



Classroom Management of Motorcycle and Small Motor Practice Using the Block Teaching in The Next Normal

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ABSTRACT

The practice of motorbikes and small motorbikes is one of the compulsory subjects but the tight schedule of lectures makes this course implemented using a block system. Even after the Covid-19 pandemic, practical courses began to be conducted offline. This study aims to describe how classroom management of motorcycle and small motor practice learning using the block system in the next normal. This research is qualitative. The techniques used in data collection were participatory observation, interviews and document studies. The validity of the data was done by source triangulation. The stages of analysis steps carried out were inventory/unitization of data, classification/categorization of data and interpretation/analysis of data. The results of this study indicate that class management planning of motorcycle and small motor practice learning was carried out by compiling lesson plans, preparing practice rooms, preparing worksheets and practicum modules, lecturers re-learning to teach practicum, and dividing practicum groups. In the implementation of class management of motorcycle and small motor practice learning, there were several class problems that lecturers faced in practicum activities, including: (1) practicum tools were damaged by students due to negligence in using or placing the tools, (2) some students were still late for class, and (3) not all students did practicum, with only a few students doing practicum while others just noted the results of their worksheets. These problems were solved by punishment and threat methods. Class management evaluation also conducted assessments on student practicum reports, performance tests, attitude observations, and observations of student learning activeness.

Keywords: *Block Teaching, Classroom Management, Next Normal, Motorcycle and Small Motorbike Practices.*

1. INTRODUCTION

Motorcycle and small motor practicum is a compulsory subject weighing 2 credits for students of the UNNES Automotive Engineering Education Study Program with many competencies [1]. All students are required to pass this course. This course consists of competence in checking motorcycle engine overhaul, automatic and manual clutch systems, automatic and manual transmission systems, disc and drum brake systems, ignition systems, conventional and injection fuel systems, steering systems, body electrical systems, valve adjustments, charging system, tune-up, and 1 cylinder diesel engine overhaul.

Not all of these competences may be fulfilled in two hours of study per week, but some take four hours. As an example, consider motorbike maintenance. Students must not only disassemble and measure pistons, but also disassemble, check, measure, and reassemble

crankshafts, connecting rods, valve mechanisms, and camshafts, as well as disassemble, inspect, and reassemble cylinder blocks [2]–[4].

According to field observations, the undergraduate automotive engineering education program's lecture schedule was very busy because each lecturer not only lectures one study program but one department consisting of three study programs; even there were lecturers who teach across faculties for general subjects, making motorcycle practicum a must to be implemented in blocks. Scheduling took into account the theoretical classroom space needed by all study programs at the engineering faculty.

Block teaching is a lecture that is not held 16 times but is condensed into a week of meetings or more until the course is finished [5]. Each block teaching meeting consists of many student activities rather than material delivered by educators so that the division of student

theoretical and practical time becomes more flexible [6]. Block teaching has several advantages including: (1) it provides sufficient time for students to study the material in depth [7]; (2) teachers have more time to complete lesson plans and to examine and re-evaluate practices and Longer time blocks allow for in-depth study, such as individual student projects, peer collaboration, and one-on-one work between teachers and students [8].

Indonesia has coexisted with Covid-19 because of the virus's waning transmission rate and the nearly universal presence of antibodies to the virus among Indonesians [9], [10]. The President of Indonesia's removal of the Restrictions on Community Activities (PKKM) [11] served as a marker for this. The learning process in the education sector was one of the many sectors in Indonesia that had transitioned from the current normal to the future one. Face-to-face learning must replace the formerly entirely online or hybrid learning processes. Face-to-face instruction was implemented by UNNES in response to this in the odd semester of 2022–2023 [12].

Classroom management is a general term that refers to teachers' efforts to design effective learning and supervise classroom activities, including student behavior according to their needs; social interaction; and an inclusive learning environment [13], [14]. Classroom management procedures are a set of predetermined steps that must be followed in order for educators to successfully carry out classroom management activities. A set of actions in class management activities known as classroom management procedures are carried out to establish ideal conditions and maintain these conditions so that the learning process can proceed effectively and efficiently. There are two management techniques: (1) Preventive action, which aims to foster an encouraging atmosphere for learning, and (2) Corrective action, which aims to stop aberrant behavior before it undermines the ideal conditions for continued learning. Aspects of classroom management, including: time planning, interaction during lectures, managing resources, enforcing rules, rewarding good behavior, and punishing bad behavior [15].

Classroom management must be carried out in an effective motorcycle and small motor practicum course to be effective and efficient. Due to the size of the class, the diversity of the students' backgrounds and learning preferences, and the amount of content the students must master, this is necessary in this course.

According to a number of studies, effective classroom management (1) could increase student behavior in the medium category at SMK Bina Wisata Lembang; (2) had a 54.10% positive influence on student learning outcome at SMK Islam Yapim Manado; (3) had a 32.71% positive influence on class XI student learning activity in introductory accounting classes at SMK Negeri 15

Jakarta; and (4) had a 28.5% positive influence on student learning motivation at SMK Negeri 1 Kota Jambi [16]–[19]

Based on the aforementioned issues, the goal of this study is to describe how motorcycle and small motor course will be managed utilizing a block system over the next normal era. Novelty of this study is there has been no research that describes practicum class management in the next normal era, particularly at the undergraduate level.

2. METHOD

This study is a qualitative descriptive study, which means it describes and reveals existing facts before using descriptive language or descriptions to explain them. For 16 meetings, this research was conducted at the Department of Mechanical Engineering's Motorcycle Laboratory, UNNES. This qualitative data analysis was inductive, meaning it starts with an analysis of the data that has been collected before developing into a hypothesis. Data reduction, data display, and conclusion drawing were the processes of qualitative data analysis that were carried out, according to source triangulation and data triangulation are used to determine the accuracy of the data [20].

3. RESULTS AND DISCUSSION

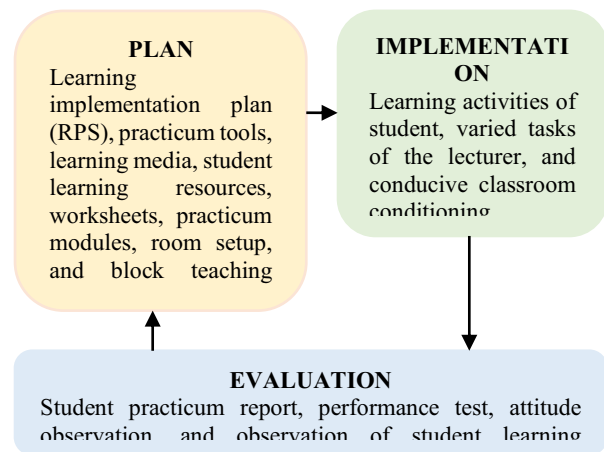


Figure 1. Classroom Management of Motorcycle and Small Motor Practice.

3.1 Planning for classroom management

Class management planning was carried out by the lecturer before carrying out learning. Lecturer arranges learning implementation plan (RPS), practicum tools, learning media, student learning resources, worksheets, practicum modules, room setup, and block teaching schedule, refresh on the ability to teach the course [21]–[23].

RPS contained graduate learning outcomes, course learning outcomes, course descriptions, references, time

and place of learning, learning methods, learning models, and learning evaluation. The prepared lesson plan was validated by the study program coordinator. RPS, learning media, student learning resources, worksheets, and practicum modules uploaded by lecturer to the Sikadu website <https://apps.unnes.ac.id/23>. Every student could download RPS and teaching materials at Sikadu.

Set up of laboratory room, equipment, and practicum materials, and practicum modules were prepared 2 weeks before the lecture. Lecturer must organize the classroom as efficiently as possible. Efficient classroom arrangement created a conducive learning environment, can be monitored easily, generates student interaction, and creates and maintains student behavior. Students should feel happy and comfortable during the practicum. The arrangement of the motorcycle laboratory room is shown in Figure 2.

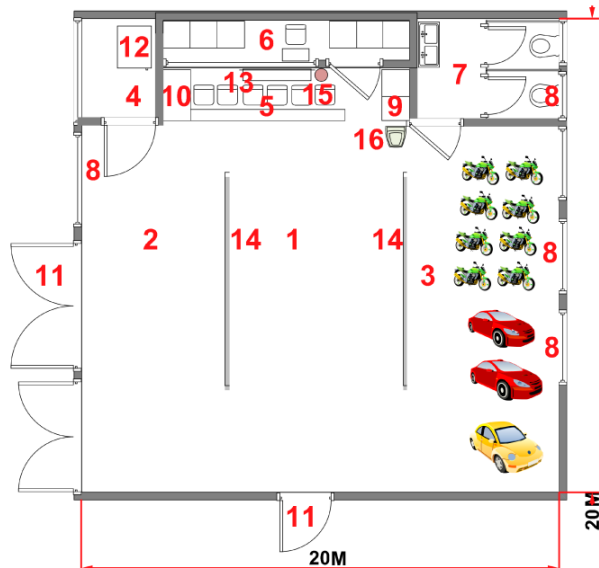


Figure 2. Plan of UNNES Motorcycle Laboratory.

- | | |
|------------------------|---|
| 1 = Practice Room 1 | 9 = Equipment Cabinet |
| 2 = Practice Room 2 | 10 = Bookcases, Jobsheets, and Teaching Materials |
| 3 = Engine Stands Room | 11 = Door |
| 4 = Changing Room | 12 = Lockers |
| 5 = Lecturer Room | 13 = LCD and Projector |
| 6 = Toolman Room | 14 = Whiteboards |
| 7 = Toilets | 15 = Dispensers |
| 8 = Glass | 16 = trash can |

Setup of the room includes: 1) space where the teaching and learning process takes place, 2) seating arrangements, 3) ventilation and light setup and 4) arrangements for storing goods [24]. The UNNES motorcycle laboratory has sufficient natural lighting plus 8 lighting lamps. Lighting that is not bright can make students sleepy and bored because students are not good at seeing objects, while with bright light students can be excited and concentrate during learning [25], [26].

The UNNES motorcycle laboratory did not provide student seats. This is to adapt the laboratory to the workplace. The UNNES motorcycle laboratory has natural ventilation and 2 fans. A comfortable workshop room temperature for students is around 28 degrees Celsius to 32 degrees Celsius [27].

Practicum equipment and engine stands in the UNNES motorcycle laboratory were stored and placed neatly, cleanly, and concisely. Practicum equipment and materials can be arranged by implementing a workshop management system. Some suitable workshop management practices such as 5S, TQM, Kaizen, VSM, TPM, Six Sigma, and JIT [28]–[30].

Two weeks before lectures the lecturer conducted independent practicum. This independent practicum was carried out to refresh the skills of removing, measuring, checking, analyzing, concluding, and reassembling according to the job. Lecturers also learned to teach to refresh and enrich their knowledge. With independent practicum before practicum will make lecturers ready to teach in practicum classes.

The number of students taking the course was 83 students. This number was too large to be used as 1 practicum class so the class was divided into 2 classes. Students who register should be notified via the UNNES Info Telegram application. A student collected a list of students who take lectures to the motorcycle laboratory. Each class consisted of 8 groups where each group consists of 5-6 students consisting of 3-4 students who have graduated from Vocational High School and 1-2 graduates from Senior High School.

Learning that should have been done in 16 meetings was condensed into 8 meetings. This course consisted of 2 practical credits so that the lesson lasted 3 hours and 20 minutes. Each meeting started from 07.30 WIB to 15.30 WIB with a break at 12.00-13.00 WIB. One meeting was usually 1 to 2 practicum jobs. The following is the block teaching schedule.

Table 1. Schedule of Block Teaching.

Days	Group							
	1	2	3	4	5	6	7	8
1 st	Job 1	Job 1	Job 1	Job 1	Job 2	Job 2	Job 2	Job 2
2 nd	Job 1	Job 1	Job 1	Job 1	Job 3	Job 3	Job 3	Job 3
3 rd	Job 2	Job 2	Job 2	Job 2	Job 1	Job 1	Job 1	Job 1
4 th	Job 3	Job 3	Job 3	Job 3	Job 1	Job 1	Job 1	Job 1
5 th	Job 4	Job 4	Job 4	Job 4	Job 5	Job 5	Job 5	Job 5
6 th	Job 5	Job 5	Job 5	Job 5	Job 4	Job 4	Job 4	Job 4
7 th	Job 6 & Job 7	Job 6 & Job 7	Job 6 & Job 7	Job 6 & Job 7	Job 7 & Job 6	Job 7 & Job 6	Job 7 & Job 6	Job 7 & Job 6
8 th	Performance Test							

3.2 Implementing for the classroom management

Practicum learning in the laboratory is different from theoretical learning in the classroom. In the laboratory students must be active in learning. Lecturers must act as demonstrators, correctors, inspirers, informers,

facilitators, motivators, mentors, class managers for students during practicums with practicum objects that must be adapted to modules, learning guides, and worksheets.



Figure 2. Demonstration in practical class.



Figure 3. Students' Learning Activities.

As a demonstrator, the lecturer must explain and master the learning material well. Learning materials were demonstrated clearly and in sequence according to the worksheet so that students get the material as a whole. As a corrector, the lecturer must reprimand students if the character shown in the action is not appropriate

There were several class problems that lecturers face in practicum activities, including: (1) practicum tools were damaged by students due to negligence in using or placing the tools, (2) some students were still late for class, and (3) not all students did practicum, with only a few students did practicum while others just noted the results of their worksheet. These problems could be solved theoretically and theoretically [31].

The punishment and threat method is one that lacks an empirical and established theoretical foundation. This method is intended for students who break class rules or lack discipline. Some examples of the punishment and threat approach were as follows: (1) the lecturer in teaching warns students that if they want good grades, they must arrive on time; (2) students who damage practicum tools must replace them; and (3) students are encouraged to be active in practicum learning because activity is also assessed.

3.3. Evaluating for the classroom management

Evaluating for the classroom management is carried out at the planning and implementing stages for classroom management, and evaluating learning. In the planning evaluation all students had sufficient space, all groups received 1 complete tool set, each group got 1 engine stand those functions properly, and all students could download learning media, modules, worksheets, and learning resources.

In implementing for the classroom management, A multimeter was damaged due to incorrect use by students. There were students who come late. Evaluation of learning is carried out using student practicum reports, performance tests, attitude observations, and observations of student learning activeness [32]. There were no students who repeat their studies in the following year because all students got grades above E [33] [34].

4. CONCLUSION

Classroom management of motorcycle and small motor practice using the block teaching in the next normal has been running effectively and efficiently even though there were still some obstacles but they had been overcome. Future research is better off doing research on learning evaluations of motorcycle and small motor practice using the block teaching in the next normal using the CIPP method.

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