

# Implementation of Practice Learning During the Covid-19 Pandemic



Nurhasan Syah, Syaiful Haq, Nizwardi Jalinus, Ambiyar

**Abstract:** *This research was done because of the covid-19 pandemic. One regulation impact of this pandemic is social distance, so it disturbed the implementation of learning because students did not allowed to learn face to face in a room or at campus. They must learn from home by online learning. This regulation was not a problem for some courses, but it was not easy for practice course because students need tools and do demonstration in laboratory or workshop. This descriptive qualitative reseach was done to observed people who involved in specific teaching method course in the mechanical engineering department of Universitas Negeri Padang (UNP). The key of this research are about data observation, triangulation, careful examination, then data reduction, presentation, and conclusion. The research result stated that; 1) there was no changes in the substance of the learning planning during covid-19, 2) the implementation of practice learning was done by fully learning during covid-19, student and lecture did communication by using whatsapp, e-mail, zoom cloud meeting, UNP's e-learning, and others tools such as youtube, 3) the assessment of learning was done by testing and observation.*

**Keywords:** *Implementation, Online Practice Learning, Pandemic, Covid-19.*

## I. INTRODUCTION

The developments of technological in the industrial revolution 4.0 provided major changes to human life, one of which impacted on the education sector [1; 2; 3; 4]. The most obvious impact is the ease of getting learning material from various sources online using the internet [5; 6], thus causing the learning process to be carried out without space and time limits [7]. However, this is only limited to helping teachers and students, but has not been able to replace the role of the teacher 100% [8; 9; 10].

In addition to the industrial revolution 4.0, the covid-19

## II. METHOD

This qualitative descriptive [17; 18] study was chosen because the data was to illustrate the application of practical learning during the covid-19 pandemic period in teaching practice subjects or specific teaching methods in the Department of Mechanical Engineering, Faculty of Engineering, Universitas Negeri Padang.

The research was carried out from mid of March 2020 (semester period in January-June) to June 2020 (end of semester) or starting from the 9th meeting until the 16th meeting. The research subjects were 27 students who took special teaching methods, and one lecturer supporting the course for 2 classes.

The researcher makes active observations or is involved as a teaching assistant and makes observations starting from online learning preparation to completion of activities. During the learning process, researchers also observe student processes and assignments.

In addition to observation, researchers also conducted documentation studies that included learning documentation, evidence of online lecture links, to proof of student assignments uploaded to YouTube in the form of teaching videos.

This research indicator consists of three main indicators, namely planning, implementation, and assessment. But also added two other indicators as a complement, namely supporting factors and inhibiting factors.

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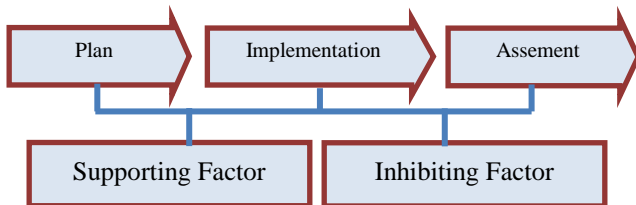


Figure 1. Indicator of Learning Implementation [16]

The hope, by using these 5 indicators will illustrate the implementation of practical learning during covid-19 in depth, and can also be used as input for improving the quality of online education for practical learning.

### III. RESULT

#### Learning Plan

The first part is planning learning. This section is reviewed from the suitability of learning planning before the pandemic covid-19 with the arrival of the pandemic covid-19. In this section, attention should be given to the substantial changes, learning targets, planned teaching materials used, media plans used, planned processes, planned time duration, and planned assessments. Based on observations, the following results were found:

- Lecturers still use the Semester Learning Plan (SLP) in accordance with the planning at the beginning of the semester, without changing the substance of lectures.
- Development of SLP is carried out in the form of tasks which are more concise into 3 main tasks, namely the preparation of lesson plans, jobsheets, and teaching materials; poster as teaching media; and practice teaching videos.
- Learning targets still refer to four teacher competency standards and eight basic teaching skills.
- Teaching materials are shared online using the Whatapp application, email, UNP e-learning, and zoom cloud meetings.
- The direction of learning refers to full online learning with a project based learning model.
- Changes in learning time according to the condition of lecturers and students, lecture days are synchronized with the schedule before covid-19, but the duration of online meetings is shortened to 2 hours or 120 minutes.
- The lecturer develops an assessment form in accordance with the form of the assignment during the covid-19 pandemic

#### Learning Implementation

The second part is related to the implementation of learning during covid-19. This section reviews the implementation of learning starting in substance, conformity with learning targets, teaching materials used in implementation, media used, the implementation process, duration of implementation time. Based on observations, the following results were found:

- Lecturers facilitate students so that they are able to come up with new ideas by referring to the development and improvement of cognitive, affective, and psychomotor abilities.

- Lecturers take the initiative to schedule lectures online using whatapps, e-mail, e-learning UNP, and zoom cloud meetings



Figure 2. Proof of Online Learning Implementation (primary research data)

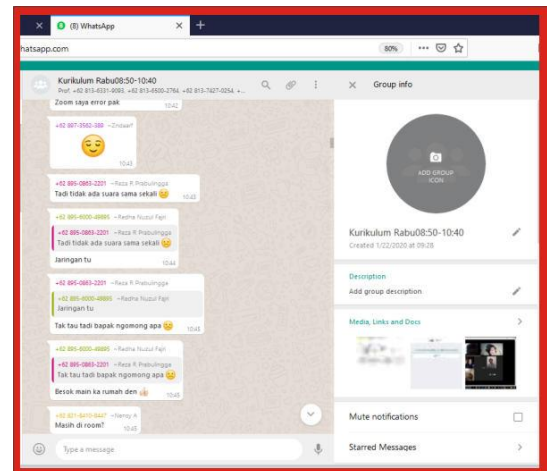
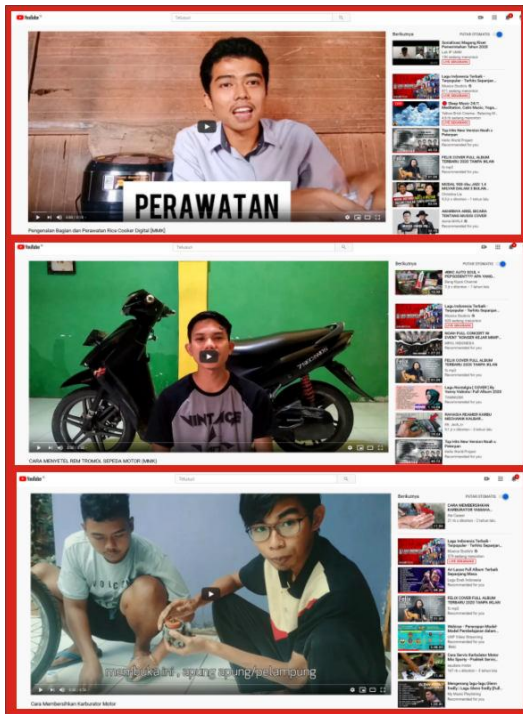


Figure 3. Online Learning Implementation by using Whatapps group (primary research data)

- Lecturers provide teaching materials online from various sources at
- Lecturers use a variety of teaching methods such as lectures, discussions, and demonstrations or students are asked to demonstrate their assignments.
- Lecturers use a variety of teaching media such as laptops, cellphones, as well as other applications such as PowerPoint, to YouTube.
- Students attend lectures from their respective homes online
- Students practice using basic equipment at home, but still refer to the aims of practical learning.

#### Learning Assesment

- The third part is related to assessment. In this section the assessment of learning begins in substance. Based on observations, the following results were found:
- Lecturers provide an assessment of attitudes competency toward students as measured by in-depth observations.
- The lecturer evaluates the competency of students' knowledge with written tests that are given formatively and summatively.
- Lecturers provide an assessment of the competency of student skills through teaching videos created by students.



**Figure 4. Online Learning Implementation by creating video and youtube (primary research data)**

The video is 5 minutes to 10 minutes long which contains teaching demonstrations with regard to 4 professional teacher competency standards and 8 basic teaching skills. This video was made by students by including close relatives of their homes as students and asked to practice the results of their learning.

**Inhibiting Factor**

The fourth part is related to inhibiting factors. This section reviews matters that disturb or hinder the achievement of the learning objectives of specific teaching methods ranging from planning, implementation, and assessment. The things that become obstacles to learning special teaching methods online during the pvidemic covid-19 are:

- Not found significant problems in substance and planning learning.
- Found problems in the implementation of learning that the internet network is unstable and not evenly distributed, so students in certain areas cannot attend lectures properly, even some of their opportunities cannot attend meetings.
- This online practice provides a number of challenges for some students due to indirect learning, so there are still those who experience difficulties in interpreting learning.
- Some students are constrained to learn independently, because they need encouragement to generate learning initiatives.
- The limited facilities and infrastructure make the implementation of learning can not be 100% as done in a laboratory or workshop, but in concept students have understood and understood the learning objectives of practice.
- No significant problems were found in the assessment, because the assessment can be done by referring to the assessment of attitudes, knowledge, and skills in accordance with observations, tests, and performance in

the form of teaching videos made by students.

**Supporting Factor**

- The fifth part is the supporting factor. This section reviews matters that encourage or support the achievement of learning objectives for specific teaching methods starting from planning, implementation, and assessment. The things that support the learning of special teaching methods online during the pvidemic covid-19 are:
- Substantially, work from home and learn form home policies make lecturers and students accept situations and conditions for online learning.
- Online learning policies or bleded learning have been circulated by the chancellor unpublished since 2015, so the improvement of online learning systems using the UNP e-learning website is considered to have supported the implementation of online learning during the covid-19 pandemic.
- The ease of whatsapp facilities is a supporting factor for the smooth implementation of online learning, especially in sharing information in the form of documents, photos and videos.
- The ease of the zoom cloud meeting facility is also a supporting factor for online learning in practical subjects.
- Making teaching videos and uploading them to YouTube also helps the achievement of online practice learning objectives in terms of implementation and assessment, because lecturers can assess student skills through the videos they upload.

**IV. DISCUSSION**

This study was divided into five large groups namely related to learning planning, learning implementation, learning assessment, inhibiting factors, and supporting factors. First, it relates to learning planning during the covid-19 pandemic. There were no fundamental differences or major changes in learning planning during the covid-19 pandemic. Lecturers still use the Semester Learning Plan in accordance with the planning at the beginning of the semester, without changing the substance of lectures. The changes were made to the form of a more concise task into 3 main tasks namely; 1) making lesson plans, jobsheets, and teaching materials; 2) posters as teaching media; 3) and practice teaching videos.

Learning targets still refer to four teacher competency standards and eight basic teaching skills. Teaching materials are distributed by lecturers, and students are asked to actively look for other references. This is in accordance with the planning at the beginning of the lecture.

The direction of learning refers to fully online learning with a project based learning model. Changes in learning time adjust the conditions of lecturers and students, the lecture day is equated with the schedule before covid-19, but the duration of the online meeting is shortened to 2 hours or 120 minutes. In addition, the lecturer also plans to develop an assessment form in accordance with the assignment form during the covid-19 pandemic.



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Second, relating to the implementation of learning during the covid-19 pandemic. Lecturers facilitate students so that they are able to come up with new ideas by referring to the development and improvement of cognitive, affective, and psychomotor abilities. Lecturers take the initiative to schedule lectures online using whatapps, e-mail, e-learning UNP, and zoom cloud meetings. Lecturers provide online teaching materials from various sources using the Whatapp application, email, UNP e-learning, and zoom cloud meetings.

Lecturers use a variety of teaching methods such as lectures, discussions, and demonstrations or students are asked to demonstrate their assignments. Lecturers use a variety of teaching media such as laptops, cellphones, as well as other applications such as PowerPoint, to YouTube. Students attend lectures from their respective homes online. Students practice using basic equipment at home, while still referring to the purpose of practical learning.

Third, relating to the assessment of learning during the covid-19 pandemic. Lecturers provide an assessment of attitudes competency toward students as measured by in-depth observation. The lecturer evaluates the competency of student knowledge with written tests that are given formatively and summatively. Lecturers provide an assessment of the competency of student skills through teaching videos made by students. The video is 5 minutes to 10 minutes long which contains teaching demonstrations with regard to 4 professional teacher competency standards and 8 basic teaching skills. This video was made by students by including close relatives of their homes as students and asked to practice the results of their learning.

Fourth, related to the inhibiting factors of practical learning during the covid-19 pandemic. The internet network is unstable and not evenly distributed, so students in certain areas cannot attend lectures properly, even some of their opportunities cannot attend meetings. This online practice provides a number of challenges for some students due to indirect learning, so that there are still people who experience difficulties in interpreting learning.

Some students are constrained to learn independently, because they need encouragement to generate learning initiatives. Limited facilities and infrastructure make the implementation of learning can not be 100% as done in a laboratory or workshop, but in concept students have understood and understood the learning objectives of practice.

Fifth, related to the supporting factors of practical learning during the covid-19 pandemic. Online learning policy or bled learning has been circulated by the rector UNP since 2015, so the implementation of online learning is no longer a very new thing. Work from home and learn form home policies make lecturers and students accept the conditions and conditions for online learning. Improvement of online learning systems using the UNP e-learning website is considered to have supported the implementation of online learning during the covid-19 pandemic. The ease of whatsapp facilities is a supporting factor for the smooth learning online, especially in sharing information in the form of documents, photos and videos. Summary, the summary of this discussion is as follows:

No	Activit y	Information
1	Plan	<ul style="list-style-type: none"> <li>• There was no substantial change in practical learning during the covid-19 pandemic with before the pandemic</li> <li>• Changes to practical tasks are summarized into 3 main tasks, namely the preparation of lesson plans, jobsheets, and teaching materials, teaching media; and practice teaching videos.</li> <li>• Teaching materials are shared online through the Whatapp application, e-mail, UNP e-learning, youtube and zoom cloud meetings.</li> <li>• The direction of learning refers to full online learning with a project based learning model.</li> <li>• Learning timetable and duration are summarized as 120 minutes for 1 meeting.</li> <li>• The form of assessment adjusts to online learning.</li> </ul>
2	Imple- mentation	<ul style="list-style-type: none"> <li>• Learning continues to refer to the development and improvement of cognitive, affective, and psychomotor abilities.</li> <li>• Learning is done online using whatapps, e-mails, UNP e-learning, youtube and zoom cloud meetings.</li> <li>• Learning uses a variety of teaching methods such as lectures, discussions, and demonstrations.</li> <li>• Students practice using basic equipment at home, but still refer to the aims of practical learning.</li> </ul>
3	Assesment	<ul style="list-style-type: none"> <li>• Assessment of student attitudes is measured in depth observation.</li> <li>• Assessment of student knowledge by written test.</li> <li>• Assessment of student skills through teaching videos made by students. The video is 5 minutes to 10 minutes long which contains teaching demonstrations with regard to 4 professional teacher competency standards and 8 basic teaching skills. This video was made by students by including close relatives of their homes as students and asked to practice the results of their learning.</li> </ul>
4	Inhibiti ng Factor	<ul style="list-style-type: none"> <li>• The internet network is unstable and uneven.</li> <li>• Some students are not accustomed to studying online independently.</li> <li>• The limited facilities and infrastructure make the implementation of learning cannot be 100% like what is done in a laboratory or workshop.</li> </ul>
5	Suppor - ting Factor	<ul style="list-style-type: none"> <li>• Online learning policy or bled learning has been circulated by the Chancellor of UNP since 2015,</li> <li>• Work from home policies make pandemic situations a joint issue.</li> <li>• Improved online learning systems using the UNP e-learning website considered to have supported the implementation of online learning during the covid-19 pandemic.</li> <li>• The ease of whatsapp facilities is a supporting factor for the smooth online learning, especially in sharing information in the form of documents, photos and videos.</li> </ul>

## V. CONCLUSION

Based on the research, it can be concluded that the implementation of practical learning during the covid-19 pandemic went well in terms of planning, implementation, and learning assessment. Pandemic covid-19 does not change the substance of the planning of learning courses specifically teaching methods. Pandemic covid-19 transforms the implementation of learning into online practice learning through WhatsApp, email, UNP's e-learning, and YouTube. Covid-19 pandemic does not change the form of learning assessment which still refers to cognitive, affective, and psychomotor aspects. Besides that the assessment also still refers to the objectives of special teaching methods courses namely four professional teacher competencies, and eight basic teaching skills. The supporting factor is a work from home policy that encourages lecturers and students together to achieve learning objectives, while the limiting factor is the limited facilities and infrastructure. Overall, the online teaching method specifically for pandemic covid-19 can be implemented well, but it needs to be improved in the future.

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