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## Training On Science Laboratory Management And Maintenance For Junior High School Teachers In East Aceh

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### *Abstract*

*The East Aceh IPA MGMP consists of 24 sub-districts with 221 schools. The selection of service areas is represented by three regions, namely Idi Rayeuk District, Darul Aman District, and Darul Ihsan District. East Aceh IPA MGMP teachers are still experiencing problems in terms of knowledge and skills in managing laboratories, using tools and materials as well as in equipment maintenance. The service activity aims to provide knowledge and skills for MGMP IPA teachers in East Aceh Regency. The method used is a descriptive method to see the improvement of teacher skills in compiling laboratory SOPs, maintenance of laboratory equipment and materials.*

**Keywords:** *East Aceh, laboratory management, MGMP IPA.*

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## INTRODUCTION

East Aceh is one of the districts located in the eastern part of Aceh province. Based on data from the Ministry of Education and culture in 2020, the number of junior high schools is equal in Aceh Regency East as many as 221 schools, consisting of 24 districts. Based on these data the service team choose three sub-districts as a place of Service which is divided into three areas namely Idi Rayeuk District, Darul Aman District, and Darul Ihsan District. Where from these three areas there are 10 public junior high schools and 1 Private Junior High School joined in Mgmp IPA East Aceh, (<https://referensi.data.kemdikbud.go.id>). Based on the results of interviews with the chairman of MGMP IPA East Aceh Regency, all the school already has a science lab. Science lessons in junior high school is the initial knowledge for students in learning the concept of science, where usually to attract interest and motivation to learn these students often do practical learning using laboratories at school. Activities practicum is one of the processes to improve students ' science process skills and can increase student creativity and activeness (Suyanto, et al, 2020). The science laboratory each school is managed directly by a science teacher as an additional task in addition to personnel instructor. Basically science teacher education qualifications as personnel assigned in laboratory has qualified, but still experiencing knowledge constraints and skills in managing the laboratory, both in terms of the use of tools and materials nor in the maintenance of tools. Teachers assigned as the manager of Science Laboratory is minimal given the opportunity to attend courses and trainings in laboratory management in improving self-competence and improving teacher performance (Rosidin, et al, 2020).

Data obtained from interviews with a number of science teachers SMP/MTs in the District East Aceh through the MGMP IPA forum, stated that most of the science teachers are still experience problems in conducting practical activities on certain topics, not all concepts of science can be taught with practicum because of the limitations of the tools and materials available. In

addition, the lack of teacher skills in using laboratory equipment (Susilo and Gufron, 2018). The most basic problem of this practical activity is the lack of understanding of teachers in managing the laboratory, both in management such as inventory data of tools and materials, working procedures in the laboratory room. Until impact on damage to materials and laboratory equipment resulting in less effective teaching and learning process in the Laboratory in growing the concept of Science participants (didik Suwarno, 2019).

## RESEARCH METHODS

Service activities laboratory management and maintenance training starts from delivery of material on laboratory management, use of tools and materials and treatments tools and materials. This activity is important because based on preliminary discussions with the chairman MGMP Science East Aceh Regency that the majority of science teachers there is very less his understanding of the concepts of the laboratory. The science teachers are from areas of Biology, Chemistry and physics. During the dedication team presented materials and discussions with participants are very clearly seen that they are very thirsty for training activities done like this, it can be seen from the participation and activeness of participants in activities the discussion (Pane and Silaban, 2021). From this activity, it can be seen that science teachers in Aceh Regency East more active and innovative which is our hope to activate teachers for the realization of professional and reliable teachers.

In the discussion activities conducted during the training activities are very many cases faced by science teachers during this time in conducting learning activities at school. Which method monotony and lack of teacher innovation are the main factors that make the learning atmosphere become more interesting. Additional knowledge and insight from this training activity become a very valuable capital obtained by science teachers in teacher self-development so that it can design science learning activities that are more interesting and innovative in the future by harmonizing between theory and practice, so that later with direct practice activities students will be more active in creative find symptoms and the object being studied.



Picture 1. The service team is providing material about management laboratory, procedures for the use of equipment and maintenance of laboratory equipment.

In this training activity the service team also provides training on procedures preparation of SOP with the aim that the availability of SOP laboratory for science teachers in East Aceh district with the same standard. SOP generated through joint discussions service team with participants, so of course formed a standardized SOP already.

## RESULTS AND DISCUSSION

Community service on waste Bank socialization program for improvement Household income has been implemented smoothly. The activities that have been performed is as follows:

- a. Review of the location where to socialize. Service team conducted a survey of the location and once the location is known, the service team coordinates with partners.
- b. From the results of coordination between the service team with partners known problems faced and determine the time for socialization and training.
- c. The dedication team prepares both materials and equipment needed.
- d. Socialization of activities in PKK housing Kopasus RT 04 RW 03, Wirogunan by devotion team which produces knowledge about the condition of waste that occurs today and the problems faced by the Department of Environment (DLH)
- e. Waste management training and become a waste bank customer to get the environment healthy and increased household income. The result of this activity is knowledge will sorting and waste management; how to establish a waste bank ; and how running / how garbage bank works.



## CONCLUSION

PKM activities socialization waste Bank to increase the income of Housewives, ex. Wirogunan, District. Kartasura, District. Sukoharjo has been able to run well and without obstacles means. Partners are very enthusiastic during the socialization and training took place as evidenced by the many questions asked to the service team. With the cooperation of a team of good service and participation active of extension/ resource persons in this service activity then everything has gone according to expected and hopes to provide benefits for community service partners in the management waste and become a customer of the waste bank to get a healthy environment and improvement household income. Constraints faced is the village government has not plunged directly to support the program, so it becomes a challenge for partners.

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