

Implementation of Basic Metal Welding Skills Training Using the 2MT Method for Youth Dropping Out of School in Lubuk Nyiur Village, Pesisir Selatan Regency

Purwantonono*, Dori Yuvenda, Nelvi Erizon, Waskito, Yufrizal, Randi Purnama Putra

Universitas Negeri Padang

Email: purwantonoseto@ft.unp.ac.id

ABSTRACT

Today the problem of unemployment still cannot be overcome by the government. According to BPS data for 2018, unemployment in Indonesia has reached 7 million people. In order to overcome this problem, tertiary institutions, in this case Padang State University, have a role to find solutions through of the Tri Dharma of higher education, namely community service carried out by lecturers by holding basic skill training activities in the field of welding. The reason for this field was given because the technological developments in the field of metal welding were quite rapid and in accordance with the competence of the lecturers implementing the activity. Besides that, to open a welding workshop business does not require large capital. Welding technology is equipped with inverter equipment which provides convenience in the welding process both in terms of electric power consumption and lighter inverter conditions so the price is cheaper. This study aims to provide basic training in the field of welding engineering skills for youth dropping out of school in Lubuk Nyiur Village, Pesisir Selatan Regency. The basic training method applied to this community service activity is the 2MT Method (interest, material and skills). This method focuses more on giving participants a strong interest, the material provided is lighter and easier to understand and skills training is simple. The sample of this research is youth dropping out of school who are in the village. The training method provides motivation, application, and practice of basic skills of underhand welding processes. This activity includes preparation for training, placement test (pretest and posttest), providing motivation, theoretical and practical training modules related to the basics of welding. The results showed that with this training activity there were 33% of the participants who had an interest and motivation in the field of welding and have the desire to set up a welding workshop in the area. The results of this study are known from the mastery of basic material both theory and practice. This activity is carried out on an ongoing basis so as to provide opportunities for other youth dropping out of school to receive basic skills training in the field of welding.

Keywords: Training, Welding, inverter, Welding workshop.

1. INTRODUCTION

The impact of the global economic crisis has created several problems in various lines of people's lives in Indonesia. Many industries have been forced to lay off their employees, due to their inability to deal with the economic crisis. While job opportunities for the people are getting narrower, as a result there is more and more unemployment among the people. The large number of unemployed in society, then it is certain that it will cause another social friction between them.

In West Sumatra according to the Central Bureau of Statistics (BPS) [1], in the first quarter of 2008 the number of unemployed people in West Sumatra amounted to 206,740 people or decreased by 10,565 people (4.86%) from the year 2007 which amounted to 217,305 people. From the figures above, even though there is a tendency for the unemployment rate to be low, it still shows a number that is of concern to all of us. The biggest increases occurred in the agricultural sector (50%), trade (20.9%) and services (12.2%).

The high unemployment rate will certainly cause other social problems in the midst of society such as theft,

robbery and so on. In addition to these social problems, there will also be many school-age children who do not attend school (dropouts) due to the inability of their parents to pay for their children's education to a higher level. If it's like this, then we will lose the workforce, an educated generation that is able to compete with other nations and the intelligent next generation of this nation in the future.

To answer the above problems, it is necessary to provide skills for youth who drop out of school. Some of the skills training that has been carried out includes: Romiyadi et al. [2] provide guidance to out-of-school youth through SMAW welding skills training. The results of the training activities show the level of success with positive indications from the participants and the participants' understanding of the material provided. Dharmanto et al. [3] through welding training for youth groups and school dropouts in the Cileungsi Village. The results of the research can help the youth in the Cileungsi area in the industrial world and efforts to increase their ability in the field of welding skills. Kurniawan et al. [4] providing Tungsten Inert Gas welding training for school dropout youths in the Simpang Timbangan Village. The results of the training show that the existence of this training can increase the theoretical understanding and skills of the participants in accordance with the targets that have been planned. Sunaryo et al. [5] providing welding skills training for productive age people in the Sukajadi village. The results of the training showed that there was an increase in the participants' skills in both theory and practice of welding.

Based on the welding skills training that had been carried out previously, this training was provided with the aim of increasing welding understanding and skills both in theory and practice for out-of-school youth in Lubuk Nyiur Village, Pesisir Selatan Regency. The update of this training from before is using the 2MT method (Interest, Material and Skilled). This method focuses more on giving participants a strong interest, the material provided is lighter and easier to understand and skills training is simple.

2. METHOD

The method used in this training is using 2MT (Interest, Material and Skilled). To achieve optimal results with the 2MT method, the following training stages are carried out:

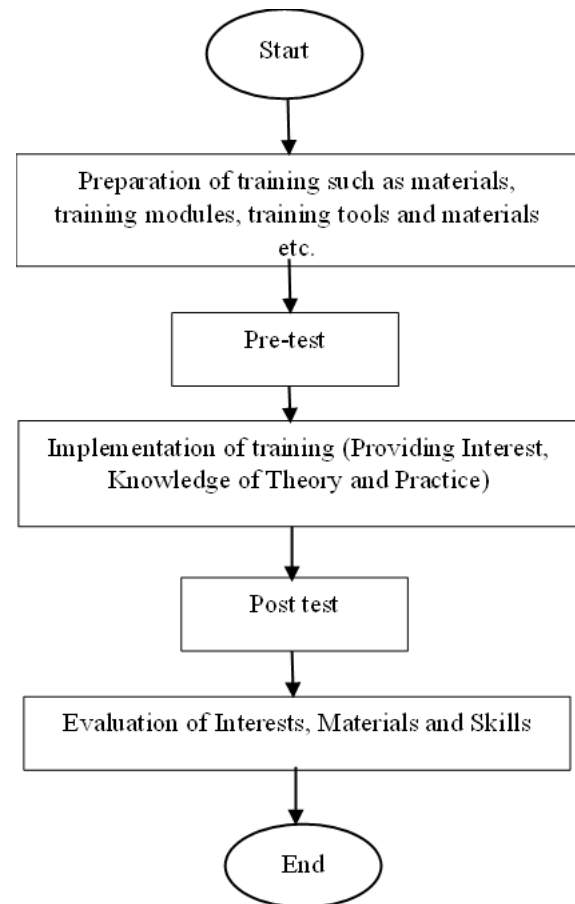


Figure 1. method

he training site was held in the Lubuk Nyiur village, Pesisir Selatan Regency. The number of training participants was 15 people who dropped out of school. The duration of the training is 5 days with a training time of 8 hours/day. Training participants are provided with training modules and job sheets. Before the training begins, the participants will be given a pre-test to find out the participants' abilities before the training which is used as comparative data after the training. During the training participants will be provided with motivational material in order to arouse participants' interest in entrepreneurship after the training. Then the participants were also provided with theoretical and practical material related to welding. Then at the end of the training, an evaluation of interest and ability in theory and practice related to welding is carried out.

3. RESULT AND DISCUSSION

After conducting skills training for out-of-school youths in Lubuk Nyiur village, Pesisir Selatan Regency. The results of the welding skills training are shown in Figure 1 as follows:

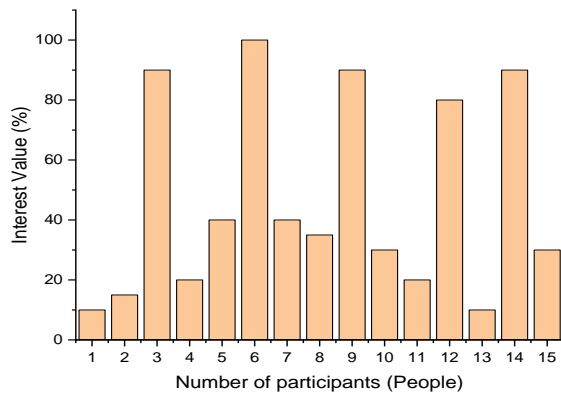


Figure 2. Number of participants versus interest value

Figure 1 shows that after the welding skills training for out-of-school youth has been carried out, it can give a positive value to the participants' interest. Of the 15 participants, 5 (33%) were interested in opening a welding workshop at their own place of residence. This proves that providing welding training for out-of-school youth can open participants' insights into the world of business or industry so as to reduce unemployment rates.

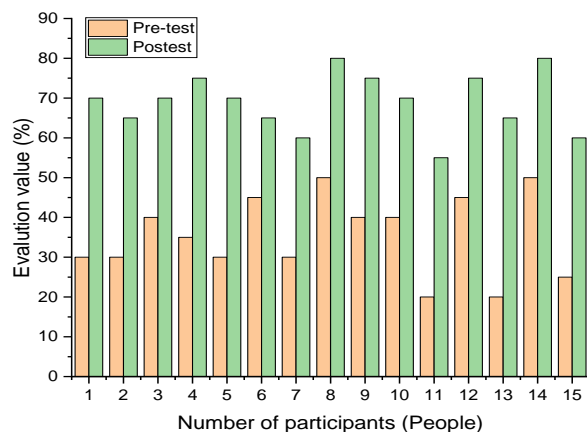


Figure 3. Number of participants versus evaluation value

Figure 3 shows that by providing skills for out-of-school youth, they can increase their understanding of theory and practice. This can be seen from the increase in the value of the evaluation carried out before being given skills and after being given training. Where before the training there was still a lot of theoretical and practical knowledge of the participants whose skills were still low, in this case the ability of the participants was still below 50%. Then after being given the training there was an increase in the ability to understand the theory and practicum of the participants with a value above 50%. This proves that by providing training to out-of-school youths they can improve their welding skills so that they can be used as a provision in opening a welding business or applying for jobs in the welding field.

4. CONCLUSION

From the training that has been given to out-of-school youth in the Lubuk Nyiur village, Pesisir Selatan Regency, it can be concluded that using the 2MT method can increase participants' interest in opening a workshop business at their place of residence. Then by providing training to out-of-school youths, they can increase their theoretical understanding of welding and improve practical skills in the field of welding. The implementation of this training is to provide understanding and skills for out-of-school youth related to the field of welding.

AUTHORS' CONTRIBUTIONS

Purwantono: Writing - original draft, Visualization, Investigation, Data curation. Dori Yuvenda: Conceptualization, Methodology, Supervision, Resources. Nelvi Erizon: Supervision, Visualization. Waskito: Conceptualization, Methodology. Yufrizal: Conceptualization, Methodology. Randi Purnama Putra: Conceptualization, Methodology, Supervision, Resources.

ACKNOWLEDGMENTS

Thank you to the community service training team, Padang State University for carrying out this activity.

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