readiness of TESL undergraduates to engage in research writing, providing insights that can help course developers and policymakers design research modules that build both confidence and competence in preservice teachers.

RESEARCH METHODOLOGY

This study adopts a quantitative survey research design to examine TESL preservice teachers' knowledge and readiness to conduct research and write research articles. Specifically, a descriptive survey design was chosen, as it allows for the systematic collection of data to describe and analyze the characteristics of the target population (Creswell & Creswell, 2018). This design is particularly suitable for exploring relationships between variables and

providing a detailed understanding of the participants' attributes. By using a survey as the primary data collection instrument, this design allows for a structured approach to collecting responses from a sample of 70 preservice teachers, ensuring consistency and comparability across participants (Fraenkel et al., 2019). Besides, the survey method is preferred in educational research as it enables the efficient collection of large amounts of data within a limited timeframe and allows researchers to analyze trends and relationships between key variables, such as knowledge and readiness (Bryman, 2019). Moreover, the structured nature of surveys supports objectivity and reliability in the data collected, reflecting upon accurate responses on the participants' readiness in conducting and writing research articles (Cohen et al., 2018)

The primary data collection instrument was an adapted questionnaire, structured to address two key constructs: knowledge and readiness (Aldabbus & Almansouri, 2022; Altikriti, S. 2022; Azizah & Budiman, 2018). The adapted questionnaire included items measured on a 4-point Likert scale, designed to assess the preservice teachers' self-reported familiarity with research methodologies, sourcing and citing references, and their preparedness to implement research in future classrooms. Using the 4-point Likert scale in the questionnaire provides several methodological advantages, particularly in studies focused on education. The nature of the 4-point scale compels respondents to only lean towards 2 options, i.e. agreement or disagreement, which reduces indecisive responses and enhances the clarity of the data (Chyung, Roberts, Swanson, & Hanhinson, 2017; Boone Jr. & Boone, 2012). By eliminating the neutral midpoint, researchers can better assess the strength of participants' attitudes, such as the TESL preservice teachers' knowledge and readiness to conduct research. Moreover, research has shown that a 4-point scale can improve the reliability of responses by reducing social desirability bias, as participants are less likely to select a middle option that may seem "safe" or neutral (DeCastellarnau, 2018). Consequently, the data gathered would significantly reflect the respondents' actions and views.

The study employed a convenience sampling method to select participants, justified by the accessibility and availability of the target population. Convenience sampling is a practical and efficient approach in educational research when specific groups, such as TESL preservice teachers, are readily accessible and meet the study's

inclusion criteria (Etikan et al., 2016). The sample comprised 70 preservice teachers from a total population of 81, exceeding the required minimum of 67 as determined by Krejcie and Morgan (1970). These participants were selected based on their enrollment in a TESL program at a Malaysian higher education institution and their completion of mandatory research courses, including Fundamentals of Research in Education and Research in Education – Project Paper. Their exposure to research methodologies and practices ensured they were well-equipped to provide informed responses.

Recognizing concerns about theoretical grounding, the questionnaire was developed with expert consultation and informed by previous validated research tools to ensure content validity (Taherdoost, 2016). Experts in TESL and educational research reviewed the items for clarity, relevance, and alignment with the study's objectives. Additionally, a pilot study was conducted with a separate group of TESL preservice teachers, during which the instrument's reliability was assessed using Cronbach's alpha. The alpha coefficient of 0.82 exceeded the generally accepted threshold of 0.70, confirming the questionnaire's internal consistency (Tavakol & Dennick, 2011).

Data collection was conducted online to accommodate participants' schedules and ensure ease of access. The structured format of the questionnaire minimized the potential for bias, enabling objective comparisons of participants' responses (Bryman, 2019). Ethical considerations, including anonymity and voluntary participation, were practised. These methodological choices enhance the reliability and validity of the study's findings, providing insights into the knowledge and readiness of preservice teachers to conduct and apply research in their professional practice.

FINDINGS AND DISCUSSION

In this study, a quantitative analysis approach, incorporating both descriptive and correlational analyses, was employed to identify trends and relationships among the variables. The descriptive analysis provides an overview of the participants' knowledge and readiness regarding research (Field, 2018). Specifically, the knowledge acquired is assessed through two dependent variables: (i) the fundamentals of research, and (ii) sources, references, and citations. To explore the

relationship between the research knowledge and readiness to writing research article, Pearson correlation coefficients was employed. This statistical method assesses the strength and direction of the linear relationship between the dependent variables and the independent variable, which is the respondents' knowledge in research and their readiness to conduct research and write research articles (Pallant, 2020). By employing these quantitative analyses, the study hopes to gain significant insights into the readiness of preservice teachers to engage with research, hence contributing to the field of teacher education.

To answer RQ1 and RQ2, descriptive analysis was employed to provide an overview of the data by displaying the mean and standard deviation. A better understanding on the trends and central tendencies was gathered from the TESL preservice teachers' responses. By conducting descriptive analysis, the study can identify the level of knowledge and among the participants for both research fundamentals (RQ1) and the use of sources, references, and citations(RQ2) in research writing.

Research Question 1: Knowledge in Fundamentals of Research

For RQ1, descriptive analysis helps in determining the extent of participants' knowledge in regards to research writing such as formulating research questions, selecting a research design, and understanding data collection procedures. Table 1.0 refers to the responses gathered for RQ1, which assessed preservice teachers' knowledge on the fundamentals of research. The mean scores indicate moderate difficulty in key areas. The mean scores for each item provide insight into which aspects of research fundamentals preservice teachers find challenging or feel confident about. A lower mean score indicates higher difficulty, while a higher score suggests greater familiarity or competence. The mean score for "difficulty in deciding on a research topic" was relatively low ($M = 2.19$, $SD = 0.687$), suggesting that respondents did not perceive this as a significant challenge. However, when it came to selecting a suitable research design ($M = 2.97$, $SD = 0.613$), participants indicated a higher level of confidence though still at the moderate range, with a score approaching the higher end of the scale. Difficulty in deciding on research objectives ($M = 2.51$, $SD = 0.737$) and in selecting samples ($M = 2.54$, $SD = 0.582$) revealed moderate levels of challenge, showing that these are areas where participants may need more

guidance. Similarly, difficulties in data collection (M = 2.44, SD = 0.715) and understanding the data sorting process (M = 2.37, SD = 0.618) also scored in the mid-range, pointing to general uncertainties in these areas. In short, the results suggest that while TESL preservice teachers demonstrate moderate knowledge of research fundamentals, certain aspects, such as research design, are better understood than others like data collection and sample selection.

Besides, the overall mean scores for RQ1 further supports the results into the TESL preservice teachers' knowledge of the fundamentals of research RQ. The overall mean score for Knowledge in Fundamentals of Research was moderate. This suggests that preservice teachers have a basic understanding of research concepts but face challenges in more complex areas like research design, setting research objectives, and selecting samples. While their general knowledge is sufficient for basic tasks, difficulties in specific areas such as data collection and understanding the data analysis process indicate that more support may be required in these areas. The moderate mean score indicates that that preservice teachers are gaining some knowledge about research fundamentals, however gaps remain in their confidence and understanding, particularly in practical research applications.

Table 1
Mean on Knowledge on the fundamentals of research

	N	Mean	Std. Deviation
1. I have difficulty in deciding on a topic to carry out research.	70	2.19	.687
2. I can decide on a suitable research design for my research.	70	2.97	.613
3. I find it difficult to decide on my research objective.	70	2.51	.737
4. It is hard to involve theory in my research.	70	2.34	.759
5. I find it difficult to select the samples.	70	2.54	.582
6. I find it difficult to collect data.	70	2.44	.715
7. I do not know the process of sorting the data before data analysis procedure.	70	2.37	.618
8. I have difficulty in carrying out validity.	70	2.37	.705
9. I have difficulty in carrying out reliability.	70	2.34	.657
10. I find it difficult to choose suitable data analysis methods.	70	2.21	.657
Valid N	70		

Research Question 2: Use of Sources, Citations, and References

For RQ2, descriptive analysis was employed to evaluate the mean scores on participants' proficiency in essential skill in research relating to the application of sources, citations, and APA referencing styles. The mean scores for each of the items were analysed and interpreted to identify the aspects of sourcing, citing and referencing that was most challenging among the preservice teachers, providing a clear picture of their readiness in this area.

RQ2 focused on the preservice teachers' ability to use sources, citations, and references when writing for research. Table 2.0 displays the mean scores in response to RQ2 that revealed areas of moderate difficulty. The mean score for "difficulty in making in-text citations" was moderately high ($M = 2.73$, $SD = 0.700$), indicating that participants struggle with this aspect of academic writing. Furthermore, challenges in using APA style for referencing ($M = 2.76$, $SD = 0.523$) was similarly high, suggesting that referencing skill is also challenging for many respondents. On the other hand, tasks such as including tables ($M = 2.30$, $SD = 0.598$) and figures ($M = 2.33$, $SD = 0.631$) according to APA guidelines were perceived as slightly less challenging. These findings highlight that preservice teachers encounter moderate difficulty in using sources and citations. Besides, the overall mean scores for RQ2 further supports the results into the TESL preservice teachers' knowledge in using sources, citations, and references.

Table 3 displays the overall mean score is slightly higher in the use of sources, citations and references; i.e. Mean B ($M=2.529$, $SD= 0.343$) than the overall mean score for research fundamentals; i.e. Mean A ($M=2.430$, $SD= 0.379$), but still in the moderate range. This suggests that preservice teachers experience noticeable difficulties in managing academic citations and references, especially in applying APA formatting and making in-text citations. Although they appear more confident in incorporating tables and figures into their writing, the challenges in paraphrasing and locating reliable sources for referencing indicate that their academic writing and referencing skills require further development. The moderate score highlights the need for more focused guidance and practice, particularly in citation techniques and referencing systems, being vital in research writing.

Table 2*Mean of use of sources, citations and references*

	N	Mean	Std. Deviation
1. It is difficult to obtain related articles to make citations.	70	2.46	.695
2. I find difficulty in making in-text citations.	70	2.73	.700
3. I can include tables according to APA in my writing.	70	2.30	.598
4. I can include figures according to APA in my writing.	70	2.33	.631
5. I find it difficult to paraphrase author's views or opinions when citing.	70	2.56	.828
6. I find it hard to gain sources for references.	70	2.51	.775
7. find difficulty in preparing the references.	70	2.59	.670
8. I have difficulty in using APA style in referencing.	70	2.76	.523
9. I have difficulty in looking for referencing sources.	70	2.53	.675
Valid N	70		

Table 3*Overall meanscore of knowledge in fundamentals of research and in use of sources, citations, and references*

	N	Minimum	Maximum	Mean	Std. Deviation
Mean A	70	1.50	3.10	2.430	.379
Mean B	70	1.89	3.44	2.529	.343
Valid N	70				

In brief, the analysis of items for the two research questions, i.e. RQ1 and RQ2, indicate that TESL preservice teachers have an average understanding of knowledge in research fundamentals and experience difficulties with citation and referencing when writing for research. This is further supported by the overall mean score for all the items in response to RQ1 and RQ2 that reflect the combined performance of the 70 respondents across the relevant items for each construct.

Research Question 3: Relationship between knowledge in fundamentals of research, use of sources, citations, respectively against references and research writing ability

Descriptive analysis is particularly useful in educational research as employed in RQ1 & RQ2, whereby the researcher presents the data in a simplified manner, making the interpretation of results more accessible (Creswell & Creswell, 2018). This approach provides an overview towards more complex analyses, i.e. the correlational analysis, employing Pearson correlation coefficients, in RQ 3 exploring the relationships between the research knowledge and readiness to writing research article.

Table 4

Correlation between fundamentals of research knowledge, use of sources, citations and references and readiness to writing research articles.

	Mean A	MeanB	MeanC
Mean A	1	.487**	.609**
Mean B		1	.431**

** p < 0.01(2-tailed); N=70; * p < 0.05

Table 4 shows the Pearson correlation analysis for RQ3 that examines the relationship between TESL undergraduates' ability in research fundamentals (Mean A), ability in sources, references, and citations (Mean B) respectively against their readiness to writing research articles (Mean C).

The Pearson Correlation analysis on the respective dependent variables indicate positive relationship with slight differences in strength to research writing ability. A strong positive relationship between students' ability in research fundamentals and their readiness to write research articles at $r = 0.609$ indicates a high level of competency in research fundamentals. This significantly enhances a student's ability to write articles, as mastering research design, data analysis, and interpretation are essential for research writing. The strong correlation suggests that improvements in research fundamentals directly impact students' writing readiness (Saputra et al.,2020). Similarly, Pearson Correlation between the use of sources,

citations and references, and their readiness to write research articles also shows a positive correlation but at a moderate level at $r = 0.431$. Hence, students who are proficient in managing sources and citations tend to be more prepared for research writing. Although the correlation between research fundamentals and writing readiness tends to be stronger, proper citation practices remain essential for developing high-quality research articles. Accurate citations contribute towards academic integrity, developing work within scholarly context, and enhancing credibility by linking findings to existing knowledge (Comon & Corpuz, 2024; Salmento, et al., 2021; Cohen et al., 2018). Additionally, citations help avoid plagiarism, ensuring transparency and respect for original authors' contributions, which is mandatory to maintaining the reliability of academic research (Worrall & Cohn, 2023).

Research writing involves a student's ability to identify a problem, provide literature reviews, and analyse data effectively that are essential to research fundamentals. Therefore, the strong correlation reflects the direct influence of research knowledge on writing ability. Meanwhile citing sources and references accurately, employing APA format is also equally important for research writing as it is embedded in the larger writing process. Thus, this may explain why the correlation is moderate rather than strong, as proper citation and referencing complements, but does not replace, other essential research writing skills.

In conclusion, The Pearson correlation analysis on RQ3 reveals positive relationships between the variables analysed, at varying degrees of strength. Hence, the null hypothesis (H_0) is clearly rejected, i.e. there is no significant relationship between research fundamentals, citation practices, and research writing ability. Instead, the alternative hypothesis (H_1) is accepted, which evidently shows that there are significant positive relationships between these variables. Therefore, both research knowledge and citation skills are indeed crucial in developing students' research writing skills.

IMPLICATIONS AND RECOMMENDATIONS

The findings of this study provides important implications for multiple stakeholders, including the Ministry of Education (MOE), Institutes of Teacher Education (ITE), and teacher training providers. Enhancing TESL preservice teachers' research knowledge, writing skills, and citation management is essential to fostering a research-oriented teaching culture, eventually grooming teachers to foresee and address gaps along their teaching journey via collaborative efforts through curriculum adjustments, workshops, and continuous professional development. Therefore, the recommendations provided aim to empower preservice teachers with the skills needed to successfully carry out research confidently in their future roles as educators.

The findings highlight the need to enrich preservice teachers' knowledge in research fundamentals and citation skill. MOE could emphasise on research by providing recognition to encourage teachers into research in relevance to best practices in education. Hence more focus on hands-on research activities and research writing practice could be incorporated in earlier stages of teacher education (Bugis & Larkins, 2020). Additionally, professional development programs focusing on APA referencing and research methodologies could shape research competency. With more research into educational methods and strategies, educators could better improve their classroom instructions apart from producing students with better educational achievement (Slade et al., 2019; Caspersen & Smeby, 2023; Despoina et al., 2020).

ITEs could strengthen research modules by integrating multiple research projects and peer-reviewed journal writing into courseworks to provide practical skills. Facilitating collaboration between students and mentors in conducting and writing research will better prepare preservice teachers for school-based inquiries (Salmento et al., 2021). To support the statement on APA workshops, the study by Comon and Corpuz (2024) provides relevant insights into strategies that enhance research competency in teacher education. They highlight that workshops focussing on common academic challenges, including citation skills and research writing, are instrumental in preparing students for academic success. These workshops, along with digital resources, encourages clarity in writing and ensure students gain mastery in areas like APA formatting and data analysis. These

recommendations would be helpful in bridging knowledge gaps between student expectations and practical requirements.

With positive implications in the field of education, research writing skills should indeed be an integral part of developing a professional educator. Recommendations to be noted by the stakeholders include encouraging collaboration between educational institutions and research bodies to provide accessible resources for research writing by MOE, implementing continuous assessments on research skills and offer feedback on writing quality by ITEs and introducing refresher courses on research and citation software tools to assist teachers with research processes by teacher training provides, towards building a professional learning community. Future research, employing both quantitative and qualitative approaches, could offer deeper insights into teachers' specific needs for research exposure, helping to design focused support that develops research engagement and competencies.

CONCLUSION

In conclusion, the ability to conduct research in classrooms and to write research articles is crucial for teachers. Engaging in classroom research allows educators to explore classroom issues, systematically investigate and improve their teaching practices, eventually enhancing student learning outcomes. It also empowers teachers to contribute to the broader educational discourse by sharing evidence-based insights and innovative strategies through publication. Writing for academic journals promotes a culture of continuous professional development and scholarly rigor, allowing teachers to function as reflective practitioners in their field. Consequently, the ability of writing a research article not only elevates the quality of education but also enriches the academic community with diverse, classroom-tested perspectives. This practice integrates the significant role of teachers as both educators and researchers.

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