

# Implementation Of Teaching Practices For Prospective Teacher Students During The Covid19 Pandemic (Case Study Of Information Technology Education)

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## Abstract:

The COVID-19 pandemic has not stopped the implementation of learning in the world. However, it is sufficient to have a significant impact on teachers and students as actors involved in learning, including student-teacher candidates. Knowledge and the ability to use a technology that can help to learn are needed. These two things will later be implemented in teaching practice activities through the Introduction to School Fields (PLP). This study aims to describe the implementation of this activity and also evaluate the activity. The research method used to find answers to the research was carried out with descriptive qualitative research. Data collection was carried out through interviews with civil servant teachers and prospective teacher students as well as observing the implementation of PLP II implementation. This research resulted in the implementation of Phase II PLP activities being carried out online at vocational schools with ICT expertise programs within 2019 to 2020. The implementation of PLP II online using the zoom and google meet tools experienced a reduction in the implementation time. The process of evaluating PLP II activities is carried out by describing the implementation of these activities through activity reports prepared by prospective teacher students and seminar results.

**Keywords** —covid19, introduction to the school field, online learning

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## I. INTRODUCTION

Brawijaya University one of the universities in Indonesia has 13 faculties and within these faculties, there are several study programs [1]. The Faculty of Computer Science is a faculty that has five undergraduate-level study programs and one master-level study program. Departments owned by the Faculty of Computer Science include the Department of Informatics Engineering and the Department of Information Systems. In each department, there are several study programs. The S1 Informatics Engineering, S1 Computer Engineering, and S2 Computer Science study programs are under the Department of Informatics Engineering. Meanwhile, S1 Information Systems, S1 Information Technology, and S1 Information

Technology Education are study programs under the Information Systems department [2].

One of the Education study programs located at the Faculty of Computer Science is only the Information Technology Education (PTI) S1 Study Program. This study program was established in 2014, with the Decree of the Minister of Education and Culture of the Republic of Indonesia number 595/E/O/2014 which is used as the basis for licensing for the implementation of study programs at Brawijaya University in Malang [2]. The basis for managing this degree is based on the Regulation of the Minister of Research, Technology and Higher Education number 55 of 2017 concerning Teacher Education Standards.

To produce the right graduates, supportive learning activities are needed apart from classroom

learning activities. These activities are in the form of learning activities in the field, which are expected to hone the skills of students in the PTI study program, especially their pedagogic skills. The form of learning activities in the field is in the form of teaching practices or the curriculum referred to as the Introduction to School Field Course (PLP).

This PLP course teaches students to make observations and apprenticeships with the aim of understanding aspects of learning and how to manage education carried out in the Education unit. This is following Permenristekdikti Number 55 of 2017 Article 1 point 8 [3] regarding the implementation of PLP. PLP previously had another name, namely Field Experience Practice (PPL) courses.

The implementation of this course can be taken by 7th-semester students who have taken all compulsory education courses and are carried out at partner schools offline in Malang City and Regency. In 2020, the curriculum in the PTI study program changed, including the name of the PPL course being PLP stage I and stage II [2].

With the pandemic that hit, learning activities in the field through PLP also experienced changes. Changes in the implementation of offline activities to online. Many things happened as a result of this change, including changes to the regulations for implementing PLP I and II. This change also includes the use of technology in learning. The use of remote technology in computer applications can provide benefits during outbreaks or emergencies. The use of technology provided and supported by the organization in supporting this learning can improve the academic performance of students [4]. In addition, the implementation of online learning activities through technology makes students feel that online learning takes a lot of time and requires more effort [5]. However, the application of this technology cannot answer the needs of the teaching process. This happened in research that discussed the teaching of previous music practices [6].

This also applies to education at the lecture level, especially the Information Technology Education study program which carries out practical teaching activities through PLP I and PLP II courses. The

use of remote technology is also applied to the Phase II School Field Introduction or commonly referred to as PLP II. Apart from the use of this technology, it is also necessary to master teaching skills for students who will carry out PLP II [7]. This is also supported by previous research which explains that training in the use of this technology is needed for PAUD (Early Childhood Education) teachers [8].

Because this activity is a forum for a student to develop the ability to work together in a work environment to form a complete and professional figure of a teacher in the ICT field in the world of information technology education, it is very important. Complete, namely having a set of knowledge, skills, values, attitudes, and behaviors needed for the profession which includes pedagogic, professional, personality, and social competencies. Professionals are competent and appropriate to use the equipment in the implementation of education both in the community, school, and outside of school. One of them is education to form a complete and professional teacher figure in lectures is teaching practice or Phase II School Field Introduction [9].

Introduction to School Fields Phase II is a compulsory subject with a weight of 3 credits which is undertaken by S1 Information Technology Education UB (PTI UB) students to implement their abilities as professional lecturer candidates in the field of Information and Communication Technology (ICT). The Phase II School Field Introduction (PLP II) was carried out in full, both in schools. PLP II at school is carried out for 6 weeks. PLP II in schools has a focus on teaching practices in the school environment. PLP II has a focus on student activities for practice at partner schools and is carried out for 6 weeks [2].

Seeing the importance of PLP II for students, guidance from several SMK parties is needed. Principals (KepSek) and Heads of Administration (KTU) to get guidance on School Management, while vocational teachers as civil servants guide and assist PLP II students while at partner schools. For this reason, on this occasion, the Department of Information Systems collaborates with partner schools to carry out PLP II in partner schools. The

Department of Information Systems proposes an activity proposal entitled "Implementation in Partner Schools Phase II School Field Introduction Activities Odd Semester 2021/2022". By holding this event, it is hoped that it can help in terms of providing materials on PLP II for PTI study students who will work on PLP II.

The objectives of holding the implementation of Phase II School Field Introduction activities are: (1) To provide practical experience of teaching in the field of ICT to PTI students who take PLP II; (2) to recognize student learning difficulties in ICT learning activities carried out by PTI students who take PLP II; (3) Provide ICT-based school management practice experience to PTI students who take PLP II; (4) Provide practical experience of other relevant educational tasks, such as ICT counseling[2].

With the pandemic and the demand to continue to carry out learning in the field through PLP II activities, it is important to do this research to describe the implementation of this activity and also evaluate the activity. It is hoped that this activity will provide information and produce findings regarding the implementation of this activity.

The study program at the Faculty of Computer Science, Universitas Brawijaya was established in 2014 and received permission from the ministry of education and culture number 595/E/O/2014. This study program aims to produce graduates as competent teachers in the field of information technology. In addition, there are also educational courses that aim to hone students' abilities through teaching practices [10]. Teaching practice is a compulsory subject that must be carried out by students from educational study programs because with this practice, students get real experience in the learning process, including the learning interaction process that involves students.

In the study program curriculum, there is one practical course given to PTI students apart from fieldwork practice. The implementation of this practice is based on Permenristekdikti Number 55 of 2017 Article 1 point 8, which is related to PLP. Students from educational study programs carry out observations and internships with the aim of understanding aspects of learning and education

management in educational units [11]. PLP is a stage that aims to prepare professional teachers at the level of the Bachelor of Education Program. This PLP activity becomes a task for students in applying their learning mastery through observation of the teaching and learning process in schools or educational institutions, besides that, it is also tasked with the process of developing learning tools, and teaching and learning guided by tutors and supervisors and followed by action. to reflect it under the guidance and supervision of the supervising lecturers and tutors in stages. PLP is divided into two stages of activity, namely PLP I and PLP II.

PLP II is a course coded: CIE61025 and weighs 3 credits or equivalent to 7,140 minutes (119 hours) of activity. PLP II is positioned as the second stage in the Introduction to the School Field and is separate from PLP I activities. However, under certain conditions PLP I can be carried out simultaneously with PLP II with the proviso that students already have MK scores for Micro-Learning and Class Management (code: CIE61022). This requires approval from the Academic Advisory Lecturer (PA) and the Head of PS PTI. PLP II can regularly be planned at KRS semester 7 (odd), and its activities can be carried out in semester 6 (even) to semester 7 (odd) while still being adjusted to the willingness of the partner/school. PLP II aims to hone students' abilities in academics, education, and fields of study through various activities carried out directly in schools [2].

In sharpening and supporting the integration of student abilities to understand student characteristics, create educational learning for students, master the fields of science and/or expertise, personality, and preparation of prospective educators, after participating in PLP II activities, students under the guidance of a civil servant teacher are expected to understand concerning: (1) Curriculum analysis; (2) Making learning tools such as lesson plans, worksheets, media, teaching materials, and assessment instruments; (3) Conducting teaching and learning activities using various learning strategies and media; (4) Class management; (5) Information and

communication technology used in teaching and learning activities; (6) Conducting the learning assessment and evaluation process; (7) Manage the implementation of co-curricular and extracurricular activities; and (8) Assist in recognizing and completing teacher administrative work/activities [2].

The requirements for implementing PLP II activities include students, supervisors, partner schools, and tutors. PLP II participants carry out the following activities: (1) Conduct learning on the curriculum and learning tools used by teachers; (2) Study learning strategies implemented in learning by teachers; (3) Study the evaluation system applied in learning by the teacher; (4) Assisting teachers in developing lesson plans, learning media, teaching materials, and learning evaluation tools; (5) Studying the use of information and communication technology in learning; (6) Educate students to practice teaching methods based on the direction and guidance of civil servant teachers and PLP II supervisors, which aims to provide direct experience in the learning process, as well as to strengthen the identity of prospective educators; (7) Assist students in extracurricular activities; and (8) teacher administration work that PLP II participants can assist in completing [2].

Online learning has a definition as learning that is carried out in a network with a situation where the teacher and students do not meet face-to-face [12]. There are two kinds of ways to interact in this online learning, namely synchronous instruction and asynchronous instruction. Synchronous instruction is interaction through direct communication with students. Asynchronous instruction is an interaction that is carried out indirectly because it is through a video or teaching material in the form of a module PowerPoint or pdf [13].

The principle of online learning is a requirement for the continuity of the learning process. Based on the circular letter of the Ministry of Education and Culture number 15 of 2020, these principles include: (1) prioritizing the safety and health of students, teachers, principals and all school residents to carry out Learning From Home (BDR); (2) the learning experience provided is expected to be a meaningful

learning for students, without being burdened with the demands of completing all curriculum achievements; (3) priority is given to life skills education, one of which is the COVID-19 pandemic; (4) the learning materials to be taught are adjusted to the age and level of education, cultural context, character and type of student specificity; (5) activities and assignments for learning from home can be given differently between regions, educational units and students, and adjusted to their respective interests and conditions, including considering the availability of access to learning facilities from home; (6) the feedback that is qualitative and quantitative given by the teacher is still given to the learning outcomes of students while studying from home; (7) positive patterns of interaction and communication that can arise from teachers and parents must be put forward [14].

## II. METHOD

Research that aims to describe a condition in the field through a case study design is called qualitative research. This research can be carried out in stages which can be seen in Figure 1 below.

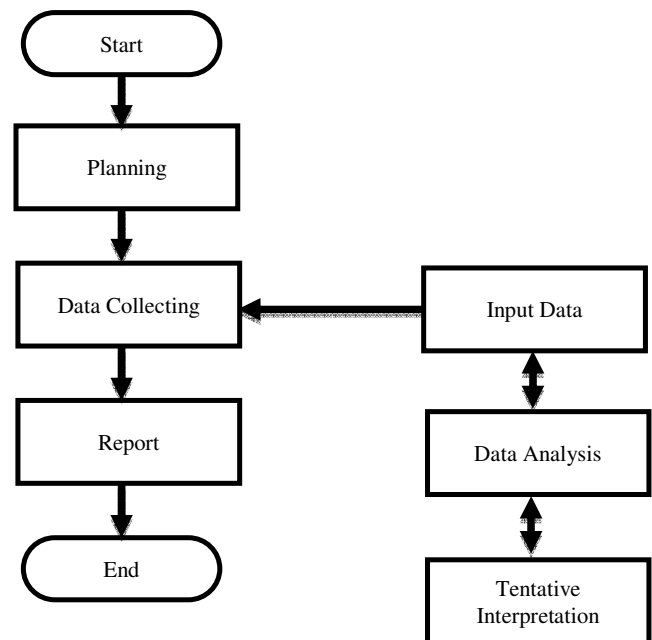


Figure 1. Qualitative Research Stages

At the planning stage, which contains the identification of problem formulations and problem

limitations, the formulation of the research situation, units, and locations selected, and informants as data sources are carried out.

The second stage is done by determining the purposive sample. This is done by: determining the research location, determining a comprehensive sample, determining the maximum variation sample, determining the tissue sample, determining the type of case sample, and the size of the case. The location of this research is in the area of Malang Raya and several other areas where PLP II is being implemented. This research was conducted from 2019 to 2020.

At the data collection stage, data analysis and interpretation were carried out through interviews with several informants who later were also equipped with observational data and document data. Interviews should be conducted in-depth and more intensive document collection to prospective teacher students and partner schools that are used as PLP II implementation sites. This data collection will run side by side with data analysis until no new data is found. The facts from the field findings are obtained first, then compiled. Later diagrams or tables or figures are interpreted and developed into propositions and principles.

The preparation of the report was carried out by researchers based on the results obtained during the research process.

### **III. FINDINGS AND DISCUSSION**

#### **Findings**

The implementation of PLP II is carried out online in the even 2019/2020 academic year to even 2020/2021. The location of the PLP II implementation is in vocational high schools in the city of Malang and also several other cities. The skill programs that are the location of this implementation are Computer and Network Engineering, Multimedia, and Software Engineering.

Due to the COVID-19 pandemic, this circular to carry out online learning was issued by the Ministry of Education and Culture. With the SE, schools in Indonesia carry out online learning.

The platform used for the implementation of PLP II is online with zoom and google meet. In online learning, problems were found from the student's perspective, namely (1) all students could not take lessons according to lesson hours; (2) students are less active [15]; (3) limited facilities for learning [16]; (4) students often go in and out of online classes; (5) students are less focused in observing the material given; (6) some students cannot participate in online learning due to limited internet quota [17]; (7) students experience network problems when participating in online learning. These problems were obtained through observations in the class of each student teacher candidate.

The implementation time of online learning in several partner schools also varies, such as (1) 20 minutes in 1 lesson hour; (2) 45 minutes in 1 lesson hour; (3) 60 minutes in 1 lesson hour.

The implementation of online learning carried out by prospective teacher-students is carried out based on knowledge of basic teaching skills. The following are the activities carried out by student-teacher candidates in the online PLP II implementation: (1) Student-teacher candidates open the lesson with greetings, the model teacher leads a prayer together before carrying out learning activities; (2) Student-teacher candidates check the attendance of students and look for and confirm students who do not enter in a firm and fair manner; (3) Student-teacher candidates make an analogy of computer storage media material with everyday life; (4) Student-teacher candidates display examples of images of various computer storage media; (5) Student-teacher candidates provide material presentation about computer storage media; (6) Student-teacher candidates ask questions or encourage students to ask questions related to the material that has been taught, in order to determine student understanding; (7) Student-teacher candidates provide assignment worksheets to students; (8) Student-teacher candidates conclude the material that has been delivered so that students understand better about the material that has been explained.

Other teacher candidate students also carry out online learning with details of the following activities: (1) Teacher candidate students start



learning by greeting, and praying together; (2) Teacher candidate students deliver material by using modules, and (3) Teacher prospective students also practice using the Corel Draw application; (4) Student-teacher candidates distribute assignments to students to be done with a deadline of one week collected through Google Classroom.

### Discussions

After the teaching practice is completed by the students, a reflection will be given by the observer. The following are the results of reflections from the implementation of PLP II by observers: “(1) The learning media used should be more interesting and interactive because this will make students more motivated in learning in class; (2) By giving directions and warnings to students who are less conducive and less focused on learning; (3) Giving questions is needed, so that students are more active in learning in class; (4) The responsiveness of teachers to learning activities is still lacking because the condition of students who are not active should be encouraged by various triggers such as questions and answers or giving a game; (5) The contents of the RPP are incomplete, namely the absence of assessment indicators; (6) The use of technology in learning is less developed because it only uses ppt and there are no tools used for demonstrations for students who have limited devices”. This aims to provide input to prospective teacher students to make improvements to their teaching abilities under the curriculum and teaching practices that have been studied previously [18]. The reflection process carried out is by tending to determine the focus of the mentoring conversation and overcoming problems that arise with direct practice [19]. Figure 2 below is the result of reflections carried out on PLP II implementation activities.

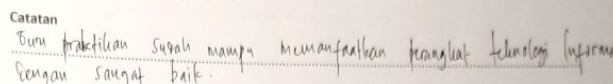


Figure 2. Reflection Results from the Civil Service Teacher

In addition, activity reports are also produced from PLP phase II activities. The preparation of this activity report was carried out individually even though the implementation was carried out in

groups. This activity report contains learning activities and the implementation of school administration by student-teacher candidates and can be used as a tool to assess the competence of prospective teacher students [20]. This is done so that prospective teacher students can express their ideas through writing according to the implementation of this activity. Furthermore, an evaluation of the implementation of activities carried out by the Examining Lecturer to prospective teacher-students is carried out through a result seminar. The results seminar process is carried out by presenting the results to students, followed by questions and answers from the examiner lecturer to students.

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