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Research paper

The Contribution of Micro Teaching Achievements and Teaching Readiness to Teaching Practicum Achievements in the Civil Engineering and Planning Education Study Program Faculty of Engineering Yogyakarta State University

Nur Izzi Sibiani[a*], V. Lilik Hariyanto[a] & Aan Yudianto[b]

[a] Yogyakarta State University, Department of Civil Engineering and Planning Education, Faculty of Engineering, Indonesia
[b] The University of Manchester, Department of Mechanical, Aerospace and Civil Engineering, United Kingdom

*Corresponding Author: nurizzisibiani@gmail.com

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ABSTRACT

Background: The main purpose of this study was to determine the contribution of micro-teaching achievements and teaching readiness to teaching practicum achievements in the Civil Engineering and Planning Education Study Program at the Faculty of Engineering, Yogyakarta State University.

Methods: This research is an ex post facto study. The population of this study was 90 students of the Civil Engineering and Planning Education Study Program, class of 2019, with a sample of 73 students. The data collection technique used is a questionnaire and documentation methods. Furthermore, data analysis was carried out using descriptive statistics, prerequisite analysis tests, and multiple regression analysis.

Results: The results of the study show that: 1) there is a positive and significant effect of micro-teaching achievements on teaching practicum achievements with $t_{count} > t_{table}$ (2.480 >1.993943) at a significance level of 5%; 2) there is a positive and significant effect of teaching readiness on teaching practicum achievements with $t_{count} > t_{table}$ (25.871 > 1.993943) at a significance level of 5%; and 3) there is a positive and significant effect of micro-teaching achievements and teaching readiness together on teaching practicum achievements with $R_2 = 0.966$; $F_{count} > F_{table}$ (1009.222 >3.12576424) at a significance level of 5%. The relative contribution of micro-teaching achievements is 7.296% and the effective contribution is 7.05%. The relative contribution of teaching readiness is 92.704% and the effective contribution is 89.58%.

Conclusion: There is a positive and significant influence of Micro Teaching Achievements and Teaching Readiness on Teaching Practicum Achievements in the Civil Engineering and Planning Education Study Program with a contribution of 96.63%.

INTRODUCTION

Yogyakarta State University is one of the Education Personnel Education Institutions (LPTK) in Indonesia. LPTK are universities that print prospective educators and produce professional educators who are ready and play a role in advancing education in Indonesia. As stated by Dr. Marsigit, MA, in the Commission I Session on December 7, 2009, in addition to producing academics and non-educational professionals, Yogyakarta State University has the main task of producing educational personnel and developing educational science and teacher science. The task of YSU as an LPTK in producing educational personnel must have the required competency standards to become qualified educators.

LPTK as the organizer of Teacher Professional Education and Training (PLPG) produces educators who have four standards of teacher competence as stated in Chapter VI Article 3 of Government Regulation Number 19 of 2005 concerning National Education Standards. Among the four competency standards are social competence, personality competence, professional competence, and pedagogical competence. This qualification is the basic ability that animates a prospective educator in preparing to become a competent and qualified educator so that it is considered to have a strategic position in learning activities (Iswardhany & Rahayu, 2020). Preparation as a teacher goes through an educational process. The prospective educators will attend lectures in the field of education through a learning process that has certain competency standards as an effort to improve the quality of prospective educators themselves.

Improving the quality of prospective educators is done by providing education and training that is oriented to the results and impacts in the future. The training provided must be designed based on a needs analysis and with the correct training principles so that the results of the training can be applied in the field. This means that the training is tailored to the needs of prospective educators who will go to schools. Thus, the improvement of quality and competency standards is not only based on internal evaluation but also adjusted to the results of external evaluation. Referring to Krik Patrick's opinion in Sutarto (2013), there are four levels of training evaluation consisting of internal (ET1 = Reaction/Response and ET2 = Learning Achievements) and external (ET3 = Application and ET4 = Impact) evaluations. In this case, YSU as an LPTK must facilitate prospective educators in order to measure the impact or results of the training on improving the quality of learning carried out. Training as a form of internal evaluation is carried out in the form of learning training, while external evaluation is carried out by going directly to the field in the form of a Teaching Practicum. The ability to carry out effective learning will be measured, become an indicator of the success of the training conducted, and become a reference for evaluating and improving the next training.

Micro Teaching is a compulsory expertise course found in Education and Teacher Training majors in higher education. Micro Teaching is a forum for teaching practice in developing and improving the abilities and insights of students as prospective educators to be better prepared and able to solve problems in the world of education (Arifmiboy, 2019: 11). Through Micro Teaching, basic teaching skills needed by a prospective educator are practiced through observation, understanding, planning, and implementation (Helmiati, 2013: 16). Micro Teaching is a teaching practice with a simplified concept, carried out on a smaller scale, with fewer participants because it is carried out with the concept of peer teaching. Peer teaching is a

teaching concept carried out with peers or in other words with classmates. In addition, the material conveyed, and the time used is less.

The purpose of Micro Teaching is to develop effective teaching strategies and as an opportunity to explore and improve various teaching skills (Imaniah, 2019). According to Pratama and Triyono in Pratama, et al. (2020), Micro Teaching is the initial stage in training to form the teaching competence of a prospective teacher. This will provide real teaching experience and opportunities to practice several skills separately and gradually. In addition, prospective educators are given an understanding of applying these skills so that they know the right time and way to use them in learning (Helmiati, 2013: 19). In Micro Teaching, prospective educators are required to practice these skills one by one so that they can master and understand the various basic teaching skills and explore more deeply the meaning and strategies for their application in the field.

After microteaching is carried out, prospective educators will carry out Teaching Practicum (PK) learning. PK is a process of observation and apprenticeship carried out by Bachelor of Education program students to study aspects of learning and managing education in educational units (Tim Penyusun Panduan PLP, 2019: 5). In this case, prospective educators will implement the competencies they have as a representation of the achievements of Micro Teaching that have been carried out. Prospective educators will be faced with actual conditions with a larger number of students. The debriefing that has been received is related to the ethics and professionalism of a teacher which includes four competencies, namely pedagogical competence, personality competence, social competence, and professional competence (Azkiyah & Mukminin, 2017). When these competencies can manage the class well, able to understand student conditions, able to master models, strategies, approaches, methods, and learning media, able to plan educational learning, able to master the principles and procedures of assessment and student learning Achievements and follow the achievement of other PK competency standards, it will certainly affect the achievements or results obtained by students in carrying out PK.

The implementation of PK does not always run smoothly. Based on the results of observations that have been made by researchers of students of the Civil Engineering and Planning Education Study Program, Faculty of Engineering, Yogyakarta State University class of 2019, there are several problems faced by students during the implementation of PK including the repeated mistakes when carrying out Micro Teaching. These problems also include being awkward while standing in front of the class, lack of class mastery, lack of variety in the learning media used, and learning methods that are still monotonous. In its implementation, students mostly use power point media, lectures, and learning references that come from one source, namely subject books or from modules provided by *Pamong* teachers. Therefore, the learning resources used. This indicates that the implementation of PK is less than optimal so that it is not as expected.

Based on research conducted by Awaliyahputri, et al. (2019), there are several problems faced by students in carrying out Field Practice Implementation (PPL, in other word is PK). Among these problems is the lack of mastery of basic teaching skills and not maximizing their application. The lack of maximum application of teaching skills is because PPL students do not practice these basic components and they are still stiff and nervous during the teaching practice, so they lack confidence. This is in line with the results of research conducted by Santoso, et al.

(2013) that 25% of students have low teaching skills. This is due to the lack of student teaching experience and the components of learning implementation that are less mastered, especially the skills of opening lessons and classroom management that are still lacking which causes interaction with students to be not optimal. In addition, the learning tools and media used are less interesting, the sources of subject matter are less varied, and the lack of mastery of learning materials causes a lack of authority of a teacher in teaching. In addition, there is also a lack of maximizing the class management so that the class control during the learning process is poor, hence it is too orderly and does not invite commotion.

Various factors can affect the successful implementation of PK, one of which is student readiness in teaching. Slameto (2010: 113) argues that readiness is an overall condition possessed by a person that makes him ready to respond in a certain way to a situation. Readiness is one of the important things that must be considered by individuals every time they do something, including in terms of teaching. This is because in carrying out PK, students will face various kinds of situations that have never been experienced on campus, such as teaching many students in front of the class, interacting with students, and interacting with other school residents. Through the implementation of PK at schools, students as prospective teachers will gain various experiences to be able to overcome various problems in the reality of implementing learning, so that they have the ability to carry out the teaching process (Nadzima et al., 2021).

The readiness of Teaching Practicum students in teaching is influenced by several aspects. As stated by Slameto (2010: 15), readiness is influenced by three aspects, namely, 1) physical, mental, and emotional conditions; 2) needs, motives, and goals; and 3) knowledge, skills, and experience. Students, as prospective teachers in carrying out Teaching Practicum with good and mature teaching readiness, will be able to improve their professionalism as teachers so that the expected learning achievements in the implementation of Teaching Practicum can be achieved as expected.

However, there are still various problems in the field related to teaching readiness. Based on the observations that have been made by researchers on students of the Civil Engineering and Planning Education Study Program, Faculty of Engineering YSU class of 2019, many students copy and paste lesson plans (RPP). Whereas students as prospective teachers should learn to make their lesson plan before implementing the learning process that is tailored to the conditions and characteristics of the students to be taught. Then the lack of teaching readiness is also seen when implementing evaluations where if there are students who have not met the passing grade, students will be asked to do the same questions as the previous exam questions as a form of remedial. Then students will be considered to have understood the material if, from the remedial results, students get good grades. Students should be given a re-understanding of the material that has not been mastered because teaching is not just giving assessments, but also understanding.

Based on the results of research by Sukoco (2013), students have a fairly good perception of the competence possessed by PPL students. However, it is necessary to make a few additions and improvements in terms of preparation before carrying out learning. In addition, students need to understand more about the competencies needed in teaching. Like research by Waluyanti and Santoso (2015), based on the results of observations of problems carried out as field supervisors, several PPL students failed due to teaching unpreparedness. This is because

students were less confident in their teaching abilities at the first meeting and feared for the next meeting.

Based on some of the research results above, many components must be owned by students who carry out Teaching Practicum. Various competencies must be learned and possessed as provisions for prospective teachers to carry out actual teaching practice. How much preparation and readiness of students as prospective teachers in teaching in the classroom will affect the results of the implementation of teaching practice carried out. A better understanding of the Contribution of Micro Teaching Achievements and Teaching Readiness to Teaching Practicum Achievements is important for designing more effective training strategies to improve the quality of prospective teacher education. Therefore, based on the background of the problem, researchers are interested in researching "The Contribution of Micro Teaching Achievements and Teaching Readiness to Teaching Practicum Achievements in the Civil Engineering and Planning Education Study Program, Faculty of Engineering, Yogyakarta State University."

METHODS

This research is ex-post facto research which is a method to uncover events that have already occurred and look at various factors related to these events. This means that the data obtained is the result of events that have occurred so that the results of measuring symptoms that already exist in respondents only reveal facts based on these measurements. In this study, the Teaching Practicum Achievements are the dependent variable aiming to look for factors that influence the event by looking back related to behaviour or events that have occurred previously on independent variables, which are Micro Teaching Achievements and Teaching Readiness.

In describing a variable related to its characteristics and how it works, an operational definition of the variable is needed to prevent dissimilarity in interpretation of the terms in the research variable. Operational definition of the independent variable related to Micro Teaching Achievements is an expression of learning objectives related to the standards of what students should know, understand, and be able to do after participating in Micro Teaching which is carried out on campus with peers and measured by evaluation results related to the ability to prepare lesson plans, the ability to carry out the opening activities of the teaching and learning process (PBM), core activities, and closing activities. Then, Teaching Readiness is a state in which individuals have adequate physical conditions, mental, social, and emotional conditions to carry out teaching activities effectively and can carry out the complexity of the teaching and learning process accompanied by existing risks to realize the previously prepared plans. Meanwhile, the operating definition of the dependent variable related to Teaching Practicum Achievements is almost the same as Micro Teaching Achievements, the difference is the location and the subjects taught, where Micro Teaching is carried out on campus with peer subjects, while Teaching Practicum is carried out at school with school student subjects.

The population used in this study were students of the Civil Engineering Education and Planning Study Program at the Faculty of Engineering, Yogyakarta State University class of 2019 with a total population of 90 students, including 38 students from class A, 30 students from class B, and 22 students from class C. Among the population, the samples were 73 students, selected through the Krejcie and Morgan method. The class of 2019 were used as subjects because they had completed most of their courses, including micro-learning and educational practice. This

allows for comprehensive data collection regarding both the independent and dependent variables under study, as they have had sufficient experience in both fields. In this case, the sampling technique was carried out using a simple random sampling method, where each sampling unit as an isolated population element had the same opportunity to become a sample or to represent the population. By using this technique, the possibility of bias in sample selection was minimized. No subject was advantaged or disadvantaged in the selection process, making the research results more reliable and valid.

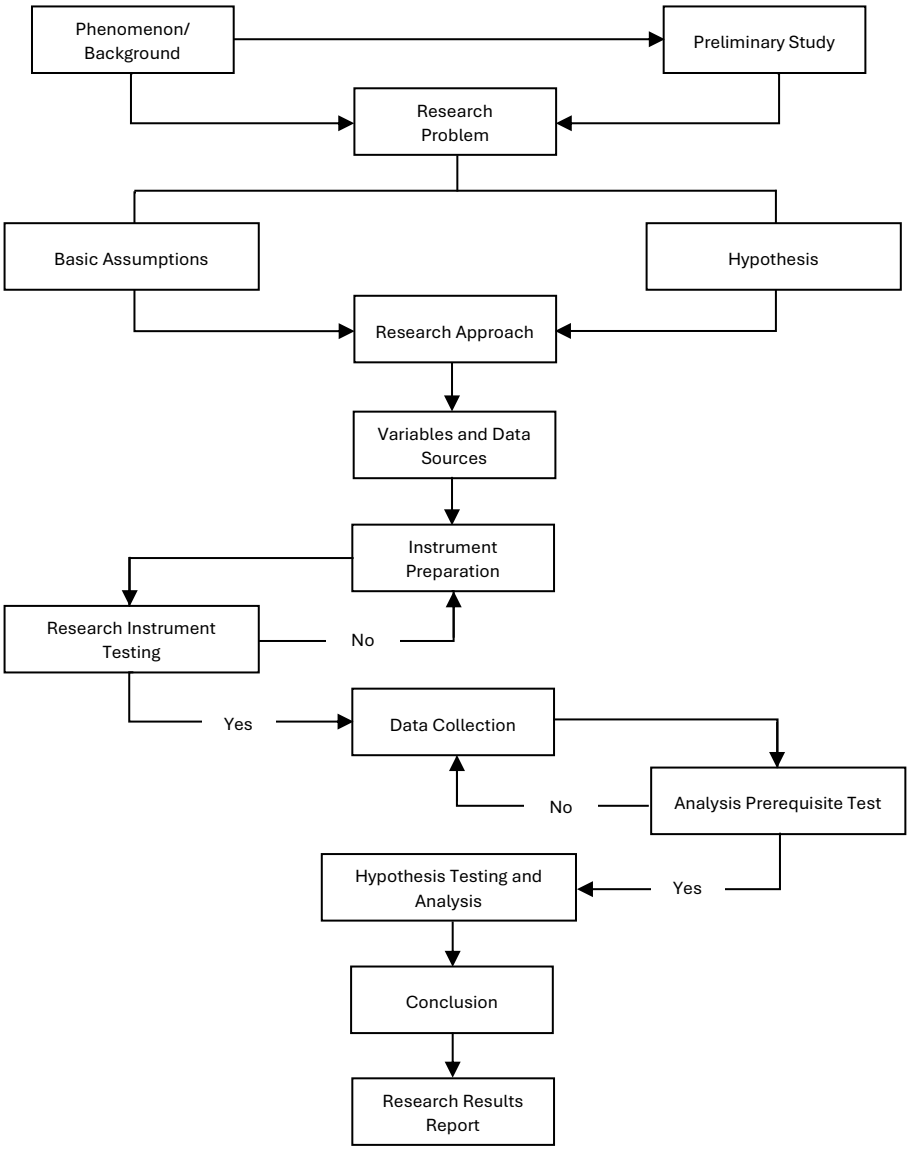

Figure 1. Chart of Research Process

Data collection techniques were carried out in two ways, namely questionnaires and documentation. Questionnaires were used to obtain data on the Teaching Readiness variable. In this case, the questionnaire used is the closed type, aiming that the data that has been collected can be measured statistically and can be quantified as a measure of the existing variables (Suwartono, 2014: 55). Furthermore, the data collection method used is documentation, used method is to collect data related to the variables of Micro Teaching Achievements and Teaching Practicum Achievements which are the results of assessments from lecturers teaching Micro

Teaching courses and Teaching Practicum Achievements which are the results of assessments from field supervising teachers from Vocational High School (SMK).

In this study, the instrument test was carried out with a content validity test by a judgment expert. In this case, the judgment expert is one of the lecturers from the lecturers of the Civil Engineering and Planning Education Department, Faculty of Engineering, YSU. After the validity test was carried out, then the reliability test was carried out. The reliability test was carried out internally with internal consistency by utilizing the Cronbach Alpha coefficient. The data reliability test was conducted on 30 students of the Civil Engineering and Planning Education Study Program, Faculty of Engineering, YSU class of 2019.

Data analysis techniques were carried out with descriptive statistics, prerequisite analysis tests, and hypothesis testing. The data description used in this study is by determining the mean, median, and mode values, followed by making a frequency distribution table, followed by making a variable tendency table, and finally making a bar chart. The prerequisite test of the analysis carried out consists of three tests, namely normality test, linearity test, and multicollinearity test. Furthermore, hypothesis testing was carried out by conducting a multiple regression test and then looking for the relative contribution (SR) and effective contribution (SE) of the independent variable to the dependent variable.

RESULTS AND DISCUSSION

Based on the results of data collection conducted on 73 respondents, data related to the variables of Micro Teaching Achievements, Teaching Readiness, and Teaching Practicum Achievements have been obtained. Micro Teaching Achievement variables were obtained through documentation of student learning achievements with the following description.

Table 1.
Description of Micro Teaching Achievements Variabel

Minimal (Xr)	Maximal (Xt)	Mean (M)	Median (Me)	Mode (Mo)	Standard Deviation (SD)
73.00	93.00	87.93	93.00	93.00	6.02

Table 2.
Recap of Conversion of Micro Teaching Achievements to Grade Categories in Academic Regulations 2021

Letter Grade	Value Range	Frequency	Percentage	Category
A	86 - 100	40	54,79%	With Compliments
A-	81 - 85	26	35,62%	Very Satisfactory
B+	76 - 80	5	6,85%	Satisfactory
B	71 - 75	2	2,74%	Passed*)
Total		**73**	**100%**	

Based on the table above, it can be seen that the frequency of Micro Teaching Achievements variable in the predicate with praise is 40 students (54.79%), the frequency of Micro Teaching Achievements variables in the very satisfying category is 26 students (35.62%), the frequency of Micro Teaching Achievements variables in the satisfying category is 5 students (6.85%), and the frequency of Micro Teaching Achievements variables in the pass category is 2 students (2.74%). So, it can be concluded that the tendency of the Micro Teaching Achievements variable is in the predicate with praise, namely 40 students (54.79%).

Data on the Teaching Readiness variable was obtained through a questionnaire data collection technique consisting of 30 statement items with scoring guidelines using a Likert scale

where there are 5 alternative answers with the highest score being 5 and the lowest score being 1. The description of the Teaching Readiness variable can be seen in the following table.

Table 3.
Description of Teaching Readiness Variabel

Minimal (Xr)	Maximal (Xt)	Mean (M)	Median (Me)	Mode (Mo)	Standard Deviation (SD)
92.00	138.00	113.40	115.00	118.00	12.03

After analyzing the data to find the values listed in the table above, then look for the frequency distribution of these variables was looked for. The frequency distribution of the Teaching Readiness variable was carried out in the following stages.

1. Determining the Number of Interval Classes
   $= 1 + 3.3\ log\ log\ n$
   $= 1 + 3.3\ log\ 73$
   $= 7.149 \approx 7$
2. Calculating the Class Range
   $= highest\ score - lowest\ score$
   $= 138 - 92$
   $= 46$
3. Determining Class Length
   $= \frac{class\ range}{number\ of\ interval}$
   $= \frac{46}{7}$
   $= 6.434$
   ≈ 7

Table 4.
Data Frequency Distribution of Teaching Readiness Variable

Interval	F	Percentage
91.5 – 98.5	9	4.110%
98.5 – 105.5	14	6.849%
105.5 – 112.5	10	20.548%
112.5 – 119.5	16	27.397%
119.5 – 126.5	16	27.397%
126.5 – 133.5	4	8.219%
133.5 – 140.5	4	5.480%
Total	**73**	**100%**

Based on the frequency distribution table above, the frequency distribution histogram of the Teaching Readiness variable can be depicted as shown in Figure 2 as follows.

To categorize the Teaching Readiness variable, the ideal score criteria were used. The calculations were carried out as follows.

Number of items $= 30$
Assessment $= 1 - 5$
$X_{min\ i}$ $= 30 \times 1 = 30$
$X_{max\ i}$ $= 30 \times 5 = 150$
M_i $= \frac{1}{2}(150 + 30) = 90$
SD_i $= \frac{1}{6}(150 - 30) = 20$

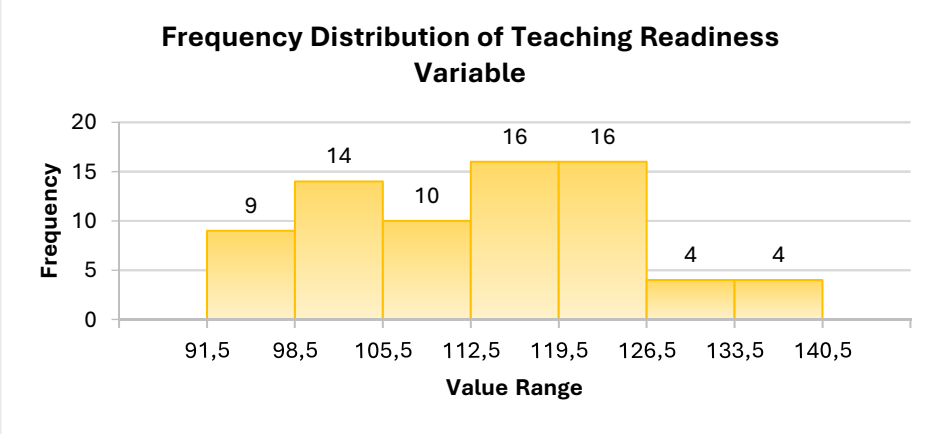

Figure 2. Histogram of Frequency Distribution of Teaching Readiness Variable

After knowing the ideal mean value and ideal standard deviation, then the data from these variables were categorized into five categories of variable tendencies, namely very high, high, medium, low, and very low. The following is the category of the tendency of the Teaching Readiness variable as shown in the table below.

Table 5.
Category of Teaching Readiness Variable

Formula	Limitations	Frequency		Category
		Absolut	Relative	
$X > Mi + 1{,}5SDi$	$X > 120$	20	27.40%	Very High
$Mi + 0{,}5SDi < X \leq Mi + 1{,}5SDi$	$100 < X \leq 120$	39	53.42%	High
$Mi - 0{,}5SDi < X \leq Mi + 0{,}5SDi$	$80 < X \leq 100$	14	19.18%	Medium
$Mi - 1{,}5SDi < X \leq Mi - 0{,}5SDi$	$60 < X \leq 80$	0	0.00%	Low
$X \leq Mi - 1{,}5SDi$	$X \leq 60$	0	0.00%	Very Low
Total		**73**	**100%**	

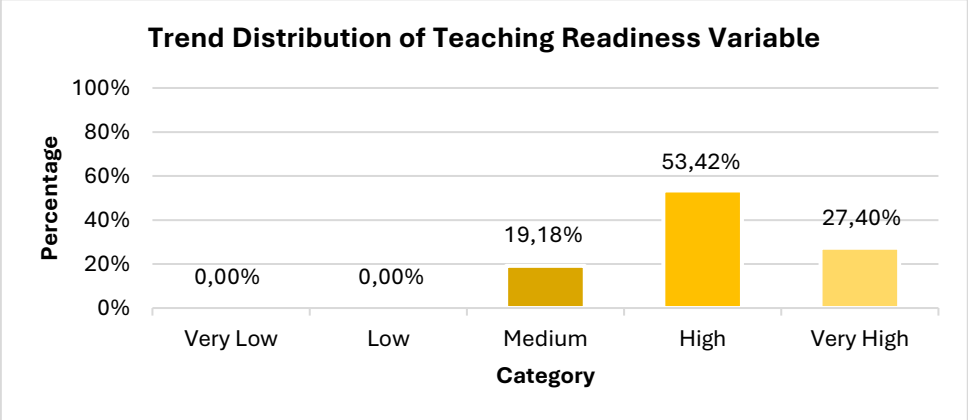

Figure 3. Bar Diagram of Trend Distribution of Teaching Readiness Variable

Based on the table and pie chart above, it can be seen that the frequency of the Teaching Readiness variable in the very high category is 20 students (27.40%), the frequency of the Teaching Readiness variable in the high category is 39 students (53.42%), the frequency of the Teaching Readiness variable in the medium category is 14 students (19.18%), and the frequency of the Teaching Readiness variable in the low and very low categories is 0 students (0.00%). So, it can be concluded that the tendency of the Teaching Readiness variable is in the high category, namely 39 students (53.42%).

Data description related to the Teaching Practicum variable of the 2019 Civil Engineering and Planning Education Study Program students, obtained through documentation of student learning achievements with the following description.

Table 6.
Description of Teaching Practicum Variabel

Minimal (Xr)	Maximal (Xt)	Mean (M)	Median (Me)	Mode (Mo)	Standard Deviation (SD)
85.00	94.00	88.26	89.00	85.00	2.48

Table 7.
Recap of Conversion of Teaching Practicum Achievements to Grade Categories in Academic Regulations 2021

Letter Grade	Value Range	Frequency	Percentage	Category
A	86 - 100	54	73.97%	With Compliments
A-	81 - 85	19	26.03%	Very Satisfactory
B+	76 - 80	0	0.00%	Satisfactory
B	71 - 75	0	0.00%	Passed*)
Total		**73**	**100%**	

Based on the table above, it can be seen that the frequency of the Teaching Practicum Achievements variable in the predicate with praise is 54 students (73.97%), the frequency of the Teaching Practicum Achievements variable in the very satisfactory category is 19 students (26.03%), the frequency of the Teaching Practicum Achievements variable in the satisfactory category is 0 students (0.00%), and the frequency of the Teaching Practicum Achievements variable in the past category is 0 students (0.00%). So, it can be concluded that the tendency of the Teaching Practicum Achievements variable is in the predicate with praise, namely 54 students (73.97%).

The first hypothesis tested is that there is a positive and significant influence between Micro Teaching Achievements on Teaching Practicum Achievements in the Civil Engineering and Planning Education study program, Faculty of Engineering, Yogyakarta State University. The following are the results of the first hypothesis test as listed in the table below.

Table 8.
First Hypothesis Test Results

Mod. *	r_{x1y}	t_{count}	t_{table}	Coeff.	Sig.	Description.
X_1	0.282	11.415	1.993	0.103	0.000	Positive and Significant

*) Dependent Variable: Teaching Practicum Achievements

Based on the table above, the correlation coefficient (r_{x1y}) of Teaching Readiness on Teaching Practicum Achievements is 0.282 and the regression coefficient is 0.103. These results indicate a positive influence between Micro Teaching Achievements on Teaching Practicum Achievements. This means that the higher the student's Micro Teaching Achievements, the higher the Teaching Practicum Achievements achieved. Conversely, if the Micro Teaching Achievements are low, the Teaching Practicum Achievements will also be low. In testing the significance using the t-test, a t_{tcount} of 11.415 was obtained compared to the value t_{tabel} at the 5% significance level, which is 1.993 with a significance value of 0.000. This result shows that t_{count} is much greater than t_{tabel} (11.415 > 1.993) and a significance value of 0.000 < 0.05, which means that Micro Teaching Achievements significantly affect Teaching Practicum Achievements. The

conclusion that can be drawn from this analysis is that there is a positive and significant effect of Micro Teaching Achievements on Teaching Practicum Achievements.

The results of this study are supported by the opinion stated by Helmiyati (2013: 19) that to equip the basic skills needed by students in teaching, Micro Teaching is needed. Therefore, real teaching experience and opportunities need to be provided to practice several skills separately and gradually. In addition, prospective educators are given an understanding of applying these skills so that they know the right time and way to use them in learning. Related to this, results of previous research conducted by Brown & Armstrong in Helmiati (2013: 24-25) that prospective teachers, in this case, students, who carry out micro-teaching will have better teaching performances in carrying out educational practices, are more skilled than prospective teachers who do not take part in micro-teaching, have high scores in Teaching Practicum, and will strengthen the interaction between prospective teachers and students. Students who have careful preparation during the implementation of Micro Teaching with learning achievements that follow the existing competency standards will certainly be more skilled in teaching than students who lack careful preparation in Micro Teaching. Thus, if students have a high level of Micro Teaching Achievements, they will also have high Teaching Practicum Achievements.

Based on the results of these studies and opinions, it can be concluded that there is a positive and significant effect of Micro Teaching Achievements on Teaching Practicum Achievements. The positive correlation coefficient results above indicate that there is a directly proportional relationship between Micro Teaching Achievements and Teaching Practicum Achievements. Students who have careful preparation during the implementation of Micro Teaching with learning achievements that follow predetermined competency standards will certainly have good teaching skills so that they will produce high Teaching Practicum Achievements. Therefore, the higher the student's Micro Teaching Achievements, the higher the student's Teaching Practicum Achievements.

The second hypothesis tested is that there is a positive and significant influence between Teaching Readiness and Teaching Practicum Achievements in the Civil Engineering and Planning Education study program, Faculty of Engineering, Yogyakarta State University. The following are the results of the second hypothesis test as shown in the table below.

Table 9.
Second Hypothesis Test Results

Mod. *	r_{x2y}	t_{count}	t_{table}	Coeff.	Sig.	Description.
X_2	0.951	43.035	1.993	0.194	0.000	Positive and Significant

*) Dependent Variable: Teaching Practicum Achievements

Furthermore, it is also known based on the table above that the correlation coefficient (r_{x2y}) of Teaching Readiness on Teaching Practicum Achievements is 0.951 and the regression coefficient is 0.194. These results indicate a positive influence between Teaching Readiness on Teaching Practicum Achievements. This means that the higher the student's Teaching Readiness, the higher the Teaching Practicum Achievements achieved. Conversely, if the student's Teaching Readiness is low, the Teaching Practicum Achievements will also be low. In testing the significance using the t-test, a t_{count} of 43.035 was obtained compared to the t_{tabel} at the 5% significance level, which is 1.993 with a significance value of 0.000. This result shows that

$t_{count\ is}$ much greater than t_{tabel} (43.035 > 1.993) and has a significance value of 0.000 < 0.05, which means that Teaching Readiness significantly affects the Teaching Practicum Achievements. The conclusion that can be drawn from this analysis is that there is a positive and significant effect of Teaching Readiness on Teaching Practicum Achievements.

The results of this study are supported by the opinion stated by Slameto (2010: 113) that readiness is one of the important things that must be considered by individuals every time they do something, including in terms of teaching. This is because in carrying out a Teaching Practicum, students will face various kinds of situations that have never been experienced on campus, such as teaching many students in front of the class, interacting with students, and interacting with other school residents. Students who have mature Teaching Readiness in carrying out Teaching Practicum will certainly be better able to manage classes, be skilled in teaching, and be able to deal with various problems that exist during teaching when students have good Teaching Readiness, the achievements of Teaching Practicum will also be high.

Based on the results of these studies and opinions, there is a positive and significant effect of Teaching Readiness on Teaching Practicum Achievements. The positive correlation coefficient results above indicate that there is a directly proportional relationship between Teaching Readiness and Teaching Practicum Achievements. Students need to have a mature teaching readiness to facilitate the implementation of learning in the classroom so that the designed lesson plan can be implemented properly. With mature teaching readiness, it is able to minimize various possible mistakes that can occur so that a teacher looks more professional. With mature teaching readiness, students also have good abilities and skills so that the achievements of Teaching Practicum can be met in accordance with predetermined competency standards. Therefore, the higher the student's Teaching Readiness, the higher the Teaching Practicum Achievements that the student has.

Table 10.
Third Hypothesis Test Results

Mod. *	R	R^2	F_{count}	F_{table}	Description.
X_{12}	0.983	0.966	1009.222	3.125	Positive and Significant

*) Dependent Variable: Teaching Practicum Achievements

Furthermore, it is also known based on the table above that the value of the correlation coefficient (R) is 0.983 and the coefficient of determination (R^2) is 0.966. This shows that there is a positive influence of Micro Teaching Achievements and Teaching Readiness on Teaching Practicum Achievements, which means that the higher the Micro Teaching Achievements and Teaching Readiness of students, the higher the Teaching Practicum Achievements. Vice versa, if the lower the Micro Teaching Achievements and Teaching Readiness of students, the lower the Teaching Practicum Achievements. After testing the significance with the F test, the F_{count} is 1009.222 which is then compared with the value of F_{tabel} at the 5% significance level, which is 3.125. This shows that $F_{count\ is}$ greater than F_{tabel} (1009.222 > 3.125), so that the variables of Micro Teaching Achievements and Teaching Readiness have a significant influence on Teaching Practicum Achievements. The conclusion that can be drawn from this analysis is that there is a positive and significant influence of Micro Teaching Achievements and Teaching Readiness on Teaching Practicum Achievements.

Then the relative contribution (SR) of Micro Teaching Achievements to Teaching Practicum Achievements is 7.296% and Teaching Readiness is 92.704% with a total SR of 100%. Meanwhile, for the effective contribution (SE) the Micro Teaching Achievement variable given to the Teaching Practicum Achievements contributed 7.05% and Teaching Readiness amounted to 89.58% so the total SE was 96.63%, which means that the Micro Teaching Achievement and Teaching Readiness variables (X_2 together make an effective contribution of 96.63% to the Teaching Practicum Achievements. In addition, there are also other factors that can affect the Teaching Practicum Achievements by 3.37% which are not discussed in this study.

The results of this study are supported by the opinion stated by Helmiyati (2013: 19) that to equip the basic skills needed by students in teaching, Micro Teaching is needed. This will provide real teaching experience and opportunities to practice several skills separately and gradually. Furthermore, according to Slameto (2010: 113) readiness is one of the important things that must be considered, including in terms of teaching. Students who have a mature teaching readiness in carrying out Teaching Practicum will certainly be better able to manage classes, be skilled in teaching, and be able to deal with various problems that exist during teaching. Therefore, students who have good Micro Teaching Achievements and mature Teaching Readiness will certainly influence increasing the Teaching Practicum Achievements.

If you look at the effective contribution (SE) given by each independent variable to the dependent variable, there is a very large difference. Micro Teaching Achievement provides a very small effective contribution of 7.05% when compared to the effective contribution given by Teaching Readiness which has a very large percentage, namely 89.58%. This is influenced by several factors, one of which is the weak level of relationship between variables. As seen in the previous discussion the Micro Teaching Achievements data has a very low variance which causes the low correlation value between variables, while the Teaching Readiness data has a very high data variance which affects the high correlation coefficient value as well.

A weak correlation coefficient can influence the effective contribution given because the correlation coefficient is used to measure how close the relationship is between two variables in research. When the correlation coefficient between two variables is weak, it means that the relationship between the two variables is not very close, and the variables do not influence each other strongly. When the relationship between two variables is weak, the effective contribution made by the variable in the study will be smaller. This is because when the relationship between two variables is weak, the variable does not have a significant influence in explaining the variation in the research results. In this case, the variable does not really play a role in explaining the relationship between the variables under study.

This is following research conducted by Nugroho (2017) on "Kontribusi Mata Kuliah Micro Teaching dan Praktik Pengalaman Lapangan (PPL) terhadap Kesiapan Mengajar Mahasiswa Program Studi Pendidikan Teknik Sipil dan Perencanaan Fakultas Teknik Universitas Negeri Yogyakarta". This research discovers that the coefficient of determination of the micro-teaching variable is 0.072, which means that the relative contribution given by the micro-teaching variable is 7.2% to the teaching readiness variable. This is in line with the results of this study where the effective contribution value given by the Micro Teaching Achievement variable to the Teaching Practicum Achievement is 7.05%. When compared between these two studies, Micro Teaching Achievements both provide effective contributions that are not much different from each dependent variable with a level that is not too significant.

Based on the results of these studies and opinions, it can be concluded that there is a positive and significant effect of Micro Teaching Achievements and Teaching Readiness on Teaching Practicum Achievements. The positive correlation coefficient results above indicate that there is a directly proportional relationship between Micro Teaching Achievements and Teaching Readiness to Teaching Practicum Achievements.

It is important for students to have thorough preparation and readiness for teaching in order to facilitate the implementation of learning in the classroom so that the designed lesson plan can be implemented properly and be able to provide a successful learning experience for students or learners. Preparation before teaching allows teachers to plan lessons well, choose appropriate teaching methods, and prepare the resources needed. With careful preparation and readiness to teach, it is possible to minimize various possible mistakes that can occur and feel more confident and calmer when teaching so that a teacher looks more professional. With careful preparation and readiness to teach, students also have good abilities and skills so that the Teaching Practicum Achievements can be met following predetermined competency standards. Therefore, the higher the Micro Teaching Achievements and Teaching Readiness of students, the higher the Teaching Practicum Achievements will be.

CONCLUSION

Based on the results and discussion in this study, it can be concluded that there is a positive and significant influence of Micro Teaching Achievements on Teaching Practicum Achievements in the Civil Engineering and Planning Education Study Program, Faculty of Engineering, Yogyakarta State University with a contribution of 7.05%. There is a positive and significant effect of Teaching Readiness on Teaching Practicum Achievements in the Civil Engineering and Planning Education Study Program, Faculty of Engineering, Yogyakarta State University with a contribution of 89.58%. In addition, there is also a positive and significant influence of Micro Teaching Achievements and Teaching Readiness on Teaching Practicum Achievements in the Civil Engineering and Planning Education Study Program, Faculty of Engineering, Yogyakarta State University with a contribution of 96.63%. Furthermore, variables that show a low contribution do not necessarily mean that the variable is not important. Therefore, it is necessary to conduct further research with a better research design and the use of methods that need to be improved.

The findings of this study should be considered given the limitations. Data related to the variables of Micro Teaching Achievements and Teaching Practicum Achievements were collected using the documentation method where the data is biased because the results of the data obtained in the form of letter grades were interpreted into numerical values by researchers according to academic regulations and the results of the data obtained so that it can affect the validity of the research. However, even though this study has the potential to contribute evidence as evaluation material needed to examine the quality of learning and teaching of prospective teacher students to improve the resulting quality as expected.

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