

The Contribution of Microteaching Achievement and Instructional Design Achievement on Teaching Practicum Achievement of the Students at The Faculty of Teacher Training and Education t he University of Jember

Zakiyah Tasnim¹ and M. Sulthon Masyhud²

¹Department of English Teacher Education, The University of Jember.

²Department of Elementary School Teacher Education, The University of Jember.

*Corresponding

ABSTACT

The research aimed to investigate the contribution of Microteaching achievement and Instructional Design achievement on the students' teaching practicum achievement. The research design was Ex-post facto having 70 students of the Faculty of teacher training and Education, the University of Jember as the research sample. Documentation was used to collect the data needed, whereas Multiple Regression and Product Moment Pearson Correlation were applied to analyze the collected data. The research results showed that the two variables, Microteaching achievement and Instructional Design achievement, being together, had contribution of 80.393% on the students' teaching practicum achievement. Separately, microteaching achievement had contribution of 60,778% and Instructional Design achievement had contribution of 19,615% on the students' teaching practicum achievement.

Key words: microteaching achievement, instructional design achievement, and teaching practicum achievement

INTRODUCTION

Globalization era at the present time demands professionalization in all fields, including in the field of education (Brown and Amstrong, 2019; Elam, 2011). The demands for professionalization in the field of education can directly affect the Faculty of teacher training and Education in preparing qualified and professional teacher candidates. Competence Based Teacher Education (CBTE) has been implemented in all Faculty of teacher training and Education, including the Faculty of Education at the University of Jember. CBTE emphasizes the performance of certain competencies. Therefore, teaching practicum has a very important role. The teaching practicum is not only a formal demand, but more than that it is also the target as well as the benchmark of the success of education (Elam, 2011; Laughtin & Moulton, 2015. Masyhud and Zakiyah, 2022).

The achievement of these competencies in the CBTE was carried out gradually through various activities, ranging from: the lecture on related education theories, microteaching practice, and then teaching practicum at schools under the guidance of a mentor and a supervisor (Masyhud and Zakiyah, 2022).

The three stages of the activities were in series and could not be separated from one to another. In the first stage, the lecture on related education theories was for awaring, and understanding deeply about education theories, and consolidating the education theories to the subject maters. All the activities were directed to the mastery of all theories related to any tasks of teacher candidates' professionalism (Masyhud and Zakiyah, 2022). In this study, mastering the theories related to the ability to create an instructional design was emphasized . This was chosen because the ability was directly related to construct an instructional

design which should be performed in teaching practicum. In addition, the ability to construct an instructional design was regarded as the accumulation of several theories that had been learnt by the students. The assumption was that good teaching skills needed to be preceded by the ability to plan a good instructional design.

The second stage, was conducting limited teaching practice on campus through microteaching practice. At this stage, the students were trained on the basic teaching skills in isolation, including the skills on setting induction, closing/ending lessons, explaining lessons, asking questions, classifying questions, managing classes, providing reinforcement, providing stimulus variations; teaching small groups and individuals, and guiding small group discussions. After that, they were trained to practice the all the basic teaching skills integrately (Masyhud and Zakiyah, 2022).

The microteaching practice was intended as a bridge between theoretical and practical abilities (Elam, 2011; Masyhud and Zakiyah, 2022). The use of microteaching as the bridge between theoretical and practical abilities was based on the traditional teacher education experience consisting of only two main components, namely theoretical lectures and teaching practicum in the practicum school. The idea got many experienced obstacles, and got many criticism (Brown and Armstrong, 2019). Because generally the basic courses are too verbal, too theoretical, and too philosophical, so the result is often too abstract and sometimes even obscure so that students have difficulty in applying it. Some evidence found that microteaching, with micro situations and conditions, can contribute positively to sharpen the teaching skills of prospective teachers (Brown and Armstrong, 2019; Loughlin & Moulton, 2015; Masyhud and Zakiyah, 2022).

Microteaching practice achievement in this research was defined as the final score achieved by students in microteaching practice on campus. After completing the micoteaching practice, the students were, at the culmination point of the establishment of teacher candidates's teaching competence/performance, doing teaching practicum at schools, which is done on the third stage (FKIP Universitas Jember, 2016; Masyhud and Zakiyah, 2022). Teaching practicum as well as the practice of educational tasks at practicum schools, were conducted in a guided and integrated manner to meet the requirements of the establishment of the teaching profession (FKIP-Universitas Jember; Kemendiknas, 2019).

Although the ability of teaching practicum included both teaching skills and other educational tasks, including outside-class counseling activities, in this study, the achievement of teaching practicum was only emphasized on teaching skills in the classroom, which was directly related to teaching and learning activities in the classroom and assessment of achievement. The teaching practicum was evaluated by using the Teacher Competency Assessment Tool. The reason was that it was directly related to most of the teacher' professional tasks.

If all the stages of the activity have been passed by a teacher candidate, it is expected he will be able to become a professional teacher, who can teach well. However, the problem still remained in this research were: Were the theories already prepared, especially those related to the the instructional design application and in accordance with the professional needs of a teacher (Masyhud and Zakiyah, 2022). Similarly, every component of teaching skill that has been isolated through a microteaching activity can be properly applied by a teacher candidate while undertaking a teaching practicum at a practicum school? These are the questions that challenge the researcher to study them further.

Based on the explanation above, the research problems were formulated as follows: Did microteaching practice achievement and instructional design achievement, being together or separated, have significant contribution on the teaching practicum achievement of the teacher candidates of the Faculty of Teacher Training and Education, the University of Jember? If yes, to what extent was the contribution of microteaching practice achievement and instructional design achievement on the teaching practicum

achievement of the teacher candidates of the Faculty of Teacher Training and Education, the university of Jember

LITERATURE REVIEW

The term “microteaching” is from two words “micro’ and “teaching”. Micro has some meanings: small, narrow, limited, and simple. While “teaching” refers to instructional activities. So, it can be understood that “microteaching” means any instructional activities in which the situation and the condition are small, limited and simplified.

The small, limited, and simplified situation and condition deal with the number the basic teaching skills (1-2 basic teaching skills), the number of students (5-10 students), the time allotment (5-15 minutes), and the learning materials (1-2 small simple units). (Masyhud, 2006; Masyhud and Zakiyah, 2022; Laughtin & Moulton, 2015). There are nine basic teaching skills that teacher candidates should master well gradually before they do their teaching practicum at schools. Those nine basic teaching skills are: (1) set induction and closure, (2) giving an explanation, (3) asking and responding to basic and advanced questions, (4) conducting learning activities with High Order Thinking (HOTS), (5) giving stimulus and variation, (6) giving reinforcement, (7) conducting classroom management, (8) individual and small group teaching, (9) guiding small group discussion. The differences between microteaching and real classroom teaching can be seen in the following table.

Table 1: The differences Between Microteaching and Real Classroom Teaching

No.	Aspects	Microteaching	Real Classroom Teaching
1.	Basic teaching skills	1-2 isolated basic teaching skills	Involving more than 2 basic teaching skills
2.	Number of students	5-10 students	30-40 students
3.	Time allotment	5-15 minutes	40-45 minutes
4.	Learning materials	1-2 small, simple units	broad and complex unit

As a technique of teaching practice, microteaching is not only conducted with isolated basic teaching skill practices; but it is also conducted with integrated basic teaching skills whenever the students have already performed well the isolated basic teaching in their microteaching practice (Laughtin & Moulton, 2015; Masyhud, Et. Al, 2017a)). It is very important because students who can perform well all the basic teaching skills isolatedly are not automatically can perform well all the basic teaching skills integratedly in their real classroom teaching. In order that they can perform well all the basic teaching skills integratedly, they need practice a lot. Therefore, it can be said that microteaching is regarded as the bridge to master well all the basic teaching skills needed in the instructional activities.

Another factor to be concerned with in preparing them to be able to teach well when they do real teaching at schools is having a good competency in constructing an instructional design (Laughtin & Moulton, 2015; Masyhud and Zakiyah, 2022). This competency is very important in order that the teacher students or the teacher candidates can prepare well dealing with the learning materials, strategy, methods, techniques, media, and assessment that they will use in the teaching-learning process so that they can to a professional teacher (Masyhud, 2018; Masyhud, 2017b). However, further research about how far the two competencies (microteaching and instructional design) affect the teacher- students’ teaching practicum achievement at schools needs to be conducted.

RESEARCH METHODS

To gain the objectives of the study as described in the previous section, the research design used was Ex-post facto. This design was chosen because this research tried to reveal the research data which at the time

of this research was done the events had passed, so the nature of this research was revealing the facts that had been going on. The disclosure of the facts is done through tracing and identifying and collecting the required data. Therefore, the design of this research was also called as causal comparative (Kerlinger, 2006, Arikunto, 2006, Masyhud, 2021). This research area was set on campus of The Faculty Teacher Education-University of Jember. The population of this research covered all students of S-1 program of Faculty of Teacher Training and Education, the University of Jember who have enrolled Microteaching course in odd semester of 2022/2023 academic year. The number of population in this study was 153 students of Faculty of Teacher Training and Education the University of Jember taken from 7 study programs. From the population, 70 students (45.75%) were taken as the research sample by using quota random sampling technique (Masyhud, 2021, Tuckman, 1998). 10 students of each study program were taken as the research sample, regardless of the number of sub-population. The data collection method used in this research was documentation method (Masyhud, 2021; Arikunto, 2006; Tuckman, 2008). The documentation was used to obtain the data related to the achievement of microteaching practice (Variable X1), the achievement of instructional design to construct a lesson plan (Variable X2), as well as the achievement of teaching practicum (Variable Y) (Masyhud, 2021; Ferguson, 2006). After the needed data were collected completely, the next step was to analyze the data by using three kinds of techniques: (1) descriptive statistical analysis, (2) multiple regression analysis and (2) product moment Pearson correlation analysis (Ferguson, 2006; Masyhud, 2021). The results of the data analysis were then used as the basis for hypothesis testing and drawing the conclusion of the research results. All the data analysis process was done by using computer program of SPSS, 26 version. The level of significance established for all hypothesis testing of the study was 0.05. For the completion of all series of research activities, overall it took four months, starting from July 2022 until December 2022.

RESULTS AND DISCUSSION

It has been explained in the previous section, that for the purposes of data analysis this study used three kinds of data analysis techniques, namely: 1) descriptive statistical analysis techniques, 2) multiple regression, and 3) partial correlation. Prior to main analysis using inferential statistics (multiple regression and partial correlation), a preliminary analysis was conducted by using descriptive statistics to obtain an overview on the existing data to be analyzed. The preliminary analysis results can be described briefly in table 2 as follows. Table 2: Microteaching Practice Scores, Instructional Design Scores, and teaching Practicum Scores of the Students of the Faculty of teacher training and Education, the University of Jember

No	Variable	N	Min	Max	Range	Mean	SD
1.	<i>Microteaching Achievement</i>	70	65	97	32	75.043	8,284
2.	<i>Instructional Design Achievement</i>	70	56	93	37	74,457	9,482
3.	<i>Teaching Practicum Achievement</i>	70	62	96	34	76,457	9.547

Furthermore, the result of data analysis with multiple regression technique showed that the regression coefficient was obtained as follows: $a_1 = 0,805150$, $a_2 = 0,278323$, with constant number equal to $-4,5686754$. With these results, the regression equation became as follows: $Y = 0.805150X_1 + 0,278323X_2 + -4,5686754$. Standard Estimation Error for the regression equation was obtained for $= 4,290$; While the multiple correlation (R) was obtained by $= 0.897$. The determinant coefficient (R-Square) was found to be $= 0.804$. The 'F-reg' value for the multiple regression equation was 137.356. Before the result of the analysis used to predict variable X against variable Y, two requirements, namely: (1) F-reg achieved which must be significant, and (2) the regression equation achieved which must be linear, must be fulfilled. The 'F-reg' significance test was done by comparing the calculated F-reg with 'F-table' with the significance level of

5%. If the value of 'F-reg' was greater than 'F-table', then the regression equation was significant. Conversely, if the value of 'F-reg' was smaller than 'F-table', then the regression equation was not significant. From the calculation, it was found that the value of 'F-reg' achieved was 137.356 showing greater than the value of F-table with 0.05 significant level for degrees of freedom (d.b) 2.67, which was 4.99. Therefore, it can be concluded that the regression equation obtained was significant. The linearity test was done by finding the estimated error variance (Standard Error) Y for X, then compared with the average sum of squares for the residue. If the variance was smaller or equal to the sum of the squares of the residue, then the multiple regression equation obtained was linear. However, if the variance was greater than the sum of the squares of the residue, then the multiple regression equation obtained was non-linear. The result of data analysis showed that the standard error of estimation obtained was equal to = 4,290 and after squared, it became = 18,405. This figure shows the same magnitude as the average number of squares of residue, which was equal to = 18.405. Thus it could be concluded that the multiple regression equation obtained was linear. From the two kinds of test, it was found that the multiple regression equation obtained had fulfilled the requirements as the basis in predicting every independent variable (X) on the dependent variable (Y), and thus it had also fulfilled the requirement for testing the research hypothesis. Furthermore, testing the research hypothesis was done based on the result of multiple correlation (R) calculation. The basic acceptance and rejection of the null hypothesis (H_0) is: if the multiple correlation (R) showed positive and greater than zero, the null hypothesis (H_0) was rejected and hence the alternative hypothesis (H_1) was accepted. Conversely, if the number of multiple correlation (R) indicated zero or negative, then the null hypothesis (H_0) was accepted and the alternate hypothesis (H_1) was rejected. The results of data analysis showed that the multiple correlation (R) obtained by was 0.897. This figure showed greater than zero. Thus, the null hypothesis (H_0) was rejected ($R > 0$). With the rejection of the null hypothesis (H_0), then the alternate hypothesis (H_1) was accepted. Thus, it can be concluded that being together all the independent variables consisting of (1) the achievement of the microteaching practice, and (2) the achievement of instructional design to construct a lesson plan, had a positive contribution to the achievement of teaching practicum of the students of the Faculty of Teacher Training and Education, The University of Jember. To determine whether all independent variables had a role as predictors of the dependent variable or not, a partial correlation analysis for each independent variable was done. That was for the achievement of microteaching practice and teaching practicum \ PPL achievement (r_{X_1Y}) and for the achievement of instructional design to construct lesson plan and teaching practicum achievement (r_{X_2Y}). The basis for rejection-and acceptance of the null hypothesis was a 0.05 significance level. If the results of the analysis showed equal or greater than the 0.05 significance level, the null hypothesis was rejected and the alternate hypothesis was accepted, and vice versa if the analysis results showed smaller than the 0.05 significance level, the null hypothesis was accepted and the alternate hypothesis was rejected. The results of hypothesis testing showed that all the independent variables, being together, affected the achievement of teaching practicum of the students (teacher candidate). Therefore, in the analysis of each element is done by looking for closeness of the relationship as an indicator and its effect. From the acquired relationship, it can be determined which independent variables can actually play a significant role as a predictor of students' teaching practicum achievement, and which are not or just "pseudo predictors". To be able to obtain the results of the correlation of each independent variable and the achievement of teaching practicum, the hypothesis test was done based on partial correlation analysis results. The result of correlation analysis done by using SPSS program computer to each independent variable to dependent variable showed that: (1) correlation coefficient between microteaching practice achievement and teaching practicum achievement or r_{X_1Y} was 0.778. The correlation coefficient when compared to the critical value (0.235) at the 0.05 significance level with $N = 70$ indicated greater. Therefore, it can be concluded that students' achievement in microteaching practice had an effect on the achievement of teaching practicum of the students of Teacher Training and Education Faculty of the University of Jember, (2) correlation coefficient between instructional design achievement and teaching practicum achievement or r_{X_2Y} obtained at = 0.440. The partial correlation coefficient when compared with the critical value at the 0.05 significance level with $N = 70$ indicated greater. The critical value for the significance level was 0.235. It can be concluded

that the students' instructional design achievement in making lesson plan had an effect on the achievement of the teaching practicum of the students of the Faculty of Education, the University of Jember. Based on the results of the analysis, it could be concluded, that the two independent variables had important significant role as a predictor and had a significant contribution to the establishment of teaching practicum achievement of students of the Faculty of teacher training and Education, the University of Jember. The research results presented in the previous section showed significant findings. Whether the independent variables, being together or separated, showed an effect on the achievement of teaching practicum of the students of the Faculty of teacher training and Education, the University of Jember. Therefore, based on these findings it could be argued that the achievement of teaching practicum of the students of the Faculty of teacher training and Education, the University of Jember was influenced collectively by all the independent variables consisting of: achievement of microteaching practice (X_1), and achievement of instructional design (X_2). The contribution of the independent variables on the establishment of teaching practicum achievement of the students of the Faculty of teacher training and Education, the University of Jember could be calculated based on the result of multiple correlation value 'R'. That was 0.897, and 0.804 which was gained after squaring it. With the result, it could be concluded that 80.40% part of the achievement of teaching practicum of the students was formed collectively by the achievement of microteaching practicum, and the achievement of instructional design. From the results above, it could also be stated, that there were still about 13.607% achievement of teaching practicum of the students formed by other variables than the two variables investigated. These variables were likely to be related to talent for being a teacher, students' IQ, students' motivation to be a teacher (Masyhud, 2022), mastering the learning theories and their perseverance (Masyhud, 2016). Because the result of partial correlation analysis showed that both independent variables had a significant correlation, each independent variable, namely: achievement of microteaching practice, and achievement of instructional design, can be used as the predictor in predicting the achievement of teaching practicum of the students of the Faculty of Teacher Training and Education, the University of Jember. In the previous section it has been argued that the overall contribution of these independent variables to the achievement of teaching practicum of the students was 80.40%. Further, the distribution of the contribution on each independent variable was as follows: 1) the achievement of microteaching practice (X_1) = 60.778%, and 2) the achievement of instructional design (X_2) = 19.615%. In more detail, the value of the contribution of each independent variable to the dependent variable (Students' teaching practicum Achievement) can be seen in table 3 below. Table 3: The value and the Rank of the Independent Variable Contribution of Microteaching Practice Achievement (X_1) and Instructional Design Achievement (X_2) on Teaching Practicum Achievement (Y)

Variable	<i>r-par</i>	Effective Contribution (%)	Relative Contribution (%)	Contribution Rank
X_1 Y	0.870	60.778	75.601	2
X_2 Y	0.710	19.615	24.399	1
TOTAL Contribution		80.393	100.00	—

Notes :

X_1 = Students' achievement of microteaching practice

X₂ = Students' achievement of instructional design

Y = Students' achievement of teaching practicum

CONCLUSIONS AND RECOMMENDATIONS

Conclusion Based on the data analysis and discussion of the research results presented in the previous section, it could be drawn the following conclusions: Firstly, whether being together or separately, all the independent variables consisting of microteaching practicum achievement and instructional design achievement had a positive contribution to the achievement of teaching practicum of the students of the Faculty of teacher training and Education, the University of Jember. Secondly, the contribution of the two independent variables in the establishment of students' teaching practicum achievement was quite high, that was 80.40%. Separately, microteaching achievement had contribution of 60,778% and Instructional Design achievement had contribution of 19,615% on the students' teaching practicum achievement.

Suggestion

Based on the research results of these studies the following suggestions are given. Firstly, to the manager of Microteaching Laboratory of the Faculty of teacher training and Education, the University of Jember. By finding the positive contribution of microteaching practicum achievement on teaching practicum achievement, the managers of microteaching laboratory should improve any services to students who are practicing microteaching so that the students can get the achievement of microteaching practicum optimally, and thus it is expected they will get the achievement of teaching practicum optimally as well. Secondly, to the manager of Teaching Practicum Unit of the Faculty of Teacher Training and Education. It is suggested that the manager should work in a good cooperation with the microteaching laboratory manager to increase the students' teaching practicum achievement. The working collaboration is started from the students practicing microteaching. Thirdly, Since there is a significant correlation between the achievement of instructional design ability to make the lesson plan and the achievement of teaching practicum, then the students should be given intensive briefing on designing an instruction before they are sent to training schools to do teaching practicum. With that it is expected that students' teaching practicum achievement will get better.

REFERENCES

1. Arikunto, Suharsimi. 2006. *Manajemen Penelitian*. Jakarta : Ditjen Dikti, Kemendikbud..
2. Brown, George and Armstrong, 2019. *Microteaching: A Programme of Teaching Skills*. London Mathuen.
3. Elam, S., 2011. *Performance-Based teacher Education : What is the State of The Art?* Washington DC.: American Association of College For Teacher Education.
4. Fakultas Keguruan dan Ilmu Pendidikan UNEJ, 2016. *Buku Pedoman Pelaksanaan Microteaching Untuk Mahasiswa FKIP Universitas Jember*. Jember: Lab. Microteaching FKIP-Universitas Jember.
5. Ferguson, George, A., 2006. *Statistical Analysis in Psychology and Education*. New York : McGraw-Hill Book Company.
6. Hadi, S 1986. *Analisis Regresi*. Yogyakarta : Yayasan Penerbitan Fakultas Psikologi Universitas Gajahmada.
7. Kemendikbud, 2019. *Pengajaran Mikro (Microteaching)*. Jakarta : Ditjen Dikti. .
8. Kerlinger, Fred, N., 2006. *Foundation of Behavioral research*. New York : Holt, Rinehart and Winston, Inc.
9. Laughlin & J. Moulton, 2015. *Evaluation of Performance Training Methods : A Manual of Teaching Trainer*. New York : UNESCO.

10. Masyhud, M. Sulthon, 2016. *Membangun Semangat Kerja Guru*. Yogyakarta: Laksbang Pressindo.
11. Masyhud, M. Sulthon; Zaliyah Tasnim; Khutobah; 2017a. Improving The Quality Of Questioning Skill Practice Achievement In Microteaching By Applyingclinical Supervision Model, International Journal of Advanced Reasearch (IJAR). Volume 5, Issue 49, 2017, PP 140-148. DOI URL: <http://dx.doi.org/10.21474/IJAR01/5312>.
12. Masyhud, M. Sulthon; Zakiyah Tasnim; Misno A. Lathif, 2017b. The Contribution of Grade Point Average (GPA), Microteching Practice Achievement and Motivation to be a Teacher on the Students' Teaching Practicum Achievement; International Journal of Research in Humanities and Social Studies, Volume 4, Issue 4, 2017, PP 22-27. <http://dx.doi.org/10.22259/ijrhss.0404005>. India: Sryahwa Publications.
13. Masyhud, M. Sulthon, 2020. *Manajemen Profesi Kependidikan*: Yogyakarta: Kurnia Kalam Semesta
14. Masyhud, M. Sulthon, 2021. *Metode Penelitian Pendidikan*. Jember: Lemaga pengembangan Manajemen dan Profesi Kependidikan.
15. Masyhud, M. Sulthon dan Zakiyah Tasnim, 2022., *Manajemen Pembelajaran Mikro (Microteaching Manajgement)*. Jember: Jember University Press
16. Tuckman, Bruce, W, 2008. *Conducting Educational Research*. New York : Harcourt Base Javanovich, Inc.