



Improving Article Writing Skills Using the Project Based Learning Model for Semester VI Students

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Abstract

Article writing competence has become an essential academic skill for university students because it supports scientific communication and publication. However, many students continued to experience difficulties in organising ideas, developing coherent arguments, and producing academic articles that met scholarly standards. Previous studies primarily examined the implementation of Project-Based Learning (PjBL) in science and general language education, while empirical evidence regarding its application in university article writing courses remained limited. Therefore, this study investigated students' learning outcomes following the implementation of the Project-Based Learning model in an Article Writing course.

This study employed a quantitative descriptive research design involving 33 sixth-semester students enrolled in the Indonesian Language Education Study Programme. The participants were selected using total sampling. Data were collected through documentation of students' academic achievement, including quiz scores, assignments, practical activities, midterm examination, final examination, and final course grades. The data were analysed using descriptive statistics, including minimum and maximum scores, mean scores, frequency distributions, and percentage analysis.

The findings revealed that students achieved satisfactory learning outcomes after the implementation of Project-Based Learning. Most participants obtained excellent academic performance, with 81.82% receiving Grade A, 15.15% obtaining Grade B, and only 3.03% receiving Grade D. The mean final score indicated that students successfully achieved the expected learning outcomes in the Article Writing course. The implementation of Project-Based Learning also promoted active participation, collaborative learning, independent inquiry, and systematic engagement throughout the academic writing process.

The findings suggested that Project-Based Learning provided an effective instructional approach for supporting article writing instruction in higher education. This study contributed empirical evidence supporting the integration of project-based instructional strategies into academic writing courses to enhance students' learning achievement and engagement.

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1. Introduction (12 pt)

Writing is one of the essential language skills that students must master in higher education because it enables them to communicate ideas, arguments, and research findings systematically and scientifically. In the Indonesian Language Education program, article writing is a fundamental

competency that prepares students to produce scientific publications, complete academic assignments, and participate in scholarly communication. However, developing academic writing competence remains a significant challenge for many university students due to difficulties in organizing ideas, constructing coherent arguments, applying academic language conventions, and integrating credible references into their writing.

The rapid development of higher education in the digital era has increased the demand for graduates who possess not only theoretical knowledge but also strong critical thinking, creativity, collaboration, and communication skills. Consequently, learning activities should encourage students to engage actively in authentic learning experiences rather than relying solely on teacher-centered instruction. In writing courses, conventional approaches often emphasize theoretical explanations and individual assignments, providing limited opportunities for students to experience the complete process of academic writing. As a result, students frequently experience difficulties in producing well-structured and publishable articles.

One instructional approach that addresses these challenges is Project-Based Learning (PjBL). This model emphasizes learning through meaningful projects that require students to investigate problems, collect and analyze information, collaborate with peers, and produce authentic products. In article writing courses, Project-Based Learning enables students to experience every stage of the scientific writing process, including topic selection, literature review, drafting, peer feedback, revision, and final publication. Such learning experiences encourage students to construct knowledge actively while simultaneously developing higher-order thinking skills.

Previous studies have demonstrated that Project-Based Learning contributes positively to students' learning motivation, collaboration, creativity, and problem-solving abilities. Bell (2010) reported that Project-Based Learning prepares learners with essential twenty-first-century competencies through authentic and meaningful learning activities. Similarly, Kokotsaki et al. (2016) concluded that Project-Based Learning enhances student engagement and promotes deeper understanding because students actively participate in knowledge construction throughout the learning process. Thomas (2000) also emphasized that project-based instruction places students at the center of learning by involving them in solving real-world problems and producing meaningful outcomes.

Despite the growing body of research on Project-Based Learning, studies focusing specifically on its implementation in university-level article writing courses remain relatively limited, particularly in Indonesian higher education. Most previous research has examined the effectiveness of Project-Based Learning in science education, vocational education, or general language learning, while empirical evidence concerning its application in academic article writing is still insufficient. Therefore, further investigation is needed to provide empirical evidence regarding students' learning outcomes after implementing Project-Based Learning in article writing instruction.

Based on these considerations, this study implemented the Project-Based Learning model in the sixth-semester Article Writing course to facilitate students in developing academic writing competence through authentic project activities. The learning process emphasized active participation, collaboration, independent inquiry, and continuous revision, enabling students to experience the complete process of scientific article development.

The objective of this study was to describe the learning outcomes of sixth-semester students after the implementation of the Project-Based Learning model in the Article Writing course. The findings are expected to provide empirical evidence regarding the effectiveness of Project-Based Learning in supporting academic writing instruction and to serve as a reference for lecturers in designing more meaningful and student-centered learning experiences in higher education.

2. Literature Review

2.1 Article Writing Skills

Writing is a productive language skill that requires learners to express ideas systematically, logically, and coherently. In higher education, article writing represents one of the highest levels of academic writing because it integrates critical thinking, information literacy, and scientific communication. Students are expected to produce articles that are supported by credible

evidence, organized according to scientific conventions, and written using appropriate academic language. Writing articles is an academic skill that enables students to develop, organize, and communicate ideas systematically based on scientific writing principles. The writing process not only produces a written product but also involves complex cognitive activities, such as planning, organizing ideas, constructing arguments, revising, and editing on an ongoing basis (Hayes, 2012). Academic writing skills also require mastery of disciplinary conventions so that writers can convey ideas effectively to the academic community (Hyland, 2019). In the context of higher education, writing scientific articles serves as a means to develop students' critical, analytical, and reflective thinking skills while simultaneously building academic literacy (Hyland, 2018). Furthermore, the article writing process encourages students to integrate various sources of information into logical and accountable arguments (Hyland, 2010). Scientific writing is also a knowledge construction process that occurs through the stages of planning, drafting, revising, and editing, so the quality of the writing is greatly influenced by the writer's ability to manage each stage (Flower & Hayes, 1980; Hayes, 2012). A genre-based approach emphasizes that successful article writing is influenced by an understanding of communication objectives, text structure, and reader characteristics (Hyland, 2003). Therefore, writing instruction should not only be oriented towards the final result, but also provide authentic experiences that allow students to experience the entire process of scientific writing (Hyland, 2016). Learning that involves collaborative activities, reflection, and problem-solving has been shown to improve the quality of students' academic writing because they have the opportunity to gradually refine their ideas and writing structure (Bell, 2010; Kokotsaki et al., 2016). Thus, article writing skills not only reflect language skills but also demonstrate scientific thinking, information literacy, and academic communication skills, which are important competencies for students in higher education.

Academic article writing involves several interconnected stages, including identifying research problems, reviewing relevant literature, organizing ideas, drafting, revising, and editing. These stages require students to master not only linguistic competence but also analytical and evaluative skills. According to Hyland (2019), academic writing is a social and cognitive process through which writers construct knowledge while engaging with disciplinary conventions and academic audiences. Therefore, learning to write articles should emphasize both writing processes and writing products.

Many university students experience difficulties in developing academic writing competence. Common challenges include generating ideas, maintaining coherence and cohesion, synthesizing information from multiple sources, and applying appropriate citation and referencing styles. Consequently, writing instruction should provide authentic learning experiences that allow students to practice the complete writing process rather than focusing solely on theoretical explanations.

2.2 Project-Based Learning

Project-Based Learning (PjBL) is a student-centered instructional model that organizes learning through meaningful projects. Students actively investigate authentic problems, collaborate with peers, and produce products that demonstrate their understanding of course concepts. Rather than emphasizing memorization, PjBL encourages inquiry, problem-solving, creativity, and reflective learning.

Bell (2010) explains that Project-Based Learning develops twenty-first-century competencies by engaging learners in authentic tasks requiring communication, collaboration, creativity, and critical thinking. Similarly, Thomas (2000) argues that projects should become the central component of instruction because they encourage students to construct knowledge independently through meaningful experiences.

The implementation of PjBL generally consists of several stages, including identifying essential questions, planning project activities, scheduling learning tasks, monitoring project implementation, evaluating products, and reflecting on learning experiences. Through these stages, students become active participants responsible for planning and completing their own learning.

In article writing courses, Project-Based Learning allows students to experience the complete process of scientific writing. Students identify research topics, conduct literature reviews, prepare

outlines, write drafts, receive peer and lecturer feedback, revise manuscripts, and present their final articles. This learning process mirrors authentic academic writing practices and provides opportunities for continuous improvement.

2.3 Project-Based Learning and Writing Skills

The effectiveness of Project-Based Learning in improving writing competence has been widely reported. PjBL encourages students to develop ideas through inquiry, collaborate in solving problems, and communicate their findings through written products. Since writing is a process requiring repeated revision and reflection, project-based activities naturally support the development of writing skills.

Bell (2010) reported that students participating in Project-Based Learning demonstrated higher engagement and stronger problem-solving abilities because learning activities were connected to authentic contexts. Likewise, Kokotsaki et al. (2016) concluded that PjBL enhances student motivation, collaboration, and independent learning while promoting deeper conceptual understanding. Project-Based Learning (PjBL) is a student-centered learning model through the completion of authentic projects so that it can improve critical thinking skills, collaboration, creativity, problem solving, and learning outcomes (Bell, 2010; Thomas, 2000; Blumenfeld et al., 1991; Krajcik & Blumenfeld, 2006; Kokotsaki et al., 2016; Condliffe et al., 2017; Guo et al., 2020; Markham, 2011; Wurdinger & Qureshi, 2015; Grant, 2002).

Research conducted by Krajcik and Blumenfeld (2006) also indicated that project-based instruction enables learners to integrate conceptual knowledge with practical applications, thereby improving both learning achievement and communication skills. In writing instruction, authentic projects encourage students to organize ideas more effectively and produce higher-quality written work because they experience the complete cycle of planning, drafting, revising, and presenting their products.

These findings suggest that Project-Based Learning provides an instructional environment conducive to improving academic writing competence. Students become active learners who construct knowledge through meaningful experiences instead of passively receiving information from instructors.

2.4 Conceptual Framework

This study is based on the assumption that Project-Based Learning facilitates active learning experiences that improve students' article writing competence. Through authentic projects, students participate in every stage of academic writing, including topic selection, information gathering, drafting, revising, and final presentation. Continuous feedback from lecturers and peers helps students refine their writing while simultaneously developing critical thinking, collaboration, and communication skills.

The conceptual relationship of this study can be illustrated as follows:



Figure 1. Framework Conceptual

The framework assumes that meaningful project activities create learning experiences that enable students to develop both academic writing competence and broader twenty-first-century skills.

3. Method

This study employed a quantitative descriptive approach to describe students' learning outcomes after the implementation of the Project-Based Learning (PjBL) model in the Article Writing course. The study focused on describing students' achievement based on the assessment components implemented during one semester.

The participants consisted of 33 sixth-semester students enrolled in the Indonesian Language Education Study Program who took the Article Writing course during the 2025/2026 academic year. The participants were selected using total sampling because all students enrolled in the course were involved in the implementation of the learning model.

The learning process was conducted using the Project-Based Learning model. Students completed a series of project activities, including identifying article topics, reviewing relevant literature, preparing article outlines, writing the first draft, receiving feedback from peers and the lecturer, revising the manuscript, and submitting the final article. Throughout the learning process, students worked both collaboratively and independently to complete each stage of the writing project.

Data were collected using documentation techniques. The documentation consisted of students' academic scores obtained from six assessment components, namely quizzes, assignments, practical activities, the midterm examination (UTS), the final examination (UAS), and the final course grade. These assessment results represented students' learning achievement after participating in Project-Based Learning.

The collected data were analyzed using descriptive statistics. The analysis included calculating the minimum score, maximum score, mean score, frequency distribution, percentage of final grades, and overall learning achievement. The results were then presented in tables and figures to provide a comprehensive description of students' learning outcomes following the implementation of the Project-Based Learning model.

The research procedure consisted of four stages. The first stage involved planning the learning activities and preparing the project assignments. The second stage was the implementation of Project-Based Learning through a sequence of article writing activities. The third stage involved collecting students' assessment data from each evaluation component. The final stage consisted of analyzing the data descriptively and interpreting the findings to describe students' learning outcomes after the implementation of Project-Based Learning.

4. Results (12 pt)

This study examined the improvement of students' article writing skills through the implementation of the Project-Based Learning (PjBL) model in the sixth semester Writing Skills course. Students' learning outcomes were measured through quizzes, assignments, practical activities, the midterm examination (UTS), the final examination (UAS), and the final course grade.

Table 1. Students' Learning Outcomes in the Article Writing Course Using the Project-Based Learning Model

Assessment Component	Minimum Score	Maximum Score	Mean Score
Quiz	70.00	83.00	80.27
Assignment	70.00	86.00	81.76
Practical Activity	0.00	81.00	2.45*
Midterm Examination (UTS)	0.00	86.00	79.12
Final Examination (UAS)	0.00	86.00	79.45
Final Score	24.50	83.65	79.53

One student obtained a practical score of 81.00, while most students had no recorded practical score.

Table 1 shows that the students achieved generally high scores across the assessment components. Assignment scores produced the highest average, followed by quiz scores. The average final score indicated that most students successfully met the expected learning outcomes in the article writing course.

Table 2. Distribution of Students' Final Grades

Grade	Number of Students	Percentage (%)
A	27	81.82
B	5	15.15
D	1	3.03
Total	33	100.00

Table 2 demonstrates that the majority of students obtained Grade A. More than four-fifths of the participants achieved excellent academic performance, while only one student received Grade D due to incomplete participation in the assessment process.

The distribution of final grades illustrates that Grade A dominated the learning outcomes. The relatively small proportion of students receiving Grade B and the presence of only one student with Grade D indicated that most participants successfully completed the learning activities designed in the course.

Table 3. Students with the Highest Final Scores

Student	Final Score	Grade
R	83.65	A
AA	83.35	A
SA	83.10	A
PY	82.85	A
SNS	82.75	A

Table 3 presents the students who obtained the highest final scores during the implementation of the learning model. The highest score achieved was 83.65, indicating that several students demonstrated consistently high performance throughout the learning process.

Table 4. Overall Achievement of Students

Indicator	Value
Number of students	33
Mean final score	79.53
Highest score	83.65
Lowest score	24.50
Students obtaining Grade A	27 (81.82%)
Students obtaining Grade B	5 (15.15%)
Students obtaining Grade D	1 (3.03%)

Table 4 summarizes the overall learning achievement. Most students achieved scores within the excellent category. The lowest score was obtained by one student who did not complete several assessment components, while the remaining students consistently demonstrated satisfactory academic performance.

Overall, the implementation of the Project-Based Learning model resulted in positive learning outcomes. Most students achieved high academic performance, as reflected by the dominance of

Grade A and the average final score of 79.53. The assessment results indicated that students successfully completed the learning activities and met the expected competencies in article writing.

5. Discussion

The findings demonstrated that the implementation of the Project-Based Learning (PjBL) model supported students in achieving satisfactory learning outcomes in the Article Writing course. Most students successfully completed the learning activities and demonstrated competence in producing academic articles. The predominance of excellent grades indicated that the learning model facilitated students' engagement throughout the writing process, beginning from identifying topics, collecting references, organizing ideas, drafting, revising, and producing the final article.

Project-Based Learning emphasizes learning through authentic tasks that require students to solve problems and produce meaningful products. In this study, the final product was an academic article completed collaboratively and individually through several stages of writing. This learning process enabled students to actively construct knowledge rather than merely receive information from the lecturer. Students were required to investigate issues, organize ideas systematically, and communicate their findings in written form. Such learning characteristics contributed to the development of higher-order thinking skills and writing competence.

The positive learning outcomes also reflected that PjBL encouraged students to become more independent during the writing process. Writing an academic article requires planning, critical reading, information synthesis, academic language use, and continuous revision. Through project-based activities, students had opportunities to improve these competencies because each stage of the project demanded active participation and continuous feedback. Consequently, students became more responsible for completing their writing tasks according to academic standards.

Another important finding was that only a small proportion of students achieved moderate learning outcomes, while one student did not successfully complete the course due to incomplete participation in several assessment components. This result suggested that the effectiveness of Project-Based Learning is closely related to students' learning engagement. Students who consistently participated in project activities tended to demonstrate better academic achievement than those with low participation. Therefore, active involvement throughout the project became an essential factor influencing learning success.

The findings support the constructivist perspective, which argues that knowledge is developed through active experience and meaningful learning activities. In Project-Based Learning, students learn by doing, reflecting, collaborating, and producing authentic products. These learning experiences provide broader opportunities for students to develop writing competence compared with conventional lecture-based instruction. The writing process becomes contextual because students experience each stage of article development directly rather than learning only theoretical concepts.

The results are consistent with previous studies reporting that Project-Based Learning improves students' writing performance, critical thinking, creativity, collaboration, and communication skills. Bell (2010) explained that PjBL creates authentic learning experiences that encourage learners to become active problem solvers while developing twenty-first-century skills. Likewise, Thomas (2000) emphasized that project-based instruction places students at the center of the learning process through meaningful projects that integrate knowledge and practical application. Similar findings were also reported by Kokotsaki et al. (2016), who concluded that Project-Based Learning enhances student motivation and promotes deeper learning because learners actively participate in constructing knowledge throughout the project.

The implementation of Project-Based Learning in the Article Writing course also provided opportunities for students to experience authentic academic writing practices. Rather than

completing isolated writing exercises, students developed complete articles through systematic stages, including topic selection, literature review, drafting, peer review, revision, and final presentation. These activities reflect the actual process of scientific writing and therefore contribute to students' readiness for conducting future academic research.

Overall, the findings indicate that Project-Based Learning can serve as an effective instructional model for developing article writing skills among sixth-semester students. The model promotes active learning, independent inquiry, collaboration, and continuous revision, all of which are fundamental elements in academic writing. The high proportion of students achieving excellent academic performance suggests that project-based learning provides a conducive environment for improving students' writing competence while simultaneously fostering essential twenty-first-century learning skills.

6. Conclusion

The implementation of the Project-Based Learning (PjBL) model in the Article Writing course produced positive learning outcomes among sixth-semester students. Most students successfully achieved the expected competencies, as reflected in the dominance of Grade A and the satisfactory overall learning achievement. These findings indicate that project-based learning provided students with meaningful learning experiences through authentic writing activities, enabling them to develop academic writing skills systematically.

The learning process encouraged students to participate actively in planning, drafting, revising, and completing academic articles. In addition to improving writing performance, the implementation of PjBL fostered students' independence, collaboration, critical thinking, and responsibility throughout the learning process. Students who consistently engaged in each project stage demonstrated better learning outcomes than those with lower participation.

Therefore, Project-Based Learning can be considered an effective instructional model for teaching article writing in higher education. Future research is recommended to employ pretest–posttest or experimental designs to measure the extent of improvement in students' writing skills more comprehensively and to compare the effectiveness of Project-Based Learning with other instructional models.

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