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Facilities Development with Training of Instructors in Maintenance and Display Case Repair in the Work Training Center (BLK) of Kuningan District

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ABSTRACT

The Kuningan West Java Vocational Training Center (BLK) is ready to create manpower to fill the world of work or independent businesses, to reduce unemployment rates. The condition of work training centers that have new buildings but are not yet supported with adequate equipment and human resources and according to needs still require support from stakeholders to improve their quality. Bandung State Polytechnic, especially the Department of Refrigeration and Air Conditioning Engineering, is experienced enough and feels the need to contribute to the development program of the BLK Kuningan, especially in the field of Facilities Development and Instructor Training in the Field of Maintenance and Repair of Display Cases at BLK Kuningan Regency. This program aims to increase the role of the BLK in increasing the competence of Human Resources according to the needs of the labor market. The method implemented is through the Facility Development and Instructor Training Program in the Field of Maintenance and Repair of Display Cases. This activity has been carried out in theory and practice with a ratio of 20% theory and 80% practice in the field which was held at BLK Kuningan. The outputs that have been achieved include training participants having sufficient competence as instructors in the field of refrigeration and air conditioning engineering, especially regarding maintenance and repair of display case machines, availability of job sheets and theory and practice modules on basic refrigeration, especially for display case machines, a set training unit display case and its service equipment.

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INTRODUCTION

Kuningan Regency consists of 32 Districts, 15 Villages, and 361 Villages. Table 1 below is a mapping of the condition of the workforce in Kuningan Regency.

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Table 1. The labor force in Kuningan District

Number of Job Seekers	=	25.690
Unemployment number	=	32.488
Workforce	=	412.512
Number of Underemployment	=	112.500

The problem with partners at this time in Kuningan district according to table 1 is that they are trying to improve services to the community, especially absorption of the workforce as much as possible, so various types of training or debriefing are needed for prospective workers so that they can compete in finding jobs or can create independent jobs. One of the alternative results of studies from partners is the need for skilled workers in the field of refrigeration and air conditioning engineering, namely display case machines. Therefore, concerning the vision and mission as well as the description of the problem data in Kuningan district, it is very appropriate if the Bandung State Polytechnic, especially the Refrigeration and Air Conditioning Engineering Department, can participate in contributing to the development and creation of an increase in the quality of the workforce through community service programs. . One of the work programs offered is in the form of skills training in the field of maintenance and repair of display case cooling machines. With this skills training program, it is hoped that the relatively large number of job seekers and the number of unemployed will be overcome. This is by the wishes and needs of partners at this time, where this training and debriefing will be prioritized in advance for instructors at BLK Kuningan, with the hope that in the future these instructors will be able to become resource persons for training participants at BLK Kuningan. Thus, the training at BLK Kuningan on the maintenance and repair of display case machines will be continued for the next participants.

IMPLEMENTATION METHOD

The method to be implemented is through the Facilities Development and Instructor Training Program in the Field of Maintenance and Repair of Display Cases. This activity has been carried out in theory and practice with a ratio of 20% theory and 80% practice in the field which was held at BLK Kuningan.

The benefits that will be obtained by the training participants include:
1. Can open an independent workshop in the field of cooling machine service
2. Can work in industries related to the field of refrigeration engineering
3. Can open a service and maintenance business cooling machine

Solutions And Problems

2.1 Problems faced by BLK Kuningan

Solutions to existing problems are prepared with a series of processes as follows:

The current problem is that according to partners' needs the need for training and debriefing in the field of display case cooling machines and split ACs to open new jobs for the workforce in Kuningan district, the solution offered by PkM implementers is to provide training for instructors at BLK Kuningan as can be seen in the following roadmap.

2.2 PKM activity roadmap Maintenance and repair of display case machines

In Figure 5. The PKM activity roadmap can be seen that there is a need for partners who are considered to be very beneficial for the development of BLK Kuningan in preparing a trained workforce, so it is necessary to create activities that can meet these needs until the planned goals are achieved and can be evaluated and monitored together by the implementation team; PPPM and Partners.

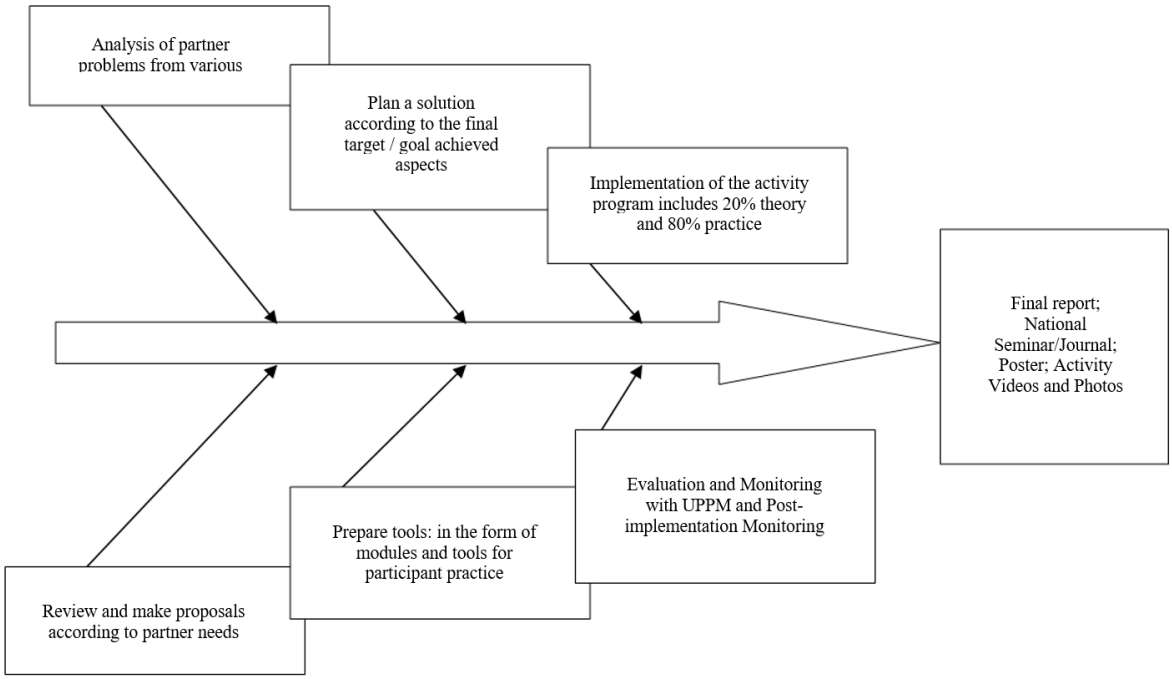

Figure 1. Roadmap for PKM BLK-Kuningan activities

Starting from an analysis of the problems faced by partners in terms of various aspects and assessed based on the needs to be achieved, then the PKM implementing team plans suitable activities according to the needs of partners or the output targets to be achieved by this activity program. Then the solution is determined in the form of training activities in the field of maintenance and repair of display case machines in theory and practice with a ratio of 20% theory and 80% practice. Practical activities are carried out with a fairly high percentage (80%) because they take into account the concept of learning by doing where it is hoped that after the completion of this program, the trainees will have adequate skills and be able to apply their experience and knowledge so that it will be very useful for the provision of himself and others.

To support practical activities, the implementing team will prepare a training unit equipped with service equipment. The training unit will then be handed over to BLK Kuningan so that it can be used again as a similar training facility. Meanwhile, for the activity of providing theoretical material besides being carried out in class, participants will receive simple modules to support teaching and learning activities at BLK Kuningan.

Thus, outputs for partners will be produced in the form of skilled human resources in the field of maintenance and repair of display case machines, BLK will have a training unit complete with service equipment, modules, and job sheets for training. While the outputs to be achieved by the implementing team will be in the form of national journals or proceedings at national seminars, posters, etc.

2.3. Venue, speakers, and participants

Debriefing and training activities will be carried out at BLK Kuningan with equipment that will be provided in the form of a training unit along with its supporting equipment and direct application practice on the appropriate object (display case cooling machine). The speakers for this debriefing/training came from lecturers from the Department of Refrigeration and Air Conditioning Engineering, Bandung State Polytechnic, who of course have experience in the field of Refrigeration and Air Conditioning engineering, both theoretically and practically. Debriefing/training materials are prepared by the trainers in the form of theoretical modules and job sheets for practice. The maximum number of participants in this debriefing and training is around 5 (five) people for one theory session while the practicum sessions are carried out in turn for each participant so that everyone will have the opportunity to try to experiment. The background of participants who can be included will be better if they have an engineering background such as Majoring in Mechanical Engineering or majoring in electrical engineering.

On July 18, 2022, the chief executive of the training surveyed BLK Kuningan along with the P3M Team and the chief executive for other training topics.

As a result of the meeting, an InCharge Person (specifically for the display case topic) was appointed to represent BLK Kuningan (Mr. Wigono) as a contact person to discuss further steps regarding timing and technical implementation. The following pictures 2 to 5 are photos during a visit and discussion/deliberation about the technical plan for implementing training/debriefing and surveys to workshops at BLK Kuningan.

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Figure 2. Greetings from the Head of the BLK Service and the Head of Polban P3M

Figure 3. Greeting from the Head of BLK Kuningan

Figure 4. Discussion of the technical plan for implementing the training

Figure 5. Field survey

Monitoring and Evaluation

Each participant will be tested for their abilities in operating/running, maintaining, and repairing display case coolers using practical methods that are directly guided and supervised by trainers. Participants who are competent in the field of operation, maintenance, and repair of display case refrigeration machines will receive a certificate (the exam it can be done in Bandung/Lab. Department of Refrigeration and Air Conditioning Engineering, Bandung State Polytechnic).

RESULTS AND DISCUSSION

Content of Research/Community Service in the form of results from research/community service activities that have been carried out. The results of research/services can be in the form of tables, graphics, or pictures and are accompanied by a discussion of the results of discussions on community service activities.

The following are the results and discussion of community service that has been carried out at BLK Kuningan Regency.

Benefit

The benefit of this debriefing/training is to add insight and knowledge to trainees in the field of display case cooling techniques. In Figure 6 the debriefing participants receive complete service equipment that can be used for daily training at the Vocational Training Center so it is hoped that the participants will have qualified skills and knowledge and can use it as additional expertise as added value in finding/getting job opportunities.

Social Impact

The impact of this debriefing/training is that in addition to increasing insight, it can also open up job opportunities for trainees. The opening of job opportunities in the field of refrigeration engineering, especially

regarding the operation and repair of display cases, will have an impact on increasing the number of middle-level workers such as SMK graduates and the equivalent. Skills in the field of display case repair services such as figure 6 do not require expensive equipment, allowing everyone to work independently or in groups.

Figure 6. Display case and Instructor training process

CONCLUSION

This activity has been carried out in theory and practice with a ratio of 20% theory and 80% practice in the field which was held at BLK Kuningan. The outputs that have been achieved include training participants having sufficient competence as instructors in the field of refrigeration and air conditioning engineering, especially regarding maintenance and repair of Display case machines, availability of job sheets and theory and practical modules on basic refrigeration, especially for display case machines, a set training unit display case and its service equipment.

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