# Preparation of Research Proposals and Articles for Vocational School Teachers

Sari Edi Cahyaningrum[1(✉)], Nurhayati Nurhayati[2],
and Fitriari Izzatunnisa Muhaimin[3]

[1] Department of Chemistry, Universitas Negeri Surabaya, Surabaya, Indonesia
saricahyaningrum@unesa.ac.id
[2] Department of Electric Engineering, Universitas Negeri Surabaya, Surabaya, Indonesia
[3] Department of Biology, Universitas Negeri Surabaya, Surabaya, Indonesia

**Abstract.** The government has regulated career paths and the mechanic of teacher promotion through the Minister of Administrative Reform and Bureaucratic Reform Regulation No. 16 of 2009 concerning Teacher's Functional Positions and Credit Scores. In the regulation, it was stated that one of the components is for promotion and teacher has to write scientific papers/articles. To write these, the teacher must conduct research activities and then the results of the research must be written in the form of scientific articles. The majority of teachers have carried out classroom action research (CAR) and made scientific articles, both published in journals and seminars. This community service activity aims to improve the ability of teachers to write research proposals and scientific articles of SMK YKP 1 Magetan. The implementation method includes 5 stages: (1) training needs analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. The result of this training was that the knowledge and skills of teachers increased and were able to lead to the realization of professional teachers. This can be seen from the results of the training evaluation data analysis, which overall participants rated this activity in the very satisfactory category. The training materials that have been mastered by the participants are good practice in making research proposals, classroom action research reports, writing class action research reports, and disseminating research reports.

**Keywords:** Research Proposals · Articles · Teachers · Magetan

## 1 Introduction

In accordance with government policies regarding teacher career development, a teacher must work to support his functional position. It becomes addition to learning/guidance activities and other additional tasks relevant to the function of the school/madrasah that are given credit points for promotions of teacher positions. It is hoped that through this program professional teacher will be supported to have more mature, strong and balanced personality. Furthermore, this regulation also stipulates that teacher are required to make and compile scientific articles. This regulation directed to all teachers [1], Some teachers need to improve their scientific writing skills so that they can keep up with

the development of knowledge and technology. For scientific articles, many junior and senior high school teachers are not used to making scientific articles that are ready to be published in scientific journals. This is to meet the demands of the Industrial Revolution 4.0 (RI 4.0) where various sectors are competing to carry out a complete transformation.

The era of RI 4.0 has changed the human mindset and way of life with automation technology that prioritizes efficiency and effectiveness to provide added value in a job [2]. It is also marked by digitalization and cyber trends that require humans to have additional skills in the field of technology and freedom of thought across science [3, 4]. Improvements become one crucial component of scientific publications that assessed for requirements of teacher credit scores in an accredited national journal article. However, not all teachers motivated to write it. On the other hand, there are still many cases of plagiarism, and scientific papers trading in the education field [5].

Some teachers feel they are not proficient and competent in writing articles, so that teachers rarely participate in scientific activities such as national and international seminars. Based on research conducted [6] found several reasons why teachers do not write scientific articles. The main reason and the highest reason is because there is less or no time available to write. The teacher's duties are quite a lot as a classroom teacher, educating students at school, and sometimes providing guidance for students outside the classroom, this is very time-consuming. Second, the teacher is still confused what to write, lack of ideas to start writing, difficult to find ideas. Third, there is a sense of laziness to write. Fourth, lack of willingness (motivation) to write. Fifth, do not understand the science of writing, that is, they do not understand how to write scientific scientific articles. Sixth, the teacher admits that there is still a lack of literature that can be used as a writing reference. Those are the 6 main things that become obstacles for teachers in writing scientific articles. This also happened to teachers in schools in Magetan district. The results of observations by the team in the field in early April 2022 obtained information that not all teachers of SMK YKP Magetan 1 carried out research activities, wrote their research in scientific articles presented at seminars or submitted to the national or international journals. Based on this observation, the team together with SMK YKP Magetan 1 teachers agreed to hold the activity "Training for Preparation of Research Proposals and Research Results Articles for Teachers of SMK YKP Magetan 1."

## 2   Method

### 2.1   Problem Solving Framework

The problem-solving procedure for this journal article writing training consists of 5 stages: (1) analysis training, (2) design, (3) development, (4) implementation, and (5) evaluation. The procedure refers to the view of [7] known as ADDIE (Analyze, Design, Develop, Implement, and Evaluate).

#### 2.1.1   Training Analysis Stage

This training includes the implementation of analysis, problem identification and formulating goals. Here, the PKM team conducted an initial study at SMK YKP Magetan 1 by

conducting interviews with teachers, principals and supervisors. The meeting discussed several things that need to be known before training activities are carried out, such as the purpose of the training, who is the participants and their need in terms of materials, training methods, techniques and others.

### 2.1.2 Training Design Stage

At this stage, the PKM team conducts the initial design of the training program, designs training materials and conceptual training evaluation which will later be used as the basis for the development stage. The activities that will be carried out to solve the problems experienced teachers by providing training that will be carried out in schools.

### 2.1.3 Development Stage

In development stage, activities are carried out by implementing the concepts that have been made at the design stage. Next, the framework is made in the form of training materials, preparation of equipment to be used in training, and making training evaluations.

### 2.1.4 Implementation

The implementation stage is often associated with the implementation of the training program itself such as the delivery of training materials from or instructors to participants. The main objective of the implementation phase, which is a design and development realization step, is to guide participants to achieve training objectives for competence, to ensure that at the end of the training program participants need to have the necessary knowledge, skills, and attitudes in preparing research proposals and scientific research articles.

## 3   Result and Discussion

Magetan Regency is located at 7°38′30″ south latitude and 111°20′30″ east longitude. Administratively, Magetan Regency consists of 18 sub-districts with 235 villages. The area of Magetan Regency is 688.85 km$^2$. Plaosan District is the largest sub-district with an area of 66.09 km$^2$ while Karangrejo District with an area of 15.15 km$^2$ is the sub-district with the smallest area (Fig. 1).

Based on the Magetan Regency database, there are 27 SMA/MA schools and the number of Vocational High Schools is 34 schools which are spread over 18 districts (Fig. 2).

Implementation of community serv activities located at SMK YKP 1 Magetan which at that time is the first vocational school in the Magetan district at that time. At the beginning of its establishment, this private school offered 3 Expertise Programs: Mechanical Engineering, Electrical Engineering, and Civil Engineering. Currently, YKP 1 Magetan Vocational School has 7 competencies that are ready to educate and prepare their students to be ready to work in industry or continue to the university. The facilities provided

**Fig. 1.** Map of Magetan Regency.

at SMK YKP1 Magetan are: competency practice equipment with the latest technology, new classrooms, religious facilities, internet facilities and so on (Fig. 3).

The training material composed of how to prepare a research proposal. It is presented to the training participants how to develop quality classroom action research proposals that can be submitted to grants provider or self-funded research. Various benefits in the implementation of Classroom Action Research. In line with this, the teachers felt that this training activity was very useful to improve competency in their career development that led to the formation of professional teachers [8]. Classroom Action Research is a necessity for teachers to improve their professionalism. It can make teachers sensitive and responsive to the dynamics of learning in the classroom. Thus, the teacher becomes more critical and aware of what is the students are facing and doing [9]. In addition, Classroom Action Research can improve teacher performance by carrying out the stages of systematic and continuous Classroom Action Research. Here, teachers are able to improve the learning process through a study of what is happening in their classrooms. The actions taken by the teacher are solely based on the actual problems that occurs in the classroom. Its implementation does not interfere with the main task of a teacher because teachers are able to stay in the class because this research is integrated with the implementation of the learning process [10]. Moreover, teachers become more creative because they are always required to make innovation efforts as the implementation and adaptation of various theories and learning techniques as well as teaching materials. In each activity, the teacher can look at its problem or limitation as well as its solutions (Fig. 4).

It must be admitted that none of the written works are completely original or original. Science develops according to the times. There are dynamics that cannot be denied affecting the existence of such knowledge. So, when I want to write an essay, I am honest with the author in doing citations and mentioning the reference sources used in writing the paper. Honesty in doing citations and mentioning the reference is part of maintaining the dignity and reputation of the author himself. Intellectual honesty in doing citations and mentioning references does not demean the weight and quality of the work produced. On the contrary, the work is increasingly recognized for its validation

**Fig. 2.** SMK YKP 1 Magetan.



**Fig. 3.** Training Materials.

**Fig. 4.** PKM Activities.

and quality. In the section of the work that is produced, it will be seen which are the ideas and thoughts of other people, whichever are the ideas and results of the author's thoughts.

After the training was conducted, the training participants were given a questionnaire as an evaluation of the PKM training activities for the preparation of research proposals and articles as well as how to submit the articles to accredited national journals. The evaluation questionnaire was given in a Google form to the participants. The results of the evaluation questionnaire show that the training program received positive responses. Based on the results of the questionnaire, the average percentage of positive responses (Strongly Agree and Agree) and almost no negative responses (Disagree and Strongly Disagree) indicates that all participants have a positive assessment of the implementation of this training activity. Participants gave a high rating for the response that this training had relevance to the needs of teachers in schools (73%) and participants stated that if there were other training held by the Unesa PKM team, they would be happy to take part in the training (73%), then the speaker master the training material well. (69%), and this training This training was useful for them (69%).

It is also give motivation to the the participants to apply the knowledge they had gained from this training by writing research proposals and compiling articles as well as how to submit the articles to accredited national journals.

## 4  Conclusion

Training activities for the preparation of research proposals and scientific articles at SMK YKP 1 Magetan received a positive response from the training participants. Based on the results of the questionnaire, it was shown that the average percentage of positive responses (Strongly Agree and Agree) and almost no one gave a negative response (Disagree and Strongly Disagree) this indicates that all participants have a positive assessment of the implementation of this training activity. Participants gave a high rating for the response that this training was relevant to the needs of teachers in schools (73%) and participants stated that if there were other training held by the Unesa PKM team.

**Authors' Contributions.**    All authors contributed finishing this article. SEC contribute in writing, NN correcting and editing. FIM as collecting data and references.

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