

## Training and Assisting in Writing Scientific Papers for Middle School Teachers in Musi Subdistrict

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### ABSTRACT

The aim of this community service activity is to train and assist junior high school teachers in Musi Subdistrict to carry out scientific writing activities. The method of implementation in training and mentoring activities for writing scientific papers for Middle School teachers in Musi Subdistrict consists of several activities which include: preparation, implementation, and evaluation of activities. Community service activities were carried out at Oelneke State Junior High School, Musi Subdistrict, North Central Timor Regency, East Nusa Tenggara. Participants in community service activities consist of 39 people. Participants consist of the principal and teacher representatives from each school. Training and assisting in writing scientific papers for Middle School teachers in Musi SubSubdistrict received a positive response from the school and it is expected that it can provide useful knowledge for teachers in compiling scientific papers to be published.

**Keywords:** Community service, Training, Assisting, Scientific Writing.

### INTRODUCTION

Teacher professional development is a teacher activity in the context of practicing science, technology and skills to improve quality both for the teaching and learning process and the professionalism of other educational personnel (Setiawan, et al., 2021); (Simarmata et al., 2022). The professional development activities in question are 1). make written works in the field of education, 2) discover technology in the field of education, 3). making lesson tools/props, and 4). creating scientific papers, and participating in curriculum development activities (Setiawan et al., 2021).

Scientific Paper is a written work made to solve a problem with the basis of theory, scientific method, and examples of scientific paper writing methods. Usually scientific papers contain data, facts, and solutions regarding a problem raised. The writing of scientific papers is carried out in a sequence and systematically. According to Eko Susilo, scientific papers are articles obtained in accordance with a scientific nature and are based on observation, evaluation, and research in a certain field, arranged according to certain methods with the systematics of writing a guided language and its content can be accounted for its truth / science. According to Dwiloka and Riana, A scientific work or scientific article is the work of a scientist (in the form of development) who wants to develop science, technology and art obtained through literature, collections of experience, research.

Writing scientific papers is an obligation that must be done by a teacher in carrying out his duties as a teacher (Palit et al., 2019) ;(Dewi et al., 2022); (Sele et al., 2021). In addition, writing scientific papers is also one of the mandatory requirements in managing promotion or credit numbers as well as portfolio-based certification activities (Dewi et al., 2020). This is in accordance with Law No. 14 of 2005 concerning Teachers and Lecturers (Nur & Mannuhung, 2022) which states that teachers are a profession. Under the law, it requires a teacher to continue to develop professional competence of teachers (Simarmata, 2022).

But in fact, for teachers in schools in general, writing scientific papers is still a scourge. Teachers feel less capable in making scientific papers so they are reluctant, even apathetic, to take care of their rank or the increase in their class (Rozyk, 2014). As for teachers who have tried to complete the requirements of their rank, many have not graduated because the scientific

papers they have made still have a lot to be revised and have not met the expected standards. As a teacher who is involved in the world of education, it is supposed to continuously add and develop his insights and understandings both directly related to the subjects he has and indirectly. For this reason, teachers must be able to make scientific papers and make them a necessity (Prabawati & Muslim, 2020).

Based on the results of field observations and interviews on January 21, 2022, it was obtained that most junior high school teachers in Musi Subdistrict have not mastered how to write scientific papers in accordance with the rules of writing scientific papers and teachers feel less capable in making scientific papers. Most junior high school teachers who stopped their promotion because they were bumped into the factor of writing scientific papers. Apart from being a requirement for teacher promotion, making scientific papers is one of the indicators to measure teacher performance listed in school accreditation, credit numbers, and teacher certification (Dwijayanti et al., 2017). Based on these conditions, training activities and assisting scientific papers for junior high school teachers in Musi Subdistrict are important to carry out. The purpose of this activity is to train and accompany junior high school teachers in Musi SubSubdistrict to carry out scientific writing activities.

## METHOD

Community service activities were carried out at Oelneke State Junior High School, Musi Subdistrict, North Central Timor Regency, East Nusa Tenggara from 20-31 Of August 2022. The activities carried out include face-to-face training activities in the classroom. Participants in this activity were 39 people. Participants consisted of the principal and teacher representative of each school including: Oelneke State Junior High School, Aplal State Junior High School, Haulasi State Junior High School, Fatumsuan State Satap Junior High School, Salu Junior High School, Ankiko State Satap Junior High School, Noebesi State Satap Junior High School, Nunpo State Satap Junior High School, West Miomaffo 1St State Junior High School, and Oetulu State Junior High School.

The implementation method in training and assisting in writing scientific papers for teachers of SMP Musi SubSubdistrict consists of several activities which include (1) Preparation (2) Implementation, and (3) evaluation of activities.



Figure 1. Stages of Service Activities

## RESULTS

### Preparation

The pre-activity stage began with a visit to the location of Oelneke State Junior High School, Musi Subdistrict, North Central Timor Regency, East Nusa Tenggara on Saturday, June 18, 2022, located in the room of the Head of Oelneke State Junior High School. The visit was carried out to meet with the Principal of Oelneke State Junior High School to coordinate and prepare for service activities. The meeting discussed the presence of the Principal and teacher representatives of each school who were targeted in service activities. In the results of the meeting, it was agreed that service activities can be carried out face-to-face and assistance is carried out online.

Next, preparation for training activities is to coordinate the schedule of activity implementation, the number of participants, facilities and infrastructure needed during training activities. From the results of coordination with partners, it was concluded that the activity would be carried out after the celebration of the Anniversary of the Republic of Indonesia, namely on Saturday, August 20, 2022. The following is documentation when the initial activity meets with partners.



**Figure 2.** Initial activities of meeting with partners

The next stage after coordinating with partners, the service team prepares material and designs the concept of the service activities to be carried out. The service team prepares material by looking for various references that are relevant to scientific papers for teachers. The delivery of training materials will be carried out by all service teams consisting of four lecturers and accompanied by 4 students of the mathematics education study program. The training was carried out by dividing 4 topics. Topic I on class action research. Topic II on qualitative research. Topic III on how to find a good reference for scientific papers. Topic IV on how to do citations by using the Mendeley app.

The preparation of the questionnaire is the last activity carried out by the service team in the pre-activity stage and aims to measure the level of success. The preparation of the questionnaire was carried out aimed at determining the extent of the benefits of training and mentoring activities for junior high school teachers in Musi Subdistrict. After the preparation of the activity was carried out, the service team confirmed the schedule of activities on July 19, 2022. From the results of the meeting, an agreement was obtained that service activities would continue to be carried out on August 20, 2022 to August 31, 2022.



**Figure 3.** Second meeting with partners

### **Implementation of Activities**

Training activities and mentoring scientific papers for teachers in general went smoothly. The Headmaster helps prepare the venue and coordinates the trainees. The trainees are principals and teacher representatives from each school. Before conducting training activities, the team introduces themselves first. Furthermore, the speaker introduced himself and tried to explore the basic knowledge of teachers related to scientific papers. The training activity lasted for one day on August 20, 2022. The mentoring activity is carried out until August 31, 2022 online. Implementation of activities as shown in the following figure.



**Figure 4.** Opening of Activities By The Principal Of Oelneke State Junior High School

After the leadership activity, it was then continued by the delivery of material by the speaker. The most important thing about the material described at the beginning of the meeting is the importance for teachers to make scientific papers, further explaining the types of research, namely classroom action research, qualitative research, and quantifiable research. The speaker also explained about the systematics of writing scientific papers. It begins with the selection of titles, abstract writing, introductions, literature reviews, methods, results, discussions, and conclusions. In this session the method used was a lecture. After the delivery of the material, it was followed by a question and answer session and interactive dialogue between the participants and the presenters. Lecture and discussion methods can be easier for practice participants to understand with better results than without hands-on practice. Then participants were given exercises such as, determining the title, problem formulation, research objectives, literature review, methods used, how to write results and findings, and ending with conclusions and how to make a bibliography using the Mendeley application. The delivery of the material as shown in the following figure.



**Figure 5.** Giving Material by the Speaker

The next mentoring activity is carried out online to be more effective. From the results of observations and interviews to participants, a positive response was obtained. The exercises given can be done by participants well. This training has provided useful information in writing scientific papers. The community service team and participants in writing scientific papers agreed to carry out online assistance. Writing an article that will be submitted to a national journal is not an easy thing.

Requires a fairly long process. That's why the Community Service Team decided to continue assisting in writing article journals after the training activity ended. At this stage, the Community Service Team gave the participants the task of writing draft manuscripts on the topics of teaching and learning that they had done. This task is carried out in their respective schools. Participants work in groups or individually in writing drafts of such articles. Participants will be accompanied by a team in writing articles until the process of submitting the article to a national journal according to the participant's scientific field.

### Activity Evaluation

After carrying out the entire series of activities for the implementation of training and mentoring, the last series of service activities is to carry out evaluations. The speaker carried out an evaluation related to the provision of material that had been delivered by providing questionnaires to participants. In this evaluation, the service team provided a questionnaire to all training participants and assistance to provide an overview of the activities that had been carried out. The author hopes to develop an overview of the usefulness of training and mentoring for teachers. Filling in the questionnaire as shown below.



**Figure 6.** Filling in questionnaires by trainee responses

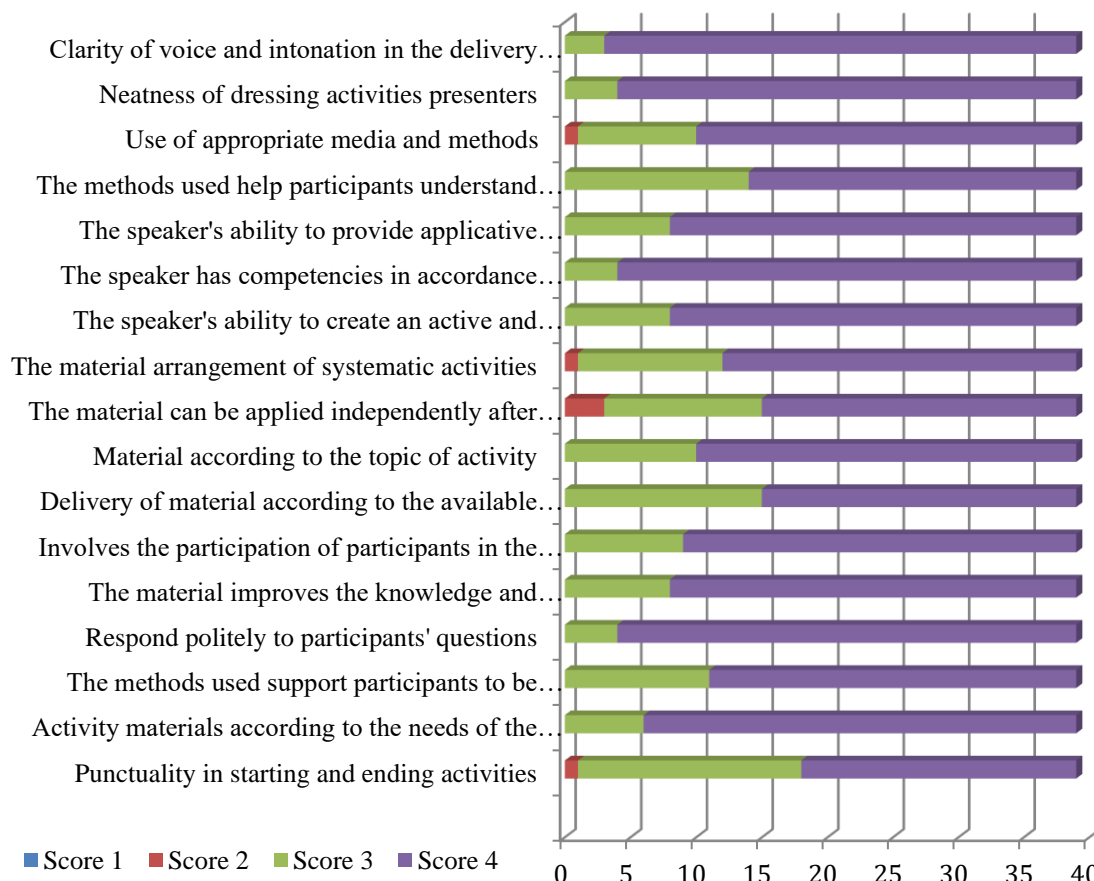
The responses of the participants of the service activity for each statement item can be seen in Table 1 below.

**Table 1.** Questionnaire of Teachers' Responses to Training Activities and Assistance in Scientific Papers

No	Statement	Score			
		1	2	3	4
1	Punctuality in starting and ending activities				
2	Activity materials according to the needs of the activity participants				
3	The methods used support participants to be more proactive				
4	Respond politely to participants' questions				
5	The material improves the knowledge and abilities of participants				
6	Involves the participation of participants in the process of activities				
7	Delivery of material according to the available time				
8	Material according to the topic of activity				
9	The material can be applied independently after the activity				
10	The material arrangement of systematic activities				
11	The speaker's ability to create an active and communicative atmosphere				
12	The speaker has competencies in accordance with the material of the activity				
13	The speaker's ability to provide applicative examples				
14	The methods used help participants understand				

No	Statement	Score			
		1	2	3	4
	the material				
15	Use of appropriate media and methods				
16	Neatness of dressing activities presenters				
17	Clarity of voice and intonation in the delivery of the material				

From Table 1 above, it is known that in general participants gave a good response to training activities and assistance in writing scientific papers that had been carried out.



**Figure 7.** Results of Participants' Responses to Activity Satisfaction

From the graph above, information was obtained that participants gave a positive response to training activities and assistance in writing scientific papers. This means that participants understand well about how the stages of writing scientific papers to the process of submitting to scientific journals. The following table shows the average response of participants to the satisfaction of the activity.

**Table 2.** Average Percentage of Participant Responses

No.	Name	%	No.	Name	%	No.	Name	%	No.	Name	%
1	YN	89.71	11	MIHN	91.18	21	YO	77.94	31	KMR	98.53
2	AA	100	12	EY	85.29	22	BYS	100	32	SO	95.59
3	ME	98.53	13	YMP	92.65	23	SJP	98.53	33	PA	91.18
4	EN	88.24	14	CYP	97.06	24	YHK	91.18	34	VB	91.18
5	IBK	98.53	15	GT	100	25	W	94.12	35	HT	91.18

No.	Name	%	No.	Name	%	No.	Name	%	No.	Name	%
6	DM	97.06	16	JSET	100	26	UB	85.29	36	YN	97.06
7	AS	98.53	17	WT	94.12	27	D	83.82	37	MRB	97.06
8	PRK	100	18	RO	92.65	28	MBO	89.71	38	YET	100
9	NAA	97.06	19	JST	95.59	29	MF	83.82	39	MN	85.29
10	OSM	100	20	MM	89.71	30	YSS	100			93.78
Average											

Based on the table above, the average response of participants to activity satisfaction was 93.78%. Thus, this service activity was carried out well. The following is documentation with the participants with the service team after the activity is completed.



Figure 8. Group photo with event participants

### CONCLUSIONS AND RECOMMENDATIONS

Community service activities regarding training and assistance in writing scientific papers for teachers of SMP Musi SubSubdistrict received a positive response from the school. This training activity and assistance in writing scientific papers also received a positive response from the participants, namely the Principal and teacher representatives of each school in Musi Subdistrict.

It is expected that service activities like this can continue to be carried out regularly so that the positive impact arising from this activity can also be felt by teachers both in the same location and in different locations with the target of the community who really need services in the field of education, especially writing scientific papers.

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