Analysis Of Scientific Article Writing Ability

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ABSTRACT

As an educator, it is necessary to have the ability to write scientific articles; as a writer, educators should understand various techniques before writing a scientific article. The author aims to analyze 1) The ability to understand article writing 2) The ability to find research problems 3) The ability to know the types of research 4) The ability to understand research methods 5) The ability to master writing techniques 6) the ability to use excellent and correct language. This research approach is descriptive qualitative. Sources of data are teachers and lecturers. The data collection technique in this research is a test. The data analysis technique uses the Miles and Huberman model. The results showed that the ability to write articles for teachers and lecturers was quite good; this was indicated by the respondents' answers stating 1) aspects of the ability to understand article writing with an average of 59.10% 2) aspects of finding problems in articles with an average of 60.6% 3) aspects of the ability to know the types of research with an average of 58.6% 4) aspects of understanding research methods with an average of 60.10% 5) aspects of mastery of writing techniques 53.0% and 6) aspects of using good and correct language with an average of 56.10%

Keywords: Scientific Article; Writing Ability; Article writing ability

1. INTRODUCTION

The ability to write scientific articles in Indonesia is still low. Ideally, writing scientific articles that are explained in the law on teachers and lecturers that the ability to conduct research and scientific publications or the development of scientific works is the main competency requirement that must be possessed. If an educator or lecturer is low in conducting research, then scientific publications are also low (Hadisaputra and Jiwandono, 2020). The reality and impact that occurs are that writing scientific papers finds many difficulties. Research conducted by (Nagari and Nugraha, 2020) says that from several causes that make it challenging to write scientific articles, namely the fear of starting and making, it is difficult to determine and create topics, organize essays, develop essays a paragraph, organize language correctly and adequately—placing the correct vocabulary and using writing mechanisms, especially writing itself. The opinion (Nagari and Nugraha, 2020) is reinforced by (Wahyuni, 2020) explaining that some of the students do not like writing scientific papers. In accordance with (Agustin, 2015) ability to write, someone (in this case a student) practices continuously in addition to thinking critically in seeing the problems that will be worked on in her writing. (Kirom, 2019) believes that the ability to write scientific articles can be improved
through language intelligence-based learning strategies, and the evaluation of results can be seen in the process and product of learning outcomes. Writing scientific articles is not difficult, this was confirmed by (Musaffak dan Fida Pangesti, 2018) who stated that writing scientific articles would be easy by starting with concept planning in the form of mind mapping, but it will not have an impact if you don’t do it well if this is done then the article will be an easy activity to do.

The ability to write an article can be developed by conducting analytical and synthesizing exercises from phenomena that have occurred in their respective fields (Gunawan et al., 2018). Academics should always develop their competence in writing scientific articles, (Widodo et al., 2021) several factors hinder teachers from writing scientific articles, namely lack of understanding of the concept of writing scientific papers, lack of motivation, and low intensity of the writing. Apart from this, there is a small part that expresses that they do not have enough time to write. There are several solutions to improve the writing skills of teachers. Writing skills according (Asfah, 2019) academics must be intervened from the start so that teachers can produce good writing quality, regulatory, coherence, and completeness. This encourages teachers to write high-quality articles. Scientific work is very important for teachers because scientific articles are an academic function, so writing scientific articles is one of the requirements for teachers to develop their profession and promotions, by writing scientific articles teachers can apply models or find supporting factors for the learning process (Yulhendri et al., 2018)

The uniqueness of this research is being able to see and identify any difficulties experienced by researchers, teachers, or lecturers seen from the indicators put forward by Siti Maslakhah, 2011 in (Sinta, Anisa, and Widayanti, 2019) that in writing scientific papers, the author should have 1) research problems 2) research methods 3) scientific writing techniques 4) mastery of good and correct language. From this indicator, the researcher developed to see the analysis of the ability to write scientific articles. It is seen because there has been no research that has developed this.

The solutions that can be obtained from this research with the results and discussions obtained will see what indicators are lacking to be improved and developed. From the explanation of the background, the objectives of this research are 1) to see the ability to write scientific articles 2) to see the shortcomings and weaknesses of writing scientific articles 3) to provide both theoretical and practical benefits for researchers, doses, teachers, and students to develop skills in writing scientific articles.

2. **METHODS**

This study uses a survey method with a sample of 198 people from teachers, lecturers, and students. The population in this study included participants who had participated in a scientific article writing training organized by Ahmad Dahlan University Master in Education
Management. This study used an online questionnaire method, which was filled out by all article writing training participants. Data were collected using the saturated sample method (Hidayati & Mubarak, 2021), with respondents from students, teachers, and public and private lecturers from various regions in Indonesia. The data was obtained by distributing questionnaires using google form by asking six questions, namely: the ability to understand writing scientific articles, the ability to find problems, the ability to understand research methods, the ability to master writing techniques, the ability to know the types of research, the ability to use good and correct language and the problems that arise—faced when writing articles. The data is processed using SPSS by calculating the percentage, standard variation, and category. After processing, a description of each item is carried out, and conclusions are made.

3. RESULTS AND DISCUSSION

RESULTS

Teachers and Lecturers have fairly good abilities in writing scientific articles; this is shown by the respondents in understanding writing, finding problems, knowing the type of research, the ability to master writing techniques, and using good and correct discussion in writing an article. According to (Karyadi & Aswin, 2020) in his research entitled students’ writing skills based on field studies, it shows that good writing skills have 3 categories, namely aspects of the title, method, results, conclusions, bibliography while the moderate ability is in the aspects of introduction and discussion. In the same vein, (Abbas, 2015) in his relevant research entitled “Analysis of Students’ Ability in Writing a Research Proposal” shows that students’ proposal writing ability, which has an average score of 67.1 and can be categorized as “medium”. According (Septafi, 2021) Everyone’s ability to write scientific articles is influenced by their accuracy in applying each element of language, organizing ideas in narrative form, accuracy in using language and good diction. Writing scientific articles takes practice and habit, and these skills are not innate but acquired through a process of learning and practice (Bahri et al., 2018). Thus, every educator needs consistency in learning to make good articles. Research from (Nagari & Nugraha, 2020) shows that the capacity to write scientific articles can be said to increase if the ability to develop paragraphs or main ideas is increased, the ability to organize, and improve the structure of scientific works such as vocabulary, and minimize errors in word choice.
DISCUSSION

Respondents’ ability to understand scientific article writing, which resulted in the following results.

Table 1.1 Summary of the results of teacher & lecturer article writing skills

|                             | Ability to understand writing | Ability to find research problems | Ability to find research types | Ability to understand Research Methods | Ability to master writing techniques | Ability to use good and correct language |
|-----------------------------|-------------------------------|----------------------------------|-------------------------------|----------------------------------------|-------------------------------------|----------------------------------------|
| N Valid                    | 198                           | 198                              | 198                           | 198                                    | 198                                 | 198                                    |
| Std. Deviation             | 0,67469                       | 0,66667                          | 0,69077                       | 0,66343                                | 0,722742                            | 0,68639                                |
| Variance                   | 0,455                         | 0,444                            | 0,477                         | 0,440                                  | 0,522                               | 0,471                                  |
| Minimum                    | 1,00                          | 1,00                             | 1,00                          | 1,00                                   | 1,00                                | 1,00                                   |
| Maximum                    | 4,00                          | 4,00                             | 4,00                          | 4,00                                   | 4,00                                | 4,00                                   |
| Sum                        | 586,00                        | 572,00                           | 594,00                        | 578,00                                 | 541,00                              | 559,00                                 |

From the table above, it can be analyzed. The ability to write articles for teachers & lecturers, namely (1) from the aspect of content the ability to understand article writing gets the highest average, namely 59.10% of respondents answered understand. In comparison, the lowest average is 1.5% by answering no understand. (2) On the aspect of the ability of teachers & lecturers to find problems in the article, respondents answered that they were able with an average percentage level of 60.6%. In comparison, those who were unable were 2.0%. (3) In the aspect of knowledge in looking at the types of articles, the average respondent answered knowing about 58.6% and those who did not know the types of articles as much as 2.0%. (4) On the aspect of understanding the research method, the average respondent answered understood by 60.10%, with 1.5% answering that they did not understand. (5) Regarding the ability to master writing techniques, the average respondent of teachers and lecturers answered that they could reach 53.0%, and they answered that they could not afford as much as 4.0%. (6) From the aspect of using good and correct language in writing an article, the respondents answered that they could use it by 56.10% and could not use it by 2.0%.

a. Ability to understand writing

| Category       | Percentage Range     |
|----------------|----------------------|
| Very Good      | 80% - 100%          |
| Good           | 62.50% - 81.30%     |
| Fairly Good    | 43.80% - 62.50%     |
| Not Good       | 24.00% - 43.80%     |

Table 1.2.

| Ability to understand writing | Average (Percent %) | Max | Min | Std and Var | Category          |
|-------------------------------|---------------------|-----|-----|-------------|-------------------|
|                               | 59.10 %             | 4   | 1   | 0.67469 and 0.455 | Fairly Good       |
Based on Table 1.2, from the analysis of research found in the aspect of the ability of teachers and lecturers to understand writing scientific articles, it can be seen that 1.5% do not understand, 20.2% do not understand, and 19.2% understand very well. The average respondent answered they understood as much as 59.10%, which shows that teachers' and lecturers' ability to understand scientific article writing is quite good.

b. Ability to find research problems

| Ability to find research problems |       |
|----------------------------------|-------|
| Average (Percent %)              | 60.60%|
| Max                              | 1     |
| Min                              | 4     |
| Std and Var                      | 0.6667 and 0.444 |
| Category                         | Fairly Good |

Based on Table 1.3, from the analysis of research found in the aspect of the ability of teachers and lecturers to understand finding problems in scientific articles, it can be seen that 2.0% do not understand, 22.2% do not understand, and 15.2% understand very well. The average respondent answered they understood as much as 60.6%, which shows that the ability of teachers and lecturers to find problems in writing scientific articles is quite good.

c. Ability to find research types

| Ability to find research types |       |
|--------------------------------|-------|
| Average (Percent %)            | 58.60%|
| Max                            | 4     |
| Min                            | 1     |
| Std and Var                    | 0.69077 and 0.477 |
| Category                       | Fairly Good |

Based on Table 1.4, from the analysis of research found in the aspect of the ability of teachers and lecturers to understand finding problems in scientific articles, it can be seen that 2.0% do not know, 17.7% do not know, and 21.7% know very well. The average respondent answered knowing as much as 58.6%, which shows that the ability of teachers and lecturers to know the types of scientific research is quite good.

d. Ability to Understand Research Methods

| Ability to Understand Research Methods |       |
|----------------------------------------|-------|
| Average (Percent %)                    | 60.10%|
| Max                                    | 4     |
| Min                                    | 1     |
| Std and Var                            | 0.66343 and 0.440 |
| Category                               | Fairly Good |
Based on Table 1.5, from the research analysis found in teachers’ and lecturers’ ability to understand scientific article research methods, it can be seen that 2.0% do not understand, 27.8% do not understand, and 14.1% do not understand very well. The average respondent answered they understood as much as 56.1%, which shows that the ability of teachers and lecturers to understand the research method of scientific articles is quite good.

e. Ability to master writing techniques

| Ability to master writing techniques | Average (Percent %) | 53.00% |
|-------------------------------------|---------------------|--------|
| Max                                 | 4                   |
| Min                                 | 1                   |
| Std and Var                         | 0.72242 and 0.522   |
| Category                            | Fairly Good         |

Based on Table 1.6, from the analysis of research found in the aspect of teachers and lecturers in mastering the technique of writing scientific articles, it can be seen that 4.0% do not understand, 30.8% do not understand, and 12.1% understand very well. The average respondent answered they understood as much as 53.0%, which shows that teachers and lecturers mastering the technique of writing scientific articles are pretty good.

f. Ability to use good and correct language

| Ability to use good and correct language | Average (Percent %) | 56.10% |
|-----------------------------------------|---------------------|--------|
| Max                                     | 4                   |
| Min                                     | 1                   |
| Std and Var                             | 0.68639 and 0.471   |
| Category                                | Fairly Good         |

Based on Table 1.7, from the analysis of research found in the aspect of the ability of teachers and lecturers to understand the research method of scientific articles, it can be seen that 2.0% do not understand, 27.8% do not understand, and 14.1% understand very well. The average respondent answered they understood as much as 56.1%, which shows that teachers’ and lecturers’ ability to use the good and correct language in writing scientific articles is quite good.

4. CONCLUSION

The results we obtained show that teachers and lecturers have fairly good abilities in writing scientific articles, ranging from understanding writing, finding problems, finding types of research, understanding research methods, mastering writing techniques, to using good and correct language in the preparation of an article. Scientific.

The number of various article preparation training held will increase the knowledge and skills of teachers and lecturers in preparing scientific articles properly. The data shows that the
respondents of teachers and lecturers have a reasonably good ability in understanding and compiling scientific articles correctly and adequately.

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