Skill Enhancement Through Electronics Installation and Maintenance Training For Forum Jamaah Mushola Al-Hidayah Members

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Abstract. At present, electronic equipment is one of the most important means for the smooth implementation of worship. One of them is a sound system, which is very commonly used during events such as recitations, sermons, and other religious activities. Over time, the influence of environmental factors, usage age, poor installation, and poor maintenance can cause the quality of electronic devices to decrease and even the components to deteriorate quickly. This is generally due to improper installation, poor operation, or poor maintenance. This service is planned to partner with the Jamaah Forum and Takmir Musala Al Hidayah in Kragilan Hamlet, Sidoluhur, Godean, where there is a problem with the lack of an optimal indoor sound system in the prayer room. The solutions offered to overcome these problems are development, installation, and operational training, as well as maintenance of indoor prayer sound systems and procurement of portable sound systems. The output targets of this program are publications in scientific forums and mass media, videos of community service activities, and the transfer of technology applications to partners. In order for the service objectives to be achieved, the service team uses several stages, namely the initial stage in the form of analyzing the needs of partners by discussing with them, preparing service proposals, the program implementation stage, making publication outputs and final reports, and the evaluation stage of service activities. All of the series of service activities have been carried out according to plan and are running well. Members of the Al Hidayah Jamaah forum participated in the activity, which was training for electronics installation and maintenance. At the end of the activity, a partner satisfaction survey was conducted with satisfactory results.

Keywords: Installation, Maintenance, Electronics, Jamaah Al-Hidayah

1 Introduction

According to the Big Indonesian Dictionary (KBBI), the meaning of the word musala is a place of prayer [1]. Musala is often referred to as a langgar or surau [2], [3], [4]. The use of loudspeakers, especially in mosques and prayer rooms, has been regulated through decree number Kep/D/101/1978, which contains "Guidelines for the Use of Loudspeakers in Mosques and Prayer Rooms" [5] [6] [7]. The decree also stipulates that for prayer rooms,
mosques, and langgars located in villages or hamlets, the use of loudspeakers can be limited, while still paying attention to the responses from the surrounding community (Islam, 1978). In the service carried out by Ilham Sayekti, with the title Training on Installation and Maintenance of a Sound System for Youth Groups and Takmir of the Roudlotun Ni'mah Mosque, Trisobo Village, Boja District, Kendal Regency, held training that could increase knowledge about the sound system and its management techniques so that it is useful for mosque residents and society in general. After the training, there were no more sound disturbances in the form of hums or unclear sounds coming out of the speakers. [8] Given that almost all student activities involve the use of electronic equipment, FX. Arinto Setyawan and friends conducted training in the electronics field simulation assistance program for students at SMA Negeri 9 Bandar Lampung. The training provided aims to provide an overview of the use of computer simulation assistance programs to understand electronics theory. In addition, multimedia practice was carried out so that the participants' knowledge increased. A pre-test and post-test were carried out to determine the level of understanding of the participants. The results of the pre-test increased from 2.68 to 6.84, an increase of 4.16. [9]

Community service At the Baiturrohman Mosque, Tambora-Jakbar by Ariyawan Sunardi, training was conducted on the installation and maintenance of the audio system for the worshippers of the Baiturrohman Mosque. Training in order to improve the ability of pilgrims as well as produce audio system installation and maintenance experts for entrepreneurship. The training method is lectures, discussions, and the practical installation of the audio system at the Baiturrohman Mosque. Maintenance training is also carried out with guidance so that pilgrims can maintain the lifetime of the installed audio system device. The results obtained indicate that the Baiturrohman Mosque audio system has been installed and is functioning properly. [10]

2 Methodology

2.1 Proposed Planning

This stage begins with a Forum Group Discussion with target partners and collaborators. Then a service team was formed with members consisting of 5 lecturers from the UMY Electrical Engineering Study Program, 1 lecturer from the UGM Electrical Engineering Study Program, 1 education staff member from the Faculty of Engineering, and 2 UMY Electrical Engineering students. Next, determine the scheme and service partners.

2.2 Analysis of Partner Needs and Preparation of Proposals

At this stage, discussions are held with target partners related to the problems faced and the solutions that will be implemented. At this stage, a schedule of activities and agreements are being prepared to become partners in this community service program. Next, the preparation of a service proposal is carried out.

2.3 Program Implementation Stage

Service activities are realized in accordance with the schedule and activity plan that have been prepared. The event begins with an opening and remarks from the dedication team, target partners, and collaborator partners. Next, training materials for installing electronics (a sound system), using them, and maintaining them are presented. At the end of the session, a tool function test was carried out.

2.4 Program Evaluation
The evaluation of this community service activity was carried out through a satisfaction survey by participants. This survey will be used as material for consideration in the implementation of subsequent community service activities.

3 Results and Discussion

3.1 Preparation

This stage begins with the implementation of FGDs with target partners and collaboration partners. This was followed by the formation of a service team consisting of 5 lecturers from the Electrical Engineering Study Program, 1 collaborator from the Electrical Engineering Study Program at Gadjah Mada University, 1 educational staff member from the Faculty of Engineering, and 2 Electrical Engineering students. The service team then determines the service scheme and partners.

3.2 Program Implementation Stage

Gadjah Mada University and Yogyakarta Muhammadiyah University both provided funding for all of these activities. The opening ceremony and remarks from the service team come first in the form of realization of service activities. Furthermore, the delivery of material about the installation of electronics (a sound system), use, and maintenance. In addition, tool testing was also carried out at the end of the session. At the end of the activity, a group photo was taken with the service team and participants, as shown in Figure 1.

![Figure 1: Photo with the service team and participants](image)

At the end of the activity, evaluate satisfaction through a survey of partners. The five questions given in the survey are to find out the level of partner satisfaction with the implementation of community service. The survey was filled out by 12 respondents who were participants in the activity. The survey results shown in Table 1 are the characteristics of the participants.

| Table 1. Respondents by age group |
3.3 Evaluation

All participants fill out a partner satisfaction survey, which serves as the method of evaluation for service activities. Table 2 displays the findings of the satisfaction survey of participants in the team's community service events.

<table>
<thead>
<tr>
<th>Survey Number</th>
<th>Survey Results</th>
<th>Amount</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very Satisfied</td>
<td>8</td>
<td>67</td>
</tr>
<tr>
<td>2</td>
<td>Satisfied</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>3</td>
<td>Quite Satisfied</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Less Satisfied</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Not Satisfied</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Based on the survey data in Table 2, it is shown that all participants in community service activities gave very satisfied statements: as many as 8 people (67%), as many as 4 people (33%) expressed satisfaction, quite satisfied, less satisfied, not satisfied, and as much as 0%. Overall, 100% of the participants stated that they were satisfied with the implementation of this community service activity. The results of the satisfaction survey can also be seen in Graph 2 below.
4 Conclusion

All of the series of service activities have been carried out properly according to the plans and methods that have been submitted. 12 members of the Al Hidayah Jamaah forum participated in the activity. At the end of the activity, a handover of goods grants and a group photo were carried out. The evaluation of activities is carried out through partner satisfaction surveys with 100% satisfactory results.

References