

# Field Practice Studies, Self-Efficacy, and Pedagogic Competence Effect on Interest in Teaching Profession to Candidates for Undergraduate Informatics Education at Universitas Negeri Malang

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## ABSTRACT

The background problem in this research is that the 2015 Informatics Engineering Study Program students have low interest in the teaching profession. This study aims to: (1) describe the Field Practice Study, self-efficacy, pedagogic competence, and interest in being a teacher; (2) revealing the partial effect of Field Practice Study, self-efficacy, and pedagogic competence on interest in becoming a teacher in undergraduate students of Informatics Engineering Education Faculty of Engineering, State University of Malang; (3) revealing the simultaneous influence of Field Practice Studies, self-efficacy, and pedagogic competence on interest in teaching profession in undergraduate students of Informatics Engineering Education, State University of Malang. The research method used is ex post facto with a descriptive correlational research design. In this study, there are three independent variables, namely Field Practice Studies ( $X_1$ ), self-efficacy ( $X_2$ ), and pedagogic competence ( $X_3$ ) and one dependent variable, namely interest in teaching profession ( $Y$ ). The population and sample in this study were undergraduate students of Informatics Engineering Education class of 2015 who had carried out Field Practical Studies (KPL) activities, totaling 80 students. The data collection technique in this study used a questionnaire/questionnaire. The results showed: (1) the level of KPL, pedagogic competence, and interest in being a teacher were in the high category while self-efficacy was in the medium category; (2) there's positive and significant effect between the KPL on interest in becoming a teacher, with a  $t_{count}$  of 2.152 and a significance value of 0.03; (3) there's positive and significant effect between self-efficacy on interest in becoming a teacher, with a  $t_{count}$  value of 2.053 and a significance value of 0.04; (4) there's positive and significant effect between pedagogic competence on interest in becoming a teacher, with a  $t_{count}$  of 2,314 and a significance value of 0.02; (5) There's positive and significant effect between the Field Practice Study, self-efficacy, and pedagogic competence on interest in becoming a teacher, with an  $F_{count}$  of 7.606 and a significance value of 0.000. The amount of the Effective Contribution (EC) of the three independent variables is 23.1%.

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## I. INTRODUCTION

Education has an important role in human life because through education it can shape the character of quality Human

Resources (HR) in a society and realize national development [1]. To produce and realize quality education, a competent and professional educator or teacher is needed. Teachers in the field of education have a very important role because teachers

design learning and develop the talents and potential of students so that they will produce graduates who have quality resources. In the Law of the Republic of Indonesia No. 14 of 2005 explains that the competencies that must be possessed by an educator include: (1) pedagogic competence, (2) personality competence, (3) social competence, and (4) professional competence. These four competencies must be possessed by an educator, all four of which can be obtained from learning at educational institutions that have educational study programs.

Each student teacher candidate is given basic teaching learning skills, skills in managing the Teaching and Learning Process (PBM) and classroom management, one of which is through the KPL course program. This program is intended to strengthen the basic teaching skills of students as prospective teachers or professional educators. KPL is a course that provides insight and practical experience to educational and non-educational students about real activities in the field so that students have adequate competence in carrying out tasks according to their field of expertise.

State University of Malang (UM) is one of the universities in Indonesia that provides education in the field of teaching science, knowledge and technology. However, this is not in accordance with the reality that exists in the environment of prospective teacher students in the Department of Electrical Engineering, Faculty of Engineering, UM. The problem that occurs is that most of the prospective teacher students have a low interest in the teaching profession.

Based on the results of observations, students of the 2015 Informatics Engineering Education Study Program, 50% of the 70 students have low interest in the teaching profession. Therefore, in this study, the subject of the 2015 Informatics Engineering Education undergraduate study program was to find out more about the interest in becoming a teacher when compared to the 2013 Electrical Engineering Education undergraduate study program students who had low interest in becoming a teacher.

This study will focus on discussing the internal factors that influence interest in a person. Self-efficacy is one of the internal factors that influence interest [2]. Self-efficacy has a very important role in life, high self-efficacy can make a person find his potential and develop it optimally [3]. Self-efficacy in this case is an interest in being a teacher. As a S1 student and a prospective teacher, self-efficacy is very necessary for success in teaching the knowledge that has been gained during lectures. This shows the importance of self-efficacy to be owned by each student teacher candidate, both those who are still studying or who will work [4]. If student teacher candidates have high self-efficacy, it will increase their interest in becoming a teacher. Conversely, if students have low self-efficacy, their interest in becoming a teacher is also low.

Interest is a sense of interest from within the individual that encourages and influences a person's behavior to realize his desires. While interest in becoming a teacher is an interest and liking from within the individual that encourages and influences a person's behavior to realize his desire to choose a profession as a teacher [5]. The quality of one's learning is

influenced by interest [6]. Students who are less interested in becoming teachers tend to pay less attention to and study in depth theoretical and practical courses related to teacher training. In fact, through these courses students are educated to become competent teachers. Teachers can be said to be competent if they have adequate pedagogical abilities. Previous research stated that there was a positive and significant effect of KPL on interest in the teaching profession [7]. Meanwhile, another research shows that there is a positive and significant influence between self-efficacy and interest in becoming a teacher [5].

## II. METHODS

The research design used in this research is descriptive correlational with a quantitative approach. Descriptive research aims to describe a situation or phenomena as they are without manipulating or giving certain treatment to the object of research. The research method used is *expose facto*. This study uses three independent variables, namely KPL ( $X_1$ ), self-efficacy ( $X_2$ ), and pedagogic competence ( $X_3$ ) and one dependent variable, namely interest in becoming a teacher ( $Y$ ). The relationship of the four variables can be seen in Fig. 1.

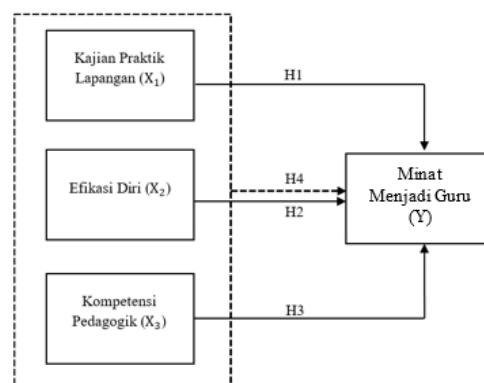


Fig. 1. Relationship between Research Variables

The population amounted to 134 students and the sample was 80 students using random sampling technique. The instruments used for data collection is questionnaire (Likert scale). The test instrument used is the validity test and the reliability test to meet the validity and reliability requirements.

Before conducting the prerequisite analysis test, descriptive statistical analysis was carried out on each variable which included: (1) the frequency distribution of the Field Practice Study, (2) the frequency distribution of self-efficacy, (3) the frequency distribution of pedagogic competence, and (4) the frequency distribution of interest in becoming a teacher.

Furthermore, to test the hypothesis, it is necessary to test the analytical prerequisites, namely (1) normality test, (2) linearity test, (3) multicollinearity test (4) heteroscedasticity test, (4) autocorrelation test. If the analysis prerequisite test has been met, then the next step is to test the hypothesis with simple regression analysis and multiple regression analysis. The equation for simple regression analysis is as follows (1),

$$Y' = a + bX \quad (1)$$

where  $Y'$  is predicted value of dependent variable,  $a$  is constant ( $Y$  value at time  $X = 0$ ),  $X$  is independent variable, and  $b$  is regression coefficient.

Then, multiple regression analysis was performed to determine the level of simultaneous relationship between independent variables and the dependent variable with the help of SPSS statistics 25.0 software. The equation for simple regression analysis is as follows (2),

$$Y' = a + b1X1 + b2X2 + b3X3 \quad (2)$$

where  $Y'$  is Dependent variable (Interest in teaching profession),  $a$  is Constant ( $Y$  value at time  $X1, X2,$  and  $X3 = 0$ ),  $b$  is Regression coefficient,  $X1$  is independent variable 1 (Field Practice Study),  $X2$  is independent variable 2 (Self-Efficacy), and  $X3$  is independent variable 3 (Pedagogic Competence).

Furthermore, to identify partial effect between variables, a partial test ( $t$  test) was carried out and to determine the simultaneous effect between the dependent variable on the independent variable, a partial test ( $F$  test) was carried out. The level of significance set was  $= 0.05$ . The decision-making procedure for the  $t$ -test is that if  $t_{count}$  is equal to or greater than  $t_{table}$ ,  $H_0$  is rejected and  $H_a$  is accepted. On the other hand, if  $t_{count}$  is less than  $t_{table}$ , then  $H_0$  is accepted and  $H_a$  is rejected. While the decision making for the  $F$  test is if  $F_{count}$  is equal to or greater than  $F_{table}$  then  $H_0$  is rejected and  $H_a$  is accepted. On the other hand, if  $F_{count}$  is less than  $F_{table}$ , then  $H_0$  is accepted and  $H_a$  is rejected.

### III. RESULT AND DISCUSSION

The results of descriptive statistical analysis in the form of an analysis of the frequency distribution of the Field Practice Study variable, the frequency distribution of the self-efficacy variable, the frequency distribution of the pedagogic competence variable, and the frequency distribution of the variable interest in becoming a teacher are shown in Table 1, Table 2, Table 3, and Table 4 below.

TABLE I. FREQUENCY DISTRIBUTION OF FIELD PRACTICE STUDIES

Category	Interval	Freq.	(%)
Very High	70 – 76	28	35,0%
High	64 – 69	42	52,5%
Medium	58 – 63	9	11,2%
Low	52 – 57	1	1,3%

TABLE II. FREQUENCY DISTRIBUTION OF SELF-EFFICACY

Category	Interval	Freq.	(%)
Very High	45 – 51	4	5,0%
High	38 – 44	11	13,8%
Medium	31 – 37	42	52,5%
Low	25 – 30	23	28,7%

TABLE III. DISTRIBUTION OF PEDAGOGIC COMPETENCIES

Category	Interval	Freq.	(%)
Very High	68 – 72	15	18,8%
High	64 – 67	31	38,5%
Medium	61 – 63	19	23,9%
Low	58 – 60	15	18,8%

TABLE IV. DISTRIBUTION OF INTEREST IN TEACHING PROFESSION

Category	Interval	Freq.	(%)
Very High	61 – 70	26	32,5%
High	51 – 60	31	38,7%
Medium	42 – 50	19	23,8%
Low	33 – 41	4	5,0%

Furthermore, the results of the analysis prerequisite tests are shown in Figure 2, Table 5, Table 6, Table 7, and Table 8.

TABLE V. NORMALITY TEST RESULTS

Variables	$P_{sig}$	Conclusion	Result
( $X_1$ )	70 – 76	28	35,0%
( $X_2$ )	64 – 69	42	52,5%
( $X_3$ )	58 – 63	9	11,2%
( $Y$ )	52 – 57	1	1,3%

Based on the results of the normality test, it can be concluded that the data is normally distributed because the  $P_{sig}$  value. Field Practice Study variables ( $X_1$ ), self-efficacy ( $X_2$ ), pedagogic competence ( $X_3$ ), and interest in becoming a teacher ( $Y$ ) are greater than the significance level value of 0.05.

TABLE VI. LINEARITY TEST RESULTS

Variables	$P_{sig}$	Conclusion	Result
$X_1$ dengan $Y$	0,246	$P > 0,05$	Linier
$X_2$ dengan $Y$	0,528	$P > 0,05$	Linier
$X_3$ dengan $Y$	0,335	$P > 0,05$	Linier

Based on the results of the linearity test, the  $P$  value  $> 0.05$ , so it can be concluded that the form of the relationship between the variables are linear.

TABLE VII. MULTICOLLINEARITY TEST RESULTS

Variables	Collinearity Statistic	
	Tolerance	VIF
(X <sub>1</sub> )	0,838	1,194
(X <sub>2</sub> )	0,985	1,015
(X <sub>3</sub> )	0,829	1,207

Based on the results of the multicollinearity test, the value of the independent variables (X<sub>1</sub>, X<sub>2</sub>, and X<sub>3</sub>) at tolerance > 0.10 and the value of the independent variables (X<sub>1</sub>, X<sub>2</sub>, and X<sub>3</sub>) at VIF < 10, it can be concluded that there is no multicollinearity in the regression model. The results of the heteroscedasticity test can be seen in Fig. 2 below.

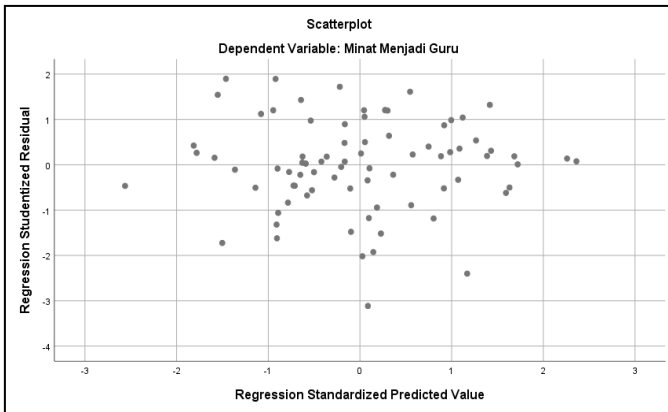


Fig. 2. Heteroscedasticity Test Results

Based on the picture, the dots do not form a clear pattern and the points spread above the 0 area and the Y axis, it means there are no symptoms of heteroscedasticity.

The autocorrelation test was tested using the Durbin-Watson (DW Test). Durbin Watson table for the number of respondents 80 (n = 80) and the number of independent variables 3 (k = 3) with a significance level of 5%, namely the value of dL = 1.560 and dU = 1.715. The results of the DW test showed that the value of DW = 1.742 so that 4 - dU (4 - 1.715) = 2.285. Based on the decision making of autocorrelation, namely the value of dU (1.715) < DW (1.766) < (4 - dU (2.285)), it can be concluded that there is no autocorrelation. All analytical prerequisite tests have been met. Thus, it can be continued with hypothesis testing using simple regression analysis and multiple regression analysis.

The results of simple linear regression analysis between Field Practice Study variables (X<sub>1</sub>) and interest in becoming a teacher (Y) can be seen in Table 8 below.

TABLE VIII. RESULTS OF SIMPLE LINEAR REGRESSION ANALYSIS X1 WITH Y

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	7,191	14,528			,495	,622
(X <sub>1</sub> )	,710	,215	,351		3,307	,001

a. Dependent Variable: (Y)

In table 8 the values of the constants and regression coefficients are obtained which will be entered into a simple linear regression equation (1), and the result is  $Y = 7,191 + 0,710X$

Based on the above equation, it is known that the constant value is 7.191. This means that if the KPL variable (X<sub>1</sub>) is 0, then the value of the interest in becoming a teacher variable (Y) is 7.191. For the regression coefficient value of the Field Practice Study variable (X<sub>1</sub>) (b) of 0.710, which means that for every one unit increase of the Field Practice Study variable (X<sub>1</sub>), the interest in becoming a teacher (Y) variable will increase by 0.710. The results of simple linear regression analysis between self-efficacy variables (X<sub>2</sub>) and interest in becoming a teacher (Y) can be seen in Table 9 below.

TABLE IX. RESULTS OF SIMPLE LINEAR REGRESSION ANALYSIS X2 WITH Y

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	41,812	5,823			7,181	,000
(X <sub>2</sub> )	,392	,169	,254		2,318	,023

a. Dependent Variable: (Y)

Based on Table 9, the values of the regression constants and coefficients that will be entered into the simple linear regression equation (1), the result is  $Y = 41,812 + 0,392X$

Based on the above equation, it is known that the constant value is 41,812. This means that if the self-efficacy variable (X<sub>2</sub>) is 0, then the value of the variable interest in becoming a teacher (Y) is 41.812. For the regression coefficient value of the self-efficacy variable (X<sub>2</sub>) (b) of 0.392, which means that for each increase of one unit of the self-efficacy variable (X<sub>2</sub>), the variable interest in becoming a teacher (Y) will increase by 0.392. The results of simple linear regression analysis between the variables of pedagogic competence (X<sub>3</sub>) and interest in becoming a teacher (Y) can be seen in Table 10 below.

TABLE X. RESULTS OF SIMPLE LINEAR REGRESSION ANALYSIS X3 WITH Y

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	-1,440	15,859		-,951	,928
(X3)	,882	,200	,375	3,574	,001

a. Dependent Variable: (Y)

Based on Table 10, the values of the constants and regression coefficients that will be entered into the simple linear regression equation (1), the result is  $Y = -1,140 + 0,882X$

Based on the above equation, it is known that the constant value is -1.440. This means that if the variable pedagogic competence (X3) is 0, then the value of the variable interest in becoming a teacher (Y) is -1.440. For the regression coefficient value of the Pedagogical Competence variable (X3) (b) of 0.882, which means that for every one unit increase in the pedagogical competency variable (X3), the interest in becoming a teacher (Y) variable will increase by 0.882.

The results of multiple linear regression analysis between the variables of Field Practice Study (X1), self-efficacy (X2), and pedagogic competence (X3) with interest in becoming a teacher (Y) can be seen in Table 11.

TABLE XI. RESULTS OF MULTIPLE LINEAR REGRESSION ANALYSIS

Model	Unstandardized Coefficients		Standardized Coefficients	
	B	Std. Error	Beta	t
1 (Constant)	-26,407	17,662		-
(X1)	,474	,223	,234	2,132
(X2)	,322	,157	,208	2,053
(X3)	,601	,256	,256	2,314

a. Dependent Variable: (Y)

Based on Table 11, the constant values and regression coefficients will be entered into the multiple linear regression equation (2), the result is  $Y' = -26,407 + 0,474X_1 + 0,322X_2 + 0,601X_3$

Based on the above equation, it is known that the constant value is -26,407. Then it is known that the regression coefficient value of the Field Practice Study variable (X1) (b1) is 0.474, which means that for each increase in the Field Practice Study variable (X1), the interest in becoming a teacher (Y) variable will increase by 0.474 with the assumption that the other independent variables remain constant. The regression coefficient value of the self-efficacy variable (X2) (b2) is 0.322, which means that for every one-unit increase in the self-efficacy variable (X2), the variable interest in becoming a teacher (Y) will increase by 0.322 assuming the other independent variables remain. The value of the regression coefficient of the pedagogic competence variable (X3) (b3) is 0.601, which means that for every one-unit

increase in the pedagogic competence variable (X3), the interest in becoming a teacher (Y) variable will increase by 0.601 assuming the other independent variables remain.

Furthermore, to determine the partial effect of the independent variable (X) on the dependent variable (Y), a partial test (t test) was carried out and to determine the simultaneous effect of the independent variable (X) on the dependent variable (Y) was carried out with a simultaneous test (F test). The results of the partial test (t test) can be seen in Table 12 and the results for the simultaneous test (F test) can be seen in Table 13.

TABLE XII. PARTIAL TEST RESULTS (T TEST)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	-26,407	17,662		-	,206
(X1)	,474	,223	,234	2,132	,036
(X2)	,322	,157	,208	2,053	,043
(X3)	,601	,256	,256	2,314	,023

a. Dependent Variable: (Y)

Based on the results of the t-test shown in Table 12 for the Field Practice Study variable (X1), a significance probability value of 0.03 was obtained. When compared with a significance value of 0.05,  $P 0.03 < 0.05$ . Furthermore, the tcount value is 2.132. When compared with the ttable value of 1.991, the  $tcount > ttable$ . From the results of the calculation of the significance value and the tcount value,  $H_0$  is rejected. So, it can be concluded that the accepted hypothesis is that there is a positive and significant influence between the Field Practice Study on the interest in teaching profession in S1 students of Information Engineering Education, Faculty of Engineering, State University of Malang.

Based on the results of the t-test shown in Table 12 for the self-efficacy variable (X2), a significance probability value of 0.04 was obtained. When compared with a significance value of 0.05,  $P 0.04 < 0.05$ . Furthermore, the value of tcount is 2.053. When compared with the ttable value of 1.991, the  $tcount > ttable$ . From the results of the calculation of the significance probability value and the tcount value,  $H_0$  is rejected. So, it can be concluded that the accepted hypothesis is that there is a positive and significant influence between self-efficacy and interest in becoming a teacher in S1 Students of Informatics Engineering, Faculty of Engineering, State University of Malang.

Based on the results of the t-test shown in Table 12 for the pedagogical competence variable (X3), the probability value of significance is 0.02. When compared with a significance value of 0.05,  $P 0.02 < 0.05$ . Furthermore, the value of tcount is 2,314. When compared with the ttable value of 1.991, the  $tcount > ttable$ . From the results of the calculation of the significance probability value and the tcount value,  $H_0$  is rejected. So, it can be concluded that the accepted hypothesis

is that there is a positive and significant influence between pedagogic competence on interest in becoming a teacher in S1 students of Informatics Engineering Education Faculty of Engineering, State University of Malang.

TABLE XIII. SIMULTANEOUS TEST RESULTS (F TEST)

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1288,427	3	409,476	7,606	,000b
Residual	4091,773	76	53,839		
1 Total	5320,200	79			

a. Dependent Variable: (Y)  
b. Predictors: (Constant), (X3), (X2), (X1)

Based on the results of the F test shown in Table 13, a significance probability value of 0.000 was obtained. When compared with a significance value of 0.05,  $P 0.000 < 0.05$ . Furthermore, the value of Fcount is 7.606. When compared with the ttable value of 2.720, the  $F_{count} > F_{table}$ . From the results of the calculation of the significance probability value and the Fcount value,  $H_0$  is rejected. So, it can be concluded that the accepted hypothesis is that there is a simultaneous positive and significant influence between Field Practice Studies, self-efficacy, and pedagogic competence on interest in becoming a teacher in undergraduate students of Informatics Engineering Education Faculty of Engineering, State University of Malang.

After the hypothesis is fulfilled, the next step is to calculate the predictor contribution. The predictor contribution is used to find out how big the contribution (contribution) of each independent variable is. There are two types of contributions, namely effective contribution (SE%) and relative contribution (SR%). To find out the contribution of each independent variable to the dependent variable in this study, it is described in Table 14.

TABLE XIV. RELATIVE CONTRIBUTION AND EFFECTIVE CONTRIBUTION OF RESEARCH VARIABLES

Prediktor	RC%	EC%
(X1)	35,56%	8,21%
(X2)	22,92%	5,29%
(X3)	41,52%	9,60%

Based on Table 14, it is known that the relative contribution of X1 to Y is 34.56%, the relative contribution of X2 to Y is 22.92%, and the relative contribution of X3 to Y is 41.52%. The effective contribution of X1 with Y is 8.21%, the relative contribution of X2 and Y is 5.29%, and the relative contribution of X3 and Y is 9.60%. While the rest is influenced by other variables or factors not examined in this study

## The Effect of Field Practice Studies on Interest in Teaching Profession

Based on the results of the hypothesis testing that has been carried out, it shows that the Field Practice Study (KPL) has a positive and significant influence on the interest in teaching profession for undergraduate students of Informatics Engineering Education class of 2015 with a tcount value of 2.132 and a significance value of 0.03 at a significance level of 5%. For the value of the Field Practice Study (KPL) regression coefficient is 0.710. Because the regression coefficient has a positive value and a significance value of  $<0.05$ , it can be interpreted that the better the quality of the Field Practice Study (KPL), the better the interest in becoming a teacher for undergraduate students of Informatics Engineering Education batch 2015. While the correlation value between Field Practice Studies (KPL) to interest in becoming a teacher is 0.351, which means that there is a low relationship between the two.

KPL activities are subjects in the field of education that are carried out in the form of teaching practices in schools. Students of the Electrical Engineering Department in carrying out KPL activities are placed in Vocational High Schools. With the Field Practice Study (KPL) activities, students will gain better experience, knowledge and skills in teaching. Then the provision in the form of experience gained during the Field Practice Study (KPL) will make students ready to carry out learning in the class as an educator. The teaching readiness of these prospective teacher students will affect their interest in becoming a teacher [8], [9].

Teaching in the traditional sense is still considered an activity of delivering or delivering information or knowledge. Meanwhile, recently, teaching is a complex act. The complex actions referred to above cover the entire system of the teaching and learning process. The system is an instructional goal to be achieved, the material to be taught, the type of activity, as well as teaching and learning facilities and infrastructure. From this description, it can be interpreted that teaching readiness is a condition or condition of a person who already has the ability and sense of being ready to carry out the entire teaching and learning system along with all the risks it faces to achieve predetermined goals.

The readiness to teach prospective teachers can be seen from the skills and abilities of the teacher. By having mature teaching readiness, various mistakes and shortcomings that may occur in the teaching and learning process can be reduced so that the professionalism of a teacher can be accounted for. With the teaching readiness that has been owned by the 2015 Informatics Engineering Education undergraduate students, they are expected to have the readiness and maturity to teach when they become teachers. There is a positive and significant influence between Field Experience Practices on interest in the accounting teacher profession in undergraduate students [7].

Based on the description that has been presented, it can be interpreted that teaching readiness can affect interest in becoming a teacher. When student teacher candidates have good teaching readiness, when they become teachers, they will be more prepared to carry out learning in class compared to students who have low teaching readiness. So, it can be

concluded that KPL partially has a positive and significant effect on the interest in teaching profession for undergraduate students of Informatics Engineering Education class of 2015 with an effective contribution percentage of 8.21%.

### **The Effect of Self-Efficacy on Interest in Teaching Profession**

Based on the results of the hypothesis test conducted, it shows that self-efficacy has a positive and significant influence on interest in becoming a teacher for undergraduate students of Informatics Engineering Education class of 2015 with a t-value of 2.053 and a significance value of 0.04 at a significance level of 5%. For self-efficacy regression coefficient value is 0.392. Because the regression coefficient has a positive value and a significance value of  $<0.05$ , it means that the better the self-efficacy, the better the interest in becoming a teacher for the 2015 Informatics Engineering Education undergraduate students. Meanwhile, the correlation value between self-efficacy and interest in becoming a teacher is equal to 0.254 which means there is a low relationship between the two.

One of the factors of self-interest is the feeling of being able or also called self-efficacy [10], [11]. In growing interest, it is necessary to support self-efficacy to increase confidence in one's abilities. Self-efficacy is simply a person's belief about his competence in carrying out a task to achieve success. Someone who has high self-efficacy will also set high targets to produce something and will strive to be able to achieve these goals or targets [4]. If student teacher candidates have high self-efficacy, it will increase their interest in becoming a teacher. Conversely, if students have low self-efficacy, their interest in becoming a teacher is also low.

Aini (2018) revealed that self-efficacy is divided into 3 dimensions, namely magnitude (level of difficulty), generality (area or behavior) and strength (level of strength against beliefs) [5]. The high self-efficacy in the magnitude dimension (level of task difficulty) of students can be seen from how much ability to face challenges at work and how much ability to survive problems that occur in their work. In addition to this, it is also seen from the experience of each student, namely the experience of success and failure. Furthermore, the high self-efficacy in the generality dimension (area or behavior) of students can be seen if students have a desire to explore their abilities in areas that have not been mastered, do not give up easily when they get difficult assignments, evaluate things that cause failure, set new goals, and learn to accept criticism and suggestions from others. Then the last one is the high self-efficacy in the dimension of strength (the level of strength against his beliefs), namely students with high self-efficacy always think positively about their abilities, can complete work both individually and in groups, are confident in dealing with difficult situations, and set higher targets. Previous study stated that efficacy has a positive and significant effect on interest in becoming an economics teacher [5].

Based on the description that has been presented, it can be interpreted that self-efficacy can affect interest in becoming a teacher. The higher the level of self-efficacy possessed by prospective teacher students, the higher the interest in

becoming a teacher, because prospective teacher students are confident in their ability to carry out all duties and obligations when undergoing the teaching profession later. So, it can be concluded that self-efficacy partially has a positive and significant effect on interest in becoming a teacher for S1 students of Informatics Engineering Education class of 2015 with an effective contribution percentage of 5.29%.

### **The Influence of Pedagogic Competence on Interest in Teaching Profession**

Based on the results of the hypothesis testing that has been carried out, it shows that pedagogic competence has a positive and significant influence on the interest in teaching profession of the 2015 Informatics Engineering Education undergraduate students with a tcount value of 2.314 and a significance value of 0.02 at a significance level of 5%. For the value of the regression coefficient of pedagogic competence is 0.630. Because the regression coefficient has a positive value and a significance value of  $<0.05$ , it can be interpreted that the better the pedagogical competence possessed, the better the interest in becoming a teacher for the 2015 Informatics Engineering Education undergraduate students. Meanwhile, the correlation value between self-efficacy and interest in becoming a teacher is equal to 0.375 which means there is a low relationship between the two.

Pedagogic competence possessed by students can influence students' interest in becoming teachers and help students to be better prepared to teach as teachers. The level of pedagogic competence possessed by students will affect the desire and interest in becoming a teacher. High pedagogic competence can determine the decision making of prospective teacher students after completing lectures. There is a positive and significant relationship between the effectiveness of pedagogic knowledge on the personal goals of prospective teacher students for students of the State University of Malang S1 PTE Study Program. Based on the description that has been presented, it can be interpreted that student teacher candidates with high pedagogical competence will have a good impression of their interest in becoming a teacher and are more prepared to teach as teachers.

### **The Effect of Field Practice Studies, Self-Efficacy, and Pedagogic Competence on Interest in Teaching Profession**

Based on the results of the hypothesis testing that has been carried out, it shows that the Field Practice Study (KPL), self-efficacy, and pedagogical competence have a positive and significant influence on the interest in teaching profession for the 2015 Informatics Engineering Undergraduate student with an Fcount of 7.606 and a 0.000 sig. value at the level of 5% significance. Meanwhile, the correlation value between Field Practice Studies (KPL), self-efficacy, and pedagogical competence on interest in becoming a teacher for undergraduate students of Informatics Engineering Education, Faculty of Engineering, State University of Malang is 0.481.

The effective contribution of the Field Practice Study (KPL) variable to interest in teaching profession is 8.21%. self-efficacy on interest in teaching profession is 5.29%, and

pedagogic competence on interest in being a teacher is 9.60% so the total effective contribution of the 3 independent variables to the dependent variable is 23.1%.

Participating in Field Practice Study (KPL) activities provides benefits for prospective teacher students, one of which is teaching readiness. With good teaching readiness, it will increase students' interest in becoming teachers. One of the factors that influence self-interest is self-efficacy. If a student teacher candidate has high self-efficacy, then his interest in becoming a teacher will also be high and vice versa if a student teacher candidate has low self-efficacy, then his interest in becoming a teacher will also be low.

Pedagogic competence can simply be interpreted as the ability of a teacher to manage student learning. So, if the pedagogic competence or teaching ability of students is good, it will make students more confident to work as teachers and make it easier to carry out activities as teachers. Based on the description that has been presented, it can be concluded that there is a simultaneous positive and significant influence between the KPL, self-efficacy, and pedagogic competence have a positive and significant influence on interest in teaching profession.

#### IV. CONCLUSION

Based on the results of the research and discussion that have been described, the conclusions that can be drawn are as follows the level of benefits of the Field Practice Study (KPL), namely the teaching readiness obtained by the 2015 Informatics Engineering Education undergraduate students is in the high category. The self-efficacy level of the 2015 Informatics Engineering S1 students belongs to the medium category. The level of pedagogic competence possessed by the 2015 Informatics Engineering S1 students is in the high category. The level of interest in becoming a teacher owned by the 2015 Informatics Engineering S1 students is in the high category.

There is a positive and significant influence between the Field Practice Study (KPL) on the interest in teaching profession in the 2015 Informatics Engineering Education undergraduate students, Faculty of Engineering, State University of Malang with an effective contribution of 8.21%.

There is a positive and significant influence between self-efficacy and interest in becoming a teacher for undergraduate students of Informatics Engineering Education class 2015 Faculty of Engineering, State University of Malang with an effective contribution of 5.29%.

There is a positive and significant influence between pedagogic competence on interest in becoming a teacher in S1 students of Informatics Engineering Education class 2015 Faculty of Engineering, State University of Malang with an effective contribution of 9.60%.

There is a simultaneous positive and significant effect between Field Practice Studies (KPL), self-efficacy, and

pedagogic competence on interest in becoming a teacher in Informatics Engineering S1 students' batch 2015 Faculty of Engineering, State University of Malang with an overall effective contribution of 23.1%.

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