THE INFLUENCE OF THE SCIENTIFIC WORK PREPARATION WORKSHOP ON INCREASING THE ACADEMIC WRITING COMPETENCE OF MAJENE OPEN UNIVERSITY STUDENTS

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Abstract

Academic writing competence is an essential skill for students but often becomes a major obstacle, including for students of the Open University (Universitas Terbuka - UT) Majene. This study aims to analyze the influence of conducting a scientific writing workshop on improving the academic writing competence of UT Majene students. The research method used was a quasi-experiment with a one-group pretest-posttest design. A total of 30 students actively taking their final project/thesis course were selected as samples using purposive sampling technique. The research instrument was an essay test to measure the ability to write a research proposal, administered before (pretest) and after (posttest) the workshop intervention. The workshop was conducted over 16 hours of meetings covering core materials on writing the problem background, problem identification, formulation of research objectives and benefits, and literature review. The obtained data were analyzed statistically using a paired sample t-test to determine the significant difference between pretest and posttest scores. The results showed a significant increase in the students' average writing ability score, from 55.20 in the pretest to 78.45 in the posttest. The t-test results strengthened this finding with a significance value (p) of 0.000 < 0.05, meaning H0 is rejected and Ha is accepted. It is concluded that the scientific writing workshop proven to have a positive and significant influence on improving the academic writing competence of UT Majene students. The implication of this research emphasizes the importance of institutions conducting similar training sustainably and structuredly to empower students' academic skills, particularly in preparing for thesis writing.

Keywords: Workshop, Scientific Work, Writing Competence, Students, Open University.

1 INTRODUCTION

Academic writing skill is one of the fundamental competencies that every student must master as an indicator of learning achievement in higher education. This ability is not only crucial for completing course assignments but is also a primary prerequisite for composing final scientific works, such as undergraduate theses (skripsi), master's theses (tesis), and dissertations. However, in reality, most students, including those enrolled at the Open University (UT) Majene, face significant difficulties in articulating their scientific ideas in writing with systematic structure and language that conforms to academic standards. These

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difficulties encompass various aspects, from formulating the problem background, identifying research gaps, compiling the literature review, to citation and paraphrasing that is free from plagiarism. The Open University, with its open and distance learning characteristics, places independent learning as its main pillar. Although it provides various modules and online learning resources, direct interaction and intensive guidance for academic writing are often limited. UT Majene students, located in an area with potentially limited access to formal learning centers, often feel less confident and untrained to start and complete their scientific papers. This can potentially lead to delays in study completion, decreased learning motivation, and even increased dropout rates at the thesis writing stage.

Based on initial observations and informal interviews with several UT Majene students, it was identified that this low academic writing competence is not solely due to a lack of materials, but rather a lack of practical training and structured mentoring. They need a forum to practice directly, receive feedback, and understand the concepts of scientific writing applicatively, not just theoretically. Therefore, an intervention in the form of training or a workshop specifically designed to solve this specific problem is considered very urgent. Several previous studies have examined the effectiveness of workshops in improving writing skills. For example, research by (Author's Name, Year) proved that writing workshops could significantly improve the quality of students' abstracts and research backgrounds. Similarly, a study by (Another Author's Name, Year) concluded that practical training approaches are more effective than conventional learning in the context of academic writing. However, specific studies highlighting the effectiveness of workshops for students in distance education systems, particularly in regions like Majene, are still very limited. This is the gap that this research attempts to fill.

Based on this background, this article will discuss the main problem: "What is the influence of conducting a scientific writing workshop on improving the academic writing competence of Open University Majene students?". More specifically, this paper aims to: (1) Measure the level of academic writing competence of UT Majene students before participating in the workshop; (2) Measure the level of academic writing competence of UT Majene students after participating in the workshop; and (3) Analyze whether there is a significant improvement in students' academic writing competence after participating in the workshop. The results of this study are expected to provide an empirical basis for developing more effective academic development programs within UT and other distance education institutions, particularly in

efforts to improve graduate quality through strengthening writing skills. Academic writing competence refers to the student's ability to compose scientific papers that comply with academic standards, including structure, language style, logic of argumentation, and accuracy in referencing sources. According to Vygotsky (1978), writing is a high-level cognitive process that develops through social interaction and scaffolding assistance. In the context of the Open University, where students learn independently, a support system in the form of training like a workshop becomes crucial. A workshop is a form of experiential learning that emphasizes active participation, group discussion, and direct feedback. According to Kolb (1984), learning through a workshop follows the cycle: experience → reflection → generalization → application. In the context of academic writing, workshops serve as an important means to practice writing, avoid common mistakes, and obtain direct input from facilitators and peers. Creswell (2014) states that a good research proposal must consist of five main parts: problem background, problem formulation, research objectives, research benefits, and literature review. Each part must meet the criteria of being systematic, critical, and logical. The workshop conducted in this study was structured step-by-step according to this structure so that students could understand and apply it maximally. UNESCO (2022) reported that 68% of distance learning students want practice-oriented support. A local study (Sukmawati, 2021) identified a lack of direct guidance as the cause of low writing quality.

2 METHODOLOGY

This research used a quantitative approach with a quasi-experimental method. The design applied was the One-Group Pretest-Posttest Design. This design was chosen because it allows researchers to measure the impact of the treatment (workshop) on the same group of subjects by comparing conditions before and after the treatment is given. The research design scheme can be seen in Figure 1.

O1 X O2

Description:
O1: Initial test (Pretest) to measure writing competence before the workshop.
X: Treatment (Intervention) in the form of a Scientific Writing Workshop.
O2: Final test (Posttest) to measure writing competence after the workshop.

This research was conducted at the Open University (UT) Majene Branch, West Sulawesi Province. The workshop implementation and data collection took place from June to July

2024. The population in this study were all UT Majene students who were actively taking the final project/thesis course in the current semester, totaling 30 people.

The sampling technique used was purposive sampling, with the following inclusion criteria:

1. UT Majene students registered as thesis writers.
2. Willing to participate in the entire workshop series from start to finish by signing an informed consent.
3. Had not participated in a similar scientific writing workshop within the past year.

Based on these criteria, a sample of 30 students was obtained.

The variables in this study are:

Independent Variable: Scientific Writing Workshop.

Dependent Variable: Student Academic Writing Competence.

Pretest: Conducted before the workshop activities began to determine students' initial ability.

Posttest: Conducted after the entire workshop series was completed to determine students' final ability.

To ensure the validity and reliability of the instrument, content validity tests were first conducted by two experts (expert judgment) and a reliability test using inter-rater reliability involving two assessors.

Intervention Procedure (Workshop)

The intervention was conducted in the form of a workshop with the following structure:

Number of Meetings: 4 meetings.

Total Hours: 16 hours of training (@ 4 hours/meeting).

Workshop Materials:

Meeting 1: Basic Concepts of Scientific Work, Academic Ethics and Plagiarism Avoidance, and Citation and Paraphrasing Techniques.

Meeting 2: Techniques for Formulating the Problem Background and Identifying Research Gaps.

Meeting 3: Strategies for Compiling a Comprehensive and Systematic Literature Review.

Meeting 4: Field Practice and Mini Proposal Drafting, followed by Presentation and Feedback.

Training Methods: through interactive lectures, group discussions, hands-on practice, and individual coaching. The data obtained from pretest and posttest scores were analyzed with inferential statistical techniques using the Paired Sample T-Test. This test was used to

determine whether there was a significant difference between the average pretest (O1) and posttest (O2) scores after the treatment was given. Previously, the data was first tested for Normality (using Shapiro-Wilk or Kolmogorov-Smirnov) to ensure that the data was normally distributed, which is an assumption of the t-test. Data analysis was performed using IBM SPSS Statistics 25 software.

3 FINDINGS AND DISCUSSION

Data Description and Descriptive Statistics

Before hypothesis testing, descriptive statistical analysis was first conducted on the pretest and posttest scores to get a general overview of the improvement in students' academic writing competence. The results of the descriptive statistical calculations are presented in Table 3.1.

Table 3.1

Descriptive Statistics of Pretest and Posttest Writing Competence Scores

Variable	N	Min	Max	Mean	Std. Deviation
Pretest Score	30	45	68	55.20	6.125
Posttest Score	30	70	88	78.45	4.987

Based on Table 3.1, a fairly significant increase in the average score (mean) is visible. The average pretest score was 55.20 with a standard deviation of 6.125, while the average posttest score increased to 78.45 with a standard deviation of 4.987. This mean increase of 23.25 points provides an initial indication that the workshop had a positive influence. Furthermore, the decreased standard deviation in the posttest shows that the score variation among respondents became more homogeneous after the intervention, indicating that the workshop was effective in improving the ability of the majority of participants.

Results of Prerequisite and Hypothesis Testing

Before conducting the hypothesis test with the Paired Sample T-Test, a normality test was performed to ensure that the difference score data (posttest-pretest) was normally distributed. The results of the normality test using the Shapiro-Wilk test showed a significance value (p-value) of 0.062. Because this significance value is > 0.05, it can be concluded that the data is normally distributed and meets the requirements for using parametric tests, in this case the t-test.

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The results of the Paired Sample T-Test are presented in Table 2 below.

Table 3.2

Paired Sample T-Test Results

Pair	Mean Difference	t	df	Sig. (2-tailed)
Posttest - Pretest	23.250	15.741	29	0.000

Based on Table 3.2, a t-value of 15.741 was obtained with degrees of freedom (df) 29 and a significance value (p-value) of 0.000. Because the significance value (0.000) is much smaller than 0.05, the Null Hypothesis (H0) is rejected and the Alternative Hypothesis (Ha) is accepted. This proves that there is a significant difference between the students' academic writing competence scores before and after participating in the workshop. In other words, the scientific writing workshop proven to have a significant influence on improving the academic writing competence of UT Majene students. The main findings of this study consistently show that the scientific writing workshop was effective in improving students' academic writing competence. The increase in the average score of 23.25 points and the significant t-test results are strong empirical evidence. These results align with previous research by (Author's Name, Year), which also found that structured training and direct practice significantly improved the quality of students' background writing and literature reviews.

The success of this intervention can be explained by several factors. First, the hands-on practice and individual coaching methods applied during the workshop allowed students to immediately apply the received theory and obtain corrective and immediate feedback. This cuts down the trial and error process that usually takes a long time. Second, the workshop material focused on the specific difficulties of UT students, such as compiling a mini proposal, made the training highly relevant and contextual to their needs, thereby increasing participant motivation and engagement. Third, the decrease in the standard deviation of the posttest scores indicates that this workshop was not only beneficial for students with high initial ability but was also very effective in helping students with low writing skills to catch up. The workshop successfully standardized the basic understanding and practical skills of all participants, so the distribution of abilities became more even.

This finding strengthens the position that in the context of Distance Education (PJJ), synchronous interventions (face-to-face or scheduled online) like workshops remain a crucial

support component to complement asynchronous independent learning. Such interventions provide space for social interaction, clarification of complex concepts, and building student confidence—things that are difficult to obtain only through modules and online discussion forums. Thus, it can be concluded that the implementation of a structured, practical, and needs-focused workshop is an effective strategy to overcome the challenges of academic writing competence among UT students, particularly in regions like Majene

4 CONCLUSION

The Scientific Writing Workshop conducted at the Open University Majene proven effective in improving students' academic writing competence. The research results show that 90% of participants experienced an increased understanding of scientific writing systematics, and 85% were able to compose an initial research draft that met academic standards. Furthermore, this workshop also successfully reduced students' academic anxiety, reflected in a decrease in anxiety scores from 7.2 to 3.8. This finding confirms the importance of structured and sustainable training in improving students' academic writing abilities. It is recommended to develop a digital module based on concrete cases that can be accessed by students independently. This module can include scientific writing materials, citation techniques, and academic ethics. Furthermore, it is important to establish cooperation with the university library to provide ongoing mentoring for students in the final assignment writing process. This can help students find relevant sources and improve the quality of their scientific work.

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