

DEVELOPMENT OF INTERESTED TALENTS THROUGH TRAINING IN PREPARATION OF SCIENTIFIC WRITING AMONG MADRASAH STUDENTS

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Abstract

Everyone has different talents and interests, one of which is related to the ability to write, especially scientific papers. Writing is one of the competencies that students must have in order to stimulate children's thinking abilities and creativity in studying every phenomenon that occurs in everyday life. Training on writing scientific papers has been carried out with the aim of providing an initial overview to students as new members of extracurricular teenagers scientific papers. The type of research used is non-experimental research in the form of descriptive research. This activity was carried out at Madrasah Aliyah Negeri 1 Mataram and was attended by all members of the extracurricular teenagers scientific papers. This training activity consists of three stages: delivery of material, assistance with the practice of preparing the introduction, and presentation of the results of student work development. The material presented in this activity consists of two topics, namely Miscellaneous Scientific Writing and Systematics of Writing Scientific Writing. All data obtained in this research was analyzed descriptively by carrying out a comparison process using various previous studies that were relevant to the research topic. Based on the training process that has been carried out, several written products have been produced by students during training activities, with titles 1). The impact of gadgets on teenagers' lives, 2). Analysis of cyber security among social media users, 3). The influence of digital technology on the behavior and thoughts of Generation Z, 4). The influence of the willow project on climate change and 5). The impact of cyberbullying on teenagers' lives. Apart from that, through research activities, several characteristics emerged in students, including the ability to express opinions, the ability to argue, the ability to work in a team, and of course the ability to write a context or material into scientific writing.

Keywords: development of interest talents; training activities; scientific papers; teenagers scientific papers; madrasah students.

INTRODUCTION

Continuous developments result in the need for various dynamic skills that enable humans to adapt quickly (Indy et al., 2019; D. R. Rizaldi et al., 2021). This is because demands continue to change, so if someone does not have good skills, especially the applied ones, it will be very difficult to compete globally. This condition is in accordance with the demands for 21st-century skills, which are increasingly being displayed at every national and even international-scale event. 21st century skills such as critical thinking, creative thinking, collaboration, and communication are considered capable of being the difference between someone who can compete or not (Mardhiyah et al., 2021; Nurhayati et al., 2020).

All 21st-century abilities or skills, as stated above, cannot just appear in someone. These skills are not limited to a person's high academic abilities. This skill is more suitable if it is categorized as developing soft skills in a person (Khoirunnisa & Habibah, 2020; D. R. Rizaldi & Fatimah, 2023). In line with the demands that exist in learning at schools or madrasahs, students must be able to balance two abilities, namely hard skills and soft skills. If these two abilities can be trained and developed by students, then of course they can be used in the problem-solving process (Putri et al., 2019; Sutianah, 2022).

The form of developing soft skills in schools is by facilitating students to be involved and participate in extracurricular activities (Shilviana & Hamami, 2020; Viningsih, 2013). One of the extracurricular activities that is of high interest to students is youth scientific work. This extracurricular facilitates students to be able to apply scientific methods to studying a phenomenon that occurs in society (Husamah et al., 2022; Madayani, 2020). Because the study of this activity is scientific, of course every member of this extracurricular must go through a training process, especially in developing various scientific papers, both research and non-research.

One of the important skills that students must master from an early age is the ability to write. This ability is not possessed by many students by chance; this is because this ability requires good initial knowledge and is supported by ongoing habits by the students themselves. According to Trismanto (2017), research states that someone who wants to have skills in composing or expressing their thoughts in writing must practice often. Students tend to have good communication skills but not necessarily writing skills. In fact, if these abilities are developed and managed simultaneously, then, of course, there will be many products or outcomes that are very useful not only for the students themselves but can also be enjoyed and read by many people.

By writing, someone can share various information or experiences with other people. According to Ahsin (2016), writing activities can express thoughts, ideas, or thoughts in the written form. This is one of the advantages of writing, the benefits of which should be seen by many people. One of the criteria or groups of writing that students really need to understand is related to scientific writing, commonly known as scientific writing. This article places greater emphasis on data that is scientific in nature or obtained through a process of observation and accompanied by research. The

data used in this paper has, of course, gone through a verification process and can be believed to be correct. Based on these problems, training activities for the preparation of scientific writing were carried out for madrasah students as a form of program for extracurricular activities for youth scientific work.

METHOD

The type of research used is non-experimental research in the form of descriptive research. In this type of research, researchers only describe symptoms, relationships, or research variables and do not provide treatment (Setyosari, 2013). The conditions described are related to students' ability to develop a scientific writing (KTI) skill while participating in talent development training activities provided by the madrasah. Data collection techniques include observation and direct action in the field through a guided training process.

This scientific writing training activity was carried out in the MAN 1 Mataram Hall on Tuesday, September 5, 2023, starting at 09.00 WITA and ended at 16.00 WITA. This activity raises the theme of forming students as intellectuals who are insightful and skillful in writing. This activity is aimed at all members of the MAN 1 Mataram youth scientific work extracurricular group.

This training activity is divided into three session stages: delivery of material, assistance with the practice of preparing introductions related to scientific papers, and presentation of the results of student work development. In the process of this activity, the author, as an activity resource person, is accompanied by an extracurricular supervisor on each agenda. The detailed schedule of scientific writing training activities can be seen in the following table.

Table 1. Schedule of Scientific Writing Training Activities

Event Time	Activities/Materials
07.30 – 08.00	Participant conditioning
08.00 – 10.00	Rules for writing research and non-research scientific papers
10.00 – 10.30	Coffee Break
10.30 – 12.00	Rules for writing research and non-research scientific papers
12.00 – 13.00	Rest, pray, and eat.
13.00 – 14.00	Practice of Writing Proposals for Research and Non-Research Scientific Papers
14.00 – 15.00	Presentation of Work Results
15.00 – 16.00	closing ceremony

(Source: Scientific Writing Training Committee, MAN 1 Mataram)

RESULT AND DISCUSSION

This training activity was carried out with the aim of preparing students as extracurricular members of youth scientific work to form and cultivate the spirit of writing, especially in relation to youth scientific work. It is hoped that this activity can trigger students' curiosity about developing any scientific writing, both research and non-research. A complete description of the stages of implementing this training activity can be seen in the following sub-section.

1. Stages of Submitting Scientific Writing Material

The first stage carried out in this training activity is, of course, to deliver various materials related to the training topic, namely scientific papers. In this training, the resource person for the activity was Mr. Dedi Riyan Rizaldi, M.Pd as a representative from MA Plus Nurul Islam Sekarbela and also the author of this article. The material presented in this training activity generally consists of two materials presented in two sessions provided by the committee. The first material with the title "Miscellaneous Scientific Writing" was delivered at 08.00 - 10.00 WITA.



Figure 1. Stages of Submitting Scientific Writing Material

In this first session, the author, as a resource person, wants to introduce the topic of scientific writing in general. This is, of course, done in order to attract students' interest and enthusiasm in studying the material in the next session, which is more focused on the systematics of writing scientific papers (Isnaini et al., 2021; D. R. R. Rizaldi & Fatimah, 2023). The scope of sub-material contained in session one includes:

1. Definition of scientific writing,
2. Benefits of scientific writing,
3. The basis for developing ideas for scientific writing, and
4. The flow of preparing scientific papers. The following is a display of the material presented by the author using Power Point.



Figure 2. Display of Various Materials for Scientific Writing

In the first session, several questions emerged from students, especially related to the initial procedures for developing scientific papers. The complete questions asked by students can be seen as follows:

Question 1:

Naela class XI MIPA 2 → "Assalamualaikum Wr. Wb, want to ask how we can start writing scientific papers? Because there are so many reference sources, we are a little confused about where to start writing it?"

Question 2:

Kiki class XI MIPA 2 → "Assalamualaikum, Wr. Wb, I would like to ask what a plagiarism check is and how does it work?"

Based on the students' questions above, it can be seen that students are starting to show interest in getting to know and starting a scientific paper. Based on this question, the thing conveyed by the author as the resource person in starting a piece of writing is to carry out a habitual pattern of writing regularly. Basically, just like other contexts, starting something is very difficult to do. Therefore, you need good intentions and of course forcing yourself to get into the habit of writing. With this habituation, students will find it easier or more responsive to various problems that exist in the environment around them. Apart from that, when you start writing, you are expected not to correct or check the writing in every sentence that has been developed. This will later hinder students in completing writing that has been developed previously.

In the second material delivery session with the title "Systematics of Writing Scientific Writing". In this second session the author places more emphasis on the stages needed to develop a complete scientific paper. The sub-material presented in this second session included:

1. Systematics of Scientific Writing in General,
2. Introduction (consisting of problem limitations, problem formulation, hypotheses, research objectives, and benefits),
3. Literature review (consisting of how to write quotations and bibliographies),

4. Research methods (consisting of methods, place and time of research, population and sample, and data collection techniques),
5. Discussion and
6. Closing.

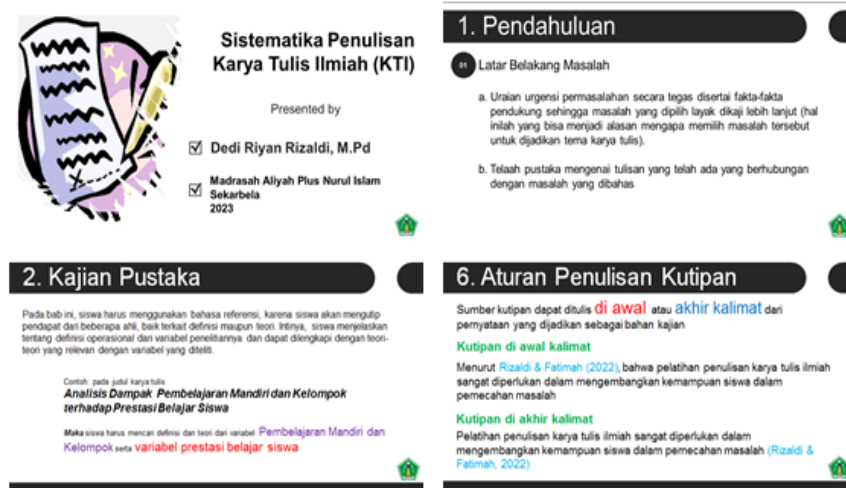


Figure 3. Display of Systematic Material for Writing Scientific Papers

The material that has been presented in both sessions one and two becomes the initial guide for students to use in developing the introductory part of a scientific paper, which will be carried out in the next session, namely the practice of writing a scientific paper.

2. Stages of Assistance in the Practice of Writing Scientific Papers

The second stage in this training process is to assist students in compiling scientific papers. In this activity, participants will be divided into several groups to make it easier for students to provide various ideas or concepts that are topics in their scientific writing. This mentoring activity was carried out by the resource person with the assistance of the youth extracurricular scientific work supervisor as well as the committee of this training activity, namely Mrs. Hj. Wahdian Apriliana, M.PFis., and Mrs. Nurul Rizqiyah, M.Pd.



Figure 4. Group Division Session for Scientific Writing Training Participants

In this session, students are more focused on developing the background to the problem, so at this stage, students are not required to be able to develop scientific work in its entirety. This is, of course, due to time constraints, so the committee chose to focus more on the background. Some of the topics raised by students in the process of preparing scientific papers include the following:

1. The impact of gadgets on teenagers' lives
2. Analysis of cyber security among social media users
3. The influence of digital technology on the behavior and thoughts of Generation Z
4. The influence of the willow project on climate change
5. The impact of cyberbullying on teenagers' lives

Based on the various topics above, it can be seen that students tend to raise various issues that are currently trending topics on various social media sites or are very close to students' lives. Of course, students' ability to determine relevant and current topics indicates that they are interested in finding out to what extent these problem conditions influence a social system.



Figure 5. Assistance in Preparing Backgrounds for Scientific Writing

The students' enthusiasm for trying to compile backgrounds related to the various topics proposed was seen through the discussions that took place within their respective groups. Each student tries to provide an overview of the components that need to appear in the background. To maximize information that can be used as a reference, the committee for this activity provides students with the opportunity to use gadgets such as smartphones and laptops to carry out internet browsing activities to look for relevant references. Of course, having a variety of references makes students more critical when studying and analyzing reliable sources in a scientific paper. Some of the results of background development carried out by students during the assistance stage in writing scientific papers are as follows:

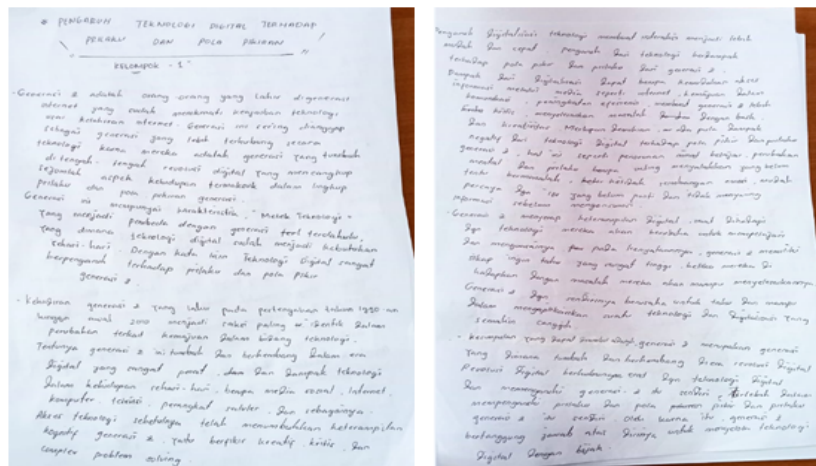


Figure 6. Assistance Products for Writing Backgrounds for Scientific Work for Teenagers

3. Stages of Presentation of the Results of Practice in Writing Scientific Papers

The final stage in scientific writing training is presenting the product in the form of a background that has been developed by each group in the previous stage. This stage provides an opportunity for students to be able to account for the results of discussions that have been carried out in front of other friends. Apart from practicing responsible attitudes, this session also trains students' ability to communicate well so that the issues raised can be easily understood by other audiences (Fauziah et al., 2023; Marini et al., 2017; Sundari et al., 2021). After carrying out the presentation process, the resource person provides some input and assessment to the entire group regarding the results that have been developed. The process of providing feedback certainly aims to ensure that students understand which parts of their writing require improvement in the future (Dewi, 2020; D. R. Rizaldi et al., 2022).



Figure 7. Product Presentation Results of Preparing Backgrounds for Scientific Writing

The presentation and feedback stages are the final agenda in scientific writing training for students who are members of the youth scientific work extracurricular. Of course, this activity is a

good initial stage, and a follow-up process must be carried out in the future so that we can continue to improve our skills in writing good scientific papers. The theory that has been obtained in this training session will certainly not have an impact on students if it is not followed by writing habits. If students feel comfortable with writing, the procedures for preparing other parts of scientific writing can of course be completed by students.

4. Outcomes and Results of Scientific Writing Training Activities

Based on the training activities that have been carried out, there are several characteristics that emerge in students related to writing ability. In general, some of the skills demonstrated during training activities include the following:

a. Ability to Think

This ability appears in students when they are carrying out a discussion process regarding the topics raised by each group. Training activities, especially in the process of developing scientific papers, are deliberately arranged in groups so that each student can share the ideas they have in mind with one another, then, as a team, determine the appropriate steps in developing the paper. With this process, students will be accustomed to being able to express any views they have without any fear of rejection (Suryanti et al., 2021). Because if students are used to expressing opinions, then this condition will continue to encourage them to speak.

b. Ability to Argue

Argumentation is a condition where someone tries to defend the concept or belief they have in front of other people (Siregar & Pakpahan, 2020). This ability can appear in two training sessions, namely during discussions between group members and when each group carries out a presentation process in front of other groups. Writing ideas that have been developed by a group will receive a variety of responses from other groups. Of course, the ideas conveyed do not always get support from other people. At this stage, students are trained to be able to maintain beliefs or ideas related to the writing they are developing while still referring to scientific principles.

c. Ability to Collaborate

Collaboration or cooperation is one of the learning techniques that is currently emphasized in all learning conditions that occur in students (Sarah & Witarsa, 2023; Zubaidah, 2016). This condition emphasizes that learning is fun if it can be done together with peers. By dividing students or training participants into small groups randomly, of course the committee tries to ensure that students can establish good relationships and communication with other students. Group activities will certainly produce maximum output or writing. This is because there are many ideas or thoughts that could possibly be included in the writing. Each member certainly brings innovative ideas, so if the group is able to maximize these differences through good cooperation, then the results obtained can be maximized.

d. Ability in Writing

Writing ability is the highest benchmark for the outcome of this training activity. Some of the abilities previously explained are prerequisite abilities that support students in writing activities. Of course, good training must be able to produce results at the end of the activity session. Based on the training activities that had been carried out, it was found that all groups were able to produce scientific paper frameworks with various topics that were interesting to observe. It is hoped that this activity can motivate students to continue to increase their desire to write, especially those related to scientific papers.

CONCLUSIONS & RECOMMENDATION

1. Conclusion

Based on the activities that have been carried out, it can be concluded that the scientific writing training activities have been carried out and well attended by all new students as members of the youth scientific work extracurricular. This activity is certainly an initial illustration that students need to continue to improve if they want to be able to develop a scientific paper, whether research or non-research in nature.

Apart from providing an overview of training activities, it also produces several problem topics and initial backgrounds for students. Of course, this initial product can be a starting point for students to develop other parts of the systematics of scientific writing, and of course, in the future, the results of this writing can be published in various media or platforms that can be read by the general public. Apart from that, several abilities that emerge in students after carrying out this training activity include the ability to think, argue, collaborate, and write.

2. Recommendation

Various efforts can be made by schools to improve students' abilities in thinking and writing. These two abilities need to continue to be trained and developed in students in order to create a balance between abilities in the fields of communication and writing. This activity is certainly very beneficial for students because it gets them used to and introduces them as early as possible to the importance of writing in supporting success.

Therefore, it is hoped that in the future, activities like this will continue to be carried out in order to maintain the writing culture among students, especially those who take part in extracurricular activities in youth scientific work.

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