Jurnal JP2N Volume 3 (3) (2026); pp 273-286
JP2N
YAYASAN PENGEMBANGAN DAN PEMBERDAYAAN NUSANTARA
EISSN: 3026-5878 (30265878/II.7.4/SK.ISSN/11/2023)

MENTORING SCIENTIFIC WRITING AMONG UNIVERSITY STUDENTS: IMPROVING ACADEMIC LITERACY AND READINESS FOR PUBLICATION

Syed Agung Afandi[1], Rizki Erdayani[2*]

[1)]Administrasi Negara, Universitas Islam Negeri Sultan Syarif Kasim Riau
[2)]Pendidikan Bahasa Indonesia, Universitas Islam Negeri Sultan Syarif Kasim Riau

Article history
Received : Januari 2026
Revised : Juni 2026
Accepted : Juni 2026

***Corresponding author**
Rizki Erdayani
Email : rizkierdayani@uin-suska.ac.id

Abstrak
Kemampuan menulis artikel ilmiah merupakan kompetensi kunci dalam pengembangan literasi akademik dan budaya riset mahasiswa di perguruan tinggi. Namun, banyak mahasiswa masih menghadapi kesulitan dalam memahami konvensi penulisan artikel ilmiah, membangun argumentasi berbasis literatur, serta memenuhi standar etika dalam publikasi. Kegiatan pengabdian kepada masyarakat ini bertujuan untuk meningkatkan pemahaman konseptual dan kualitas penulisan artikel ilmiah mahasiswa melalui program pendampingan penulisan artikel ilmiah. Kegiatan dilaksanakan secara luring di Universitas Islam Negeri Sultan Syarif Kasim Riau dengan melibatkan 60 mahasiswa dari berbagai program studi dan angkatan. Metode pelaksanaan menggunakan pendekatan pendampingan partisipatif yang meliputi pemetaan kemampuan awal, workshop terstruktur mengenai penulisan artikel ilmiah, serta pendampingan intensif melalui *writing clinic*. Evaluasi kegiatan dilakukan melalui observasi partisipatif, perbandingan hasil pre-test dan post-test, serta analisis kualitas draft artikel sebelum dan sesudah pendampingan. Hasil kegiatan menunjukkan adanya peningkatan pemahaman konseptual mahasiswa mengenai penulisan artikel ilmiah, perbaikan signifikan pada struktur dan kualitas draft artikel, serta meningkatnya kesiapan mahasiswa untuk melakukan publikasi ilmiah. Kegiatan ini juga menegaskan efektivitas model *writing clinic* sebagai strategi pengabdian yang berdampak dalam penguatan literasi akademik dan budaya publikasi mahasiswa. Secara keseluruhan, pendampingan penulisan artikel ilmiah berkontribusi pada pemberdayaan komunitas akademik internal dan mendukung pengembangan pendidikan tinggi yang berorientasi pada riset dan publikasi berkelanjutan.
Kata Kunci: literasi akademik, penulisan artikel ilmiah, *writing clinic*

Abstract
The ability to write scientific articles is a key competency in fostering students' academic literacy and research culture in higher education. However, many students continue to face difficulties in understanding academic writing conventions, developing literature-based arguments, and adhering to publication ethics standards. This community engagement program aims to enhance students' conceptual understanding and the quality of their scientific writing through a structured scientific article writing mentorship program. The activity was conducted offline at Universitas Islam Negeri Sultan Syarif Kasim Riau and involved 60 students from various academic programs and cohorts. The program employed a participatory mentoring approach, consisting of an initial needs assessment, structured workshops on scientific article writing, and intensive mentoring through a writing clinic model. The evaluation was carried out through participatory observation, comparisons of pre-test and post-test results, and document analysis of students' article drafts before and after the mentoring process. The results indicate an improvement in students' conceptual understanding of scientific article writing, significant enhancements in the structure and quality of article drafts, and increased readiness for academic publication. The program also confirms the effectiveness of the writing clinic model as an impactful community engagement strategy for strengthening academic literacy and students' publication culture. Overall, scientific writing mentorship contributes to empowering the internal academic community and supports the development of higher education oriented toward sustainable research and publication practices.
Keywords: academic literacy, scientific article writing, writing clinic

INTRODUCTION

Strengthening students' capacity for scientific writing is a fundamental prerequisite for building a productive and integrity-driven academic ecosystem in higher education. The ability to write scientific articles functions not only as a means of knowledge dissemination but also as an instrument for developing students' critical reasoning, analytical thinking, and academic ethics (Afandi et al., 2025). In contemporary higher education, scholarly publication is increasingly positioned as an indicator of learning quality and academic output at both institutional and individual levels. Policies such as *Merdeka Belajar–Kampus Merdeka* (MBKM), growing expectations for student publication, and the integration of research into teaching have further reinforced the urgency of mastering scientific article writing skills from the undergraduate level (Afandi et al., 2023).

Nevertheless, numerous studies indicate that students continue to face significant challenges in producing scientific articles that meet academic and journal publication standards. These challenges include difficulties in formulating focused research problems, constructing literature-based argumentative frameworks, and integrating research findings into relevant scholarly discourses (Hyland, 2016; Swales & Feak, 2012). Many students tend to reproduce thesis- or report-style writing without substantial transformation into journal article formats, resulting in manuscripts that are largely descriptive, weakly analytical, and lacking clear scholarly contributions.

These difficulties are closely related to students' limited academic literacy and insufficient understanding of academic genre conventions. Scientific writing is not merely a technical activity but a social practice embedded in specific disciplinary norms, expectations, and scholarly traditions (Hyland, 2004). Without adequate understanding of the IMRAD structure, academic argumentation styles, and citation and publication ethics, students struggle to position their work within broader scholarly communities. Previous studies have emphasized that weaknesses in academic writing skills often stem from overly theoretical instructional approaches that provide limited opportunities for iterative writing practice and feedback-based learning (Wingate, 2012; Lea & Street, 1998).

At the same time, instruction in research methodology and academic writing in higher education institutions generally remains oriented toward fulfilling curricular requirements rather than preparing students for publication. Students are often introduced to writing concepts and structures normatively, without intensive guidance in drafting, revising, and refining manuscripts. As a result, the transition from writing a final project or thesis to producing a journal article becomes a challenging stage and frequently leads to students' reluctance to engage in scholarly publication activities. This condition contributes to low levels of student publication and limits the regeneration of emerging academic writers within higher education institutions.

In this context, scientific article writing mentorship emerges as a relevant and impactful strategy for bridging the gap between academic demands and students' actual capacities. Mentorship functions not merely as a mechanism for knowledge transfer but

as a collaborative learning process that enables students to understand academic writing practices in a contextual and reflective manner. Mentoring- and writing clinic–based approaches have been shown to be more effective than one-way training models, as they provide sustained feedback, argumentative discussion, and gradual improvement in writing quality (Aitchison & Lee, 2006; Murray & Moore, 2006).

From a community engagement perspective, scientific article writing mentorship can be understood as a form of service to the internal academic community, particularly students who face concrete challenges in developing academic capacity. Community engagement is not exclusively directed toward external communities but can also focus on strengthening the capacity of strategic target groups within higher education, provided that such activities generate measurable change, competency development, and tangible impact (Boyer, 1996; Bringle & Hatcher, 2002). Accordingly, scientific writing mentorship holds strong academic legitimacy as a community engagement activity oriented toward empowerment and the strengthening of research culture.

Based on this background, the present community engagement program was designed to enhance students' ability to write scientific articles that comply with academic standards and publication ethics through a structured scientific article writing mentorship program. The program comprises an initial needs assessment, structured training on scientific article writing, and intensive mentoring through writing clinics and feedback on article drafts. The expected outcomes extend beyond improved conceptual understanding to include enhanced quality of article drafts that are ready for submission to academic journals. More broadly, this program is expected to contribute to strengthening students' academic literacy and fostering a sustainable culture of scholarly publication in higher education.

IMPLEMENTATION METHOD

This community engagement activity was conducted offline at Universitas Islam Negeri Sultan Syarif Kasim Riau. Face-to-face implementation was selected because academic writing mentorship has been shown to be more effective when it involves direct interaction, reflective discussion, and sustained feedback between facilitators and participants (Aitchison & Lee, 2006; Murray & Moore, 2006). The institutional context of higher education also enables community engagement activities to be directed toward strengthening students' academic capacity as part of fostering a research and publication culture.

The participants of this community engagement program consisted of 60 students from various academic programs and cohorts. The diversity of participants' academic backgrounds reflects heterogeneity in initial levels of scientific writing competence, which necessitates an adaptive and inclusive mentoring approach. Participant selection was conducted openly, taking into account students' interest in improving scientific writing skills and their willingness to engage fully in all stages of the program. This cross-disciplinary approach aligns with the view that academic literacy and scientific

writing skills constitute generic competencies relevant across disciplinary fields (Lea & Street, 1998; Wingate, 2012).

The program was designed using a participatory mentoring approach that emphasizes active student engagement at each stage of the activity. This approach is grounded in the understanding that scientific article writing is an iterative process involving planning, drafting, revising, and reflective refinement (Hyland, 2016). The activity began with an initial assessment of students' writing capacity through preliminary discussions and simple measurements of participants' understanding of scientific article structure, citation techniques, and publication ethics. This initial assessment functioned as a needs assessment to ensure that mentoring materials and strategies were aligned with participants' actual needs (Bringle & Hatcher, 2002).

The subsequent stage involved structured workshops on scientific article writing. The materials covered the structure of scientific articles (IMRAD), formulation of research problems and objectives, development of literature-based argumentative frameworks, and fundamental principles of publication ethics and academic citation. The workshops were delivered interactively by combining conceptual explanations with concrete examples drawn from scholarly articles, in accordance with a genre-based academic writing approach that emphasizes understanding writing conventions within specific scholarly communities (Swales & Feak, 2012; Hyland, 2004).

Following the development of conceptual understanding, students participated in intensive mentoring through writing clinic activities. At this stage, participants drafted or revised scientific article manuscripts derived from undergraduate theses, course-based research, or independent studies. The mentoring team provided direct feedback focusing on improving article structure, argumentative coherence, citation consistency, and clarity of scholarly contribution. The writing clinic model was adopted because it has been shown to be effective in enhancing academic writing quality through dialogic processes and sustained feedback, rather than through technical correction alone (Aitchison & Lee, 2006; Murray & Moore, 2006).

Evaluation of the community engagement activity was conducted to assess the effectiveness of the mentoring program in improving students' scientific writing abilities. The evaluation employed participatory observation during the activities, comparisons of pre-test and post-test results measuring students' understanding, and document analysis of article drafts before and after the mentoring process. In addition, participant feedback was collected through reflective discussions and brief questionnaires at the end of the program. The use of both process- and outcome-based evaluation aligns with principles of community engagement that emphasize tangible impact and capacity building among target participants (Boyer, 1996; Bringle & Hatcher, 2002).

DISCUSSION RESULTS

The implementation of the scientific article writing mentorship program for students yielded significant outcomes in terms of both process and academic outputs. Overall, the program effectively addressed the initial problems identified, namely students' limited understanding of scientific writing conventions and their low level of readiness to engage in academic publication. Figure 1, Findings from participatory observation conducted throughout the program indicate a high level of student engagement, particularly during discussion sessions and intensive mentoring activities. Students were not merely passive recipients of instructional content but actively participated in processes of reflection, revision, and academic dialogue concerning the manuscripts they developed.

Figure 1. Activity Implementation Process

3.1 Enhancement of Conceptual Understanding of Scientific Article Writing

One of the primary outcomes of this scientific article writing mentorship program was the improvement in students' conceptual understanding of the nature, function, and characteristics of scientific articles as a form of academic communication. At the initial stage of the program, most students demonstrated a limited and largely instrumental understanding of scientific writing. Scientific articles were commonly perceived as condensed versions of undergraduate theses or research reports, without adequate consideration of fundamental differences in purpose, audience, and rhetorical logic. This perception was evident in pre-test responses and initial discussions, in which students

emphasized technical formatting aspects rather than conceptual elements such as scholarly contribution, positioning within the literature, and argumentative strength.

Following participation in the workshops and mentoring sessions, a notable shift occurred from a predominantly technical orientation toward a more conceptual and reflective understanding of scientific article writing. Students began to recognize that scientific articles are not merely final research products, but vehicles for academic dialogue that situate research findings within broader scholarly conversations. This shift was reflected in students' improved ability to identify the purposes of scientific articles, including communicating knowledge contributions, subjecting arguments to critical scrutiny, and enabling replication or further development by other researchers (Hyland, 2004; Swales & Feak, 2012).

Improved conceptual understanding was also evident in students' interpretation of article structure. Initially, the IMRAD structure (Introduction, Methods, Results, and Discussion) was understood mechanically as a sequence of sections to be followed. Through mentoring, students came to understand this structure as a logical framework representing scientific reasoning—from problem formulation and methodological explanation to presentation of findings and interpretation of results and implications. This understanding helped students realize that each section serves an interconnected argumentative function rather than merely replicating chapter divisions typical of theses (Hyland, 2016).

Another area of significant improvement concerned students' understanding of research problem formulation and research objectives. Prior to mentoring, research problems tended to be overly broad, normative, or descriptive. After mentoring, students were increasingly able to formulate focused research problems aligned with relevant scholarly discourse and to articulate explicit research objectives linked to identified research gaps. This finding supports the view that problem formulation lies at the core of academic writing competence and requires explicit, context-sensitive guidance (Wingate, 2012).

Enhanced conceptual understanding was also reflected in students' attitudes toward the use of literature and citation practices. Initially, literature was viewed primarily as a formal requirement to legitimize academic work. Following mentoring, students increasingly regarded literature as a foundation for argumentation and a means of positioning their research within specific scholarly traditions. Students demonstrated greater awareness of the importance of using primary sources, reputable journals, and up-to-date references to strengthen their arguments. This shift indicates a growing understanding of academic ethics and citation practices as integral components of scholarly integrity (Hyland, 2004; Lea & Street, 1998).

In addition, the mentoring program contributed to students' understanding of publication ethics. Through discussions and case examples, students were introduced to issues such as plagiarism, self-plagiarism, salami publication, and the importance of originality in scholarly work. This understanding is particularly important given

increasing publication pressures in higher education that are often not accompanied by adequate training in publication ethics. After the program, students demonstrated more critical and cautious use of sources and a clearer understanding that publication quality is measured not only by quantity but also by integrity and scholarly contribution.

Overall, the enhanced conceptual understanding achieved through this program demonstrates that structured, practice-based mentoring can shift students' perceptions of academic writing from an administrative obligation to an intellectual practice. This paradigm shift constitutes a crucial foundation for the sustainable development of students' publication capacity. These findings align with the academic literacies perspective, which emphasizes that academic writing development involves transforming ways of thinking and participating within scholarly communities, rather than merely acquiring technical skills (Lea & Street, 1998; Hyland, 2016).

3.2 Improvement in the Quality of Students' Article Drafts

Document analysis of students' article drafts before and after the mentoring program revealed systematic and substantive improvements in academic writing quality. At the initial stage, most drafts exhibited characteristics typical of reports or undergraduate theses in terms of structure, language style, and argumentative patterns. Abstracts were generally narrative and descriptive, emphasizing general background information rather than explicitly presenting research objectives, methods, key findings, and scholarly contributions. This indicates that students had not yet fully understood the abstract's function as an argumentative summary representing the entire article and serving as the primary entry point for journal readers.

Similar weaknesses were observed in the introduction sections, which tended to present lengthy, normative, and unfocused contextual descriptions. Introductions often failed to demonstrate a clear argumentative progression from general context to specific research problems, and research gaps were rarely articulated explicitly. Consequently, research objectives were not sharply defined, and the relationships among background, research questions, and scholarly contribution lacked coherence. These findings are consistent with previous literature indicating that novice writers frequently struggle to construct literature-based and argumentative introductions due to limited academic experience and genre awareness (Swales & Feak, 2012; Hyland, 2004).

The discussion sections in initial drafts also exhibited notable weaknesses. Discussions were often repetitive, reiterating results without providing in-depth interpretation or linking findings to theoretical frameworks and prior research. In many cases, students did not clearly distinguish between results and discussion sections, resulting in superficial and non-reflective analysis. This pattern suggests that students initially viewed scientific writing primarily as data reporting rather than as a process of scholarly argumentation requiring interpretation and engagement with the literature.

Following the mentoring program and writing clinic activities, substantial improvements were observed in the structure and quality of students' article drafts.

Students began to produce abstracts that were more concise, systematic, and informative, proportionally presenting essential elements such as research objectives, methodological approaches, key findings, and implications. This improvement reflects a growing understanding of the abstract as an intellectual representation of the entire article rather than a background summary.

Significant improvement was also evident in the introduction sections. Students demonstrated enhanced ability to construct logical argumentative flows, moving from general contexts toward specific research problems. Introductions increasingly integrated relevant literature to position the study within appropriate scholarly discourse. Students also showed improved capacity to articulate explicit research objectives and questions, thereby clarifying the direction and contribution of their articles. These findings reinforce the argument that contextualized feedback through mentoring can help students grasp the rhetorical and argumentative logic of scientific writing (Hyland, 2016).

In discussion sections, students began to demonstrate emerging abilities to interpret findings and relate them to relevant literature, although the depth of analysis varied. Some drafts showed attempts to compare findings with previous studies and to articulate broader implications. These developments suggest that students increasingly understood the discussion section as an argumentative space for negotiating the meaning of research findings rather than merely reiterating data. The step-by-step revision process supported by direct mentoring enabled students to better comprehend the relationships among data, theory, and argument.

Direct and contextual feedback provided during writing clinic activities proved to be a key factor in improving draft quality. Through academic dialogue between mentors and students, revision processes extended beyond technical correction to encompass the strengthening of argumentation and textual coherence. This approach aligns with findings by Aitchison and Lee (2006) emphasizing the importance of dialogic feedback in academic writing development, as well as Murray and Moore's (2006) perspective on communities of practice in fostering novice writers' confidence and competence.

Nevertheless, post-mentoring draft analysis also indicated that some students continued to experience difficulties in developing consistently analytical and argumentative discussions. Limited integration of theoretical frameworks and insufficient use of up-to-date literature remained major challenges. In some cases, literature was referenced superficially and not fully embedded within argumentative discussions. These findings suggest that sustained improvement in academic writing quality depends heavily on habitual engagement with scholarly literature and theoretical frameworks, which requires time and ongoing learning processes (Hyland, 2004; Swales & Feak, 2012).

Overall, the improvements observed demonstrate that structured, practice-based interventions can significantly enhance students' academic writing abilities, even though not all challenges were fully resolved. These findings underscore the importance of

positioning scientific writing mentorship as a medium- to long-term process integrated with research methodology instruction and the cultivation of academic reading practices. Thus, this community engagement activity not only produced technical improvements in students' article drafts but also constituted an initial step toward building sustainable academic writing capacity.

3.3 Effectiveness of the Mentoring and Writing Clinic Model

One of the most salient findings of this community engagement activity was the effectiveness of the intensive mentoring model implemented through writing clinics in enhancing both the process and outcomes of students' scientific writing. Unlike one-way training approaches that focus primarily on content delivery, the writing clinic model positioned students as active agents in the writing learning process. This model enabled sustained dialogic interaction between mentors and students, ensuring that learning was not merely top-down but responsive to participants' specific needs and challenges.

Within the writing clinics, students were able to discuss concrete issues arising in their drafts, ranging from problem formulation and argument organization to literature use and citation techniques. Students posed highly specific questions about their manuscripts, while mentors provided feedback tailored to the research context, academic proficiency, and disciplinary background of each participant. This interactional pattern facilitated contextual and meaningful learning, as students directly understood the rationale behind each suggestion and revision.

The effectiveness of the writing clinic model was also evident in students' attitudinal changes toward the writing process itself. Initially, many students perceived revision as a technical corrective task and an additional burden. Through dialogic mentoring, however, students increasingly viewed revision as an integral component of academic thinking. They became more receptive to critique, more reflective in evaluating their work, and more proactive in articulating arguments or justifying writing choices. This attitudinal shift represents a key indicator of emerging academic writer identity among students.

The writing clinic model employed in this program aligns with findings by Aitchison and Lee (2006) and Murray and Moore (2006), who emphasize the importance of communities of practice in academic writing development. Writing is not viewed as an isolated individual skill, but as a social practice learned through interaction, negotiation of meaning, and participation in academic communities. In this context, the writing clinic functioned as a social-academic space in which students learned not only from mentors but also from peers through discussion, experience sharing, and cross-review of drafts.

Horizontal peer interaction within writing clinics further contributed to mentoring effectiveness. Students with relatively stronger writing abilities often became informal learning resources for others through discussion and exchange of writing experiences. This process fostered a collaborative learning environment and reduced students'

dependence on mentors as the sole academic authority. Consequently, the writing clinic served not only as a guidance space but also as a mechanism for cultivating academic culture grounded in collaboration, reflection, and shared learning.

From an academic writing pedagogy perspective, the effectiveness of writing clinics can also be explained through the academic literacies approach, which emphasizes understanding the practices, values, and expectations of specific academic communities (Lea & Street, 1998; Hyland, 2016). Through writing clinics, students learned not only how to write, but how to think and argue as members of scholarly communities. Dialogic mentoring enabled students to recognize that academic writing standards are not arbitrary rules but reflections of epistemic and normative values within academia.

Nevertheless, the effectiveness of the writing clinic model was influenced by contextual factors such as mentor-to-student ratios, available mentoring time, and students' initial readiness. In this program, limited time constrained the intensity of mentoring for some participants, particularly those requiring deeper guidance in theoretical argumentation and analytical writing. This finding suggests that writing clinics yield maximum impact when implemented continuously and integrated into academic programs such as research methodology or academic writing courses.

Overall, findings regarding the effectiveness of the writing clinic model affirm its relevance and impact in developing students' scientific writing abilities. Beyond improving draft quality, the model facilitated a transformation in students' perceptions of academic writing as a social, reflective, and collaborative process. In the context of community engagement, writing clinics can thus be positioned as a best practice suitable for replication and further development to strengthen academic literacy and publication culture in higher education institutions.

3.4 Challenges and Limitations of the Program

Despite the positive outcomes achieved, the implementation of this scientific writing mentorship program also revealed several challenges and limitations that warrant critical reflection. Acknowledging these limitations is essential for providing a balanced assessment of program effectiveness and for informing future improvement and development strategies.

A primary challenge related to the heterogeneity of students' initial academic writing abilities. Participants came from diverse academic programs and cohorts with varying levels of research experience and exposure to scholarly literature. Students with prior research experience and familiarity with journal articles adapted more quickly to scientific writing conventions and responded more effectively to feedback. Conversely, students at earlier stages of academic development required more time to grasp argumentative structures, literature integration, and scientific writing logic. These differences resulted in variation in the pace and quality of draft development, making uniform mentoring difficult.

Time constraints constituted another significant challenge. Although the writing clinic model proved effective, limited mentoring duration restricted the extent of revision, particularly for students requiring deeper guidance in theoretical argumentation and analytical interpretation. In some cases, mentoring focused more on structural clarity and organization, while deeper conceptual analysis and engagement with scholarly discourse remained underdeveloped. This finding underscores that scientific writing development is a medium- to long-term process that cannot be fully achieved through short-term interventions.

Another limitation involved some students' continued dependence on mentor guidance when developing arguments. This dependence manifested in students waiting for explicit instructions before revising and showing limited initiative in independently exploring alternative arguments or literature. While mentoring improved technical and structural understanding, fostering intellectual autonomy as academic writers remains an ongoing challenge. Overly intensive mentoring without empowerment strategies may inadvertently constrain students' development of academic independence.

These challenges indicate that scientific writing mentorship should be designed as a continuous, integrated process within higher education rather than as a standalone activity. Integrating writing mentorship into research methodology, academic writing courses, or thesis supervision can provide sustained opportunities for practice, reflection, and skill development. This approach aligns with Hyland's (2016) argument that academic literacy development requires consistent and institutionalized support.

From a community engagement perspective, limitations also relate to program sustainability and scalability. While short-term mentoring yields immediate benefits, long-term impact depends on institutional follow-up and stakeholder commitment. Without supportive policies and continuation mechanisms, capacity gains may not fully develop. Strengthening students' publication culture therefore requires synergy among community engagement initiatives, academic policy, and learning systems that support sustained academic writing practices. Overall, the challenges identified do not diminish the program's value but rather highlight the complexity of developing students' scientific writing capacity. By explicitly acknowledging these limitations, the program provides a robust foundation for refining more adaptive, sustainable, and integrated mentoring models. This reflective stance further positions the community engagement activity as an evolving institutional learning process rather than a final, closed intervention.

3.5 Implications for Community Engagement and Higher Education

From a community engagement perspective, the scientific article writing mentorship program produced tangible impacts in enhancing students' academic capacity as its primary target group. These findings reaffirm that community engagement need not be confined to external communities but can also focus on empowering internal academic communities when activities address real needs, generate measurable change, and

contribute to sustainable capacity building. In this framework, students can be understood as members of the academic community with specific academic literacy needs, making them strategic beneficiaries of community engagement initiatives (Boyer, 1996; Bringle & Hatcher, 2002).

The improvement in students' academic literacy and publication readiness demonstrates that mentorship-based community engagement has greater transformative potential than ceremonial or one-directional approaches. Scientific writing mentorship not only transfers technical knowledge but also cultivates students' reflective capacity in understanding academic practices, publication ethics, and their roles within scholarly communities. In this sense, community engagement functions as an empowerment mechanism that transforms students' ways of thinking and practicing, rather than merely delivering short-term skills training.

Another important implication concerns the strengthened legitimacy of community engagement as an integral component of higher education's *tridharma* alongside teaching and research. The mentorship program illustrates that boundaries among community engagement, teaching, and research are fluid and mutually reinforcing. Through this activity, faculty members contributed not only as community engagement practitioners but also as educators enhancing learning quality and as facilitators strengthening students' research ecosystems. This perspective aligns with the concept of the *scholarship of engagement*, which positions community engagement as an academic endeavor with epistemic and pedagogical value equivalent to teaching and research (Boyer, 1996).

Within the broader context of higher education, the program offers strategic implications for cultivating research and publication culture among students. Scientific writing mentorship can serve as a systematic strategy to bridge gaps between academic policy demands—such as publication requirements and research integration—and students' diverse actual capacities. These gaps often generate frustration among students and faculty and may compromise publication quality without adequate pedagogical support.

Furthermore, the findings indicate that developing students' publication capacity is inseparable from institutional design. Community engagement–based writing mentorship can complement formal classroom instruction, particularly in research methodology and academic writing courses. Integrating writing mentorship into academic policies and curricula can create more coherent and sustainable learning pathways for students' research and publication development. This approach aligns with the view that academic literacy evolves through repeated practice, sustained feedback, and active participation in scholarly communities (Hyland, 2016).

Beyond student-level impact, the program also has implications for institutional capacity building. Improved student publication readiness contributes directly to institutional performance indicators, including academic outputs and scholarly reputation. Consequently, institutional investment in writing mentorship yields strategic

value not only for individual students but also for higher education institutions' long-term academic objectives. Overall, the implications of this scientific article writing mentorship program underscore the role of community engagement as a strategic vehicle for strengthening academic literacy, research culture, and publication ecosystems in higher education. By positioning students as empowered agents and mentorship as a core approach, the program contributes to sustainable academic capacity building while reinforcing synergies among community engagement, teaching, and research.

CONCLUSION

This community engagement program on scientific article writing mentorship demonstrates that a structured, practice-based mentoring approach—particularly through the writing clinic model—is effective in enhancing students' conceptual understanding and improving the quality of their scientific article drafts. Students not only showed increased technical competence in producing articles that meet academic standards, but also demonstrated deeper understanding of argumentative logic, literature use, and publication ethics. These findings affirm that the development of scientific writing competence requires dialogic and sustained learning processes rather than the mere delivery of theoretical instruction.

Based on these results, it is recommended that scientific article writing mentorship be systematically integrated into higher education academic policies and curricula, particularly within research methodology and academic writing courses. The continuous implementation of mentoring programs, supported by adequate institutional commitment, can strengthen students' academic literacy and foster a sustainable research and publication culture. Accordingly, this community engagement activity contributes not only to the enhancement of individual students' capacities but also to the achievement of higher education's strategic objectives in improving the quality and quantity of scholarly publications.

REFERENCES

Afandi, M., Erdayani, R., & Afandi, S. A. (2023). How to Use" Publish or Perish" to Raise the Standard of Scientific Writing at State Administration Study Programme students, Sultan Syarif Kasim Riau State Islamic University. Welfare: Jurnal Pengabdian Masyarakat, 1(2), 313–318.

Afandi, M., Erdayani, R., & Afandi, S. A. (2025). Managerial Strategy in Developing Student Academic Literacy Culture Through Assistance in Writing Scientific Articles Towards Quality Scientific Publications. Welfare: Jurnal Pengabdian Masyarakat, 3(2), 298–303.

Aitchison, C., & Lee, A. (2006). Writing, publishing, and the doctorate: Writing and doctoral learning. *Studies in Higher Education, 31*(3), 265–285. https://doi.org/10.1080/03075070600680500

Boyer, E. L. (1996). The scholarship of engagement. *Journal of Public Service & Outreach, 1*(1), 11–20.

Bringle, R. G., & Hatcher, J. A. (2002). Campus–community partnerships: The terms of engagement. *Journal of Social Issues, 58*(3), 503–516. https://doi.org/10.1111/1540-4560.00273

Hyland, K. (2004). *Disciplinary discourses: Social interactions in academic writing*. University of Michigan Press.

Hyland, K. (2016). *Academic publishing: Issues and challenges in the construction of knowledge*. Oxford University Press.

Lea, M. R., & Street, B. V. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education, 23*(2), 157–172. https://doi.org/10.1080/0307507981233138036 4

Murray, R., & Moore, S. (2006). *The handbook of academic writing: A fresh approach*. Open University Press.

Swales, J. M., & Feak, C. B. (2012). *Academic writing for graduate students: Essential tasks and skills* (3rd ed.). University of Michigan Press.

Wingate, U. (2012). Using academic literacies and genre-based models for academic writing instruction: A "literacy" journey. *Journal of English for Academic Purposes, 11*(1), 26–37. https://doi.org/10.1016/j.jeap.2011.11.006