



The influence of professional competence and self-efficacy teachers' on student achievement in economic learning

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Abstract

This research aimed at analyzing the influence of professional competence and self efficacy of teachers on student's learning achievement in economic learning at *SMA Negeri 9 Pontianak*. The research method has been used was Regression method with explanation research form. The sample of research was 66 people. The data collection instrument used was the Likert scale questionnaire. Data analysis was done through multiple linear regressions technique. The finding showed that there was an influence of professional competence and self efficacy of teachers on student's learning achievement in economic learning at *SMA Negeri 9 Pontianak*.

Keywords: professional competence, self-efficacy, achievement, economic learning

1. Introduction

Learning has an important role in education. Learning achievement is a part that cannot be separated from learning activities because learning is a process, while the learning achievement is the result of the learning process. For students, learning is an obligation. The success or failure of students in education depends on the learning process experienced in the classroom.

The optimal learning achievement must be done by studying earnestly or with persistent struggle. Reaching the optimal learning achievement is not as easy as falling of a log, it is full of struggle and there are various obstacles that must be faced to achieve it.

Even though the learning achievement is determined by the students themselves to achieve it, but the role of teachers is crucial in realizing student achievement. As stated by Tu'u (2004: 75) [10] that "learning achievement is the acquisition of knowledge or skills that are developed by learning matter, usually indicated by test scores or numerical value that is assigned by teachers". Thus the teacher becomes an important factor in determining the achievement of learning by way of conveying knowledge or skills of learning matter, especially on economic learning developed in the classroom.

One of the most important teacher competencies in helping students achieve the optimal learning achievement is professional competence. In line with the opinion of Tilaar (2012: 89) [5] which stated that "the professional competence that must be possessed by each teacher, among others: the ability to develop the personality of learners, especially their intellectual ability, and bring learners into members of the unified Indonesian society based on Pancasila". Inspired by Tilaar opinion, the professional competence of teachers is the ability possessed by the teacher, it is the result of cognitive work to carry out the task so that the students obtain an optimal learning achievement, so that is the creation of quality or quality of education. The abilities include: (1) mastery of

the learning matter, (2) the ability to manage learning, and (3) knowledge of evaluation.

According Jamil (2013: 122) [6], "Professional competence is the ability of teachers in mastering knowledge in science, technology and / or art and culture that they received. According to Nurfuadi (2012: 99) [8] the scope of professional competence, namely: (1) Mastering the teaching materials according to curriculum and enrichment / supporting field of study; (2) Understand and be able to apply varied learning methods / models; (3) The using of instructional media, including: recognize, select and use the media, create a simple learning tool, using the library in the learning process. (4) Managing the class, including: arranging classroom layout for lessons, creating a harmonious learning circumstance. (5) Ability to conduct evaluation of student learning achievement. From the description above, showed that to have a professional competence a teacher must be able to master all the indicators related to the competence. To improve the success of students in learning, the role and responsibilities of teachers in the future will be more complex. Knowing the characteristics of students such as self efficacy becomes very important for teachers to be considered, as one of the factors that influence the success of students in learning. Self efficacy is the belief of a person that he / she will be able to perform the required behavior in a task. The individual's thoughts of self- efficacy determine how much effort will be shed and how long the individual will persist in facing an obstacle or an unpleasant experience. Self-efficacy is not a measurement of skills, but it is trusting that it is done in a variety of situations (Bandura, 1997: 37) [2], so that the high self-efficacy of students is related to the optimism of students on completing the tasks assigned by the teacher.

The embodiment of self-efficacy can be defined as a public belief about their ability to produce a designated performance level that affects events that affect their lives. Economics teachers who have high self-efficacy in general will strive to

deal with difficulties and stay afloat in doing various tasks. Conversely, economics teachers who have low self-efficacy will be shackled with doubts about self-ability and will be easily give up when facing difficulties in performing the task. Economics teachers with high self-efficacy tend to see difficult tasks as challenges that must be mastered, while economics teachers with low self-efficacy tend to see the heavy task.

2. Materials and Methods

This study uses a quantitative approach which aimed at describing errors and problems related to independent variables and dependent variables.

The form of research used is the explanation where the associative quantitative research with the characteristics of the truth of the hypothesis will be tested through this research.

Explanatory research in this study explains the associative causal relationship between professional competences (X1), self efficacy (X2) with learning achievement (Y), and quality of both partial causality and simultaneous causality through hypothesis testing.

The population in this research was 192 people. The sample had chosen was the class X students of IPS majors in SMA Negeri 9 Pontianak as much as 66 students. The research

variables consist of independent variables: professional competences (X1), self efficacy (X2) and the bound variable of achievement learning certificate (Y).

An instrument of the data collecting used was questionnaires. Before the data being analyzed, first, the instrument of research was tested that is the validity used product moment correlation, and reliability through Cronbach Alpha technique. Data obtained by using statistics and analysis through two ways namely: (1) descriptive statistics, this is done by looking for the average standard deviation Mode, media, and frequency of distribution. Then made a histogram of each variable score, (2) inferential statistics by using multiple linear regression model, this analysis is used to make conclusions based on hypothesis testing that could be generalize. Before performing the first analysis, the normality testing, *multikolinieritas*, *heteroskedastisitas* and linearity should be done.

3. Results & Discussion

3.1 Research Results

Hypothesis testing on the influence of professional competence, self-efficacy on student achievement in economic learnings at class X SMA Negeri 9 Pontianak, could be seen in Table 1.

Table 1: Effect of partial professional competence, self-efficacy on student achievement

Variables	Regression Coefficient	Partial Coefficient (t)	Sig.	t Table df = 2	Constants	errors
Professional Competency	0.651	4.545	0,000	1,669	3.041	4.807
Self-Efficacy	0.636	4.601	0,000			

Based on the result of multiple regression analysis above, obtained the regression equation as follows:
 $Y = a + b_1X_1 + b_2X_2 + e$

$Y = 3,041 + 0,651 X_1 + 0,636 X_2 + 4,807$

While the simultaneous effect calculation results can be seen in Table 2.

Table 2: The simultaneous influence of professional competence, Self-Efficacy on student achievement on economic learning

R	R Square	Adjusted R Square	F Count	Sig	H ₀
0.907 ^a	0.823	0.817	150,555	0,000	0,05
<i>F Tabel Df 2 = 3,99</i>				<i>0,000 < 0,05</i>	

The result of this research showed that hypothesis testing in this analysis influenced by: (1) professional competence variable (X1) has positive effect on student achievement on economic learnings in grade X SMA Negeri 9 Pontianak (Y) of 65.10%. (2) By Self-Efficacy (X2) variable have an effect on student achievement on economic learnings in class X SMA Negeri 9 Pontianak (Y). (3) Simultaneously there is strong influence of Professional Competence (X1), Self-Efficacy (X2) toward student achievement on economic learnings in class X SMA Negeri 9 Pontianak (Y) equal to 81, 70%.

3.2 Discussion

i) Influence of partial influence of professional competence, on student achievement on economic learning

There is partial influence of Professional Competence, to Student Learning Achievement on Economic Learning in Class X SMA Negeri 9 Pontianak with $t_{count}(4,545) > t_{table}$ (1,669). The results of this study were supported by Syukri Indah (2015) who conducted research on “the influence of

pedagogic competence and professional competence of teachers on the achievement of learning in the students of class XI at *SMK Farmako Medika Plus Caringin-Bogor*”. This research was used a quantitative method. Data collection techniques in this study were questionnaires, interviews, documentation, and observation. Data analysis technique used was multiple regressions. F_{test} calculation showed that $F_{count} = 12,362 > F_{table} = 6,95$ with significance $0,001 < 0,05$. This result showed the of significant F_{count} , so H_0 was rejected and H_a was accepted.

Based on these results, the H_a in this study which stated that "There is an influence of pedagogic competence and professional competence of teachers on the learning achievement in grade X SMA Negeri 9 Pontianak". The result of coefficient of determination is $R^2 = 0,119 = 11,9\%$. These results indicate that the independent variables of pedagogical competence of teachers and professional competence influenced the student achievement dependent variable of 11.9% and the remaining 88.1% was influenced by other factors not included in this study.

The result of this study has proven that there was a positive and significant influence of pedagogical competence and professional competence of teachers on student achievement in Class X *SMA Negeri 9 Pontianak*. Professional competence has been set forth in the Regulation of the Minister of National Education Number. 16 of 2007 on Teacher Competency Standards covering the main competencies of teachers namely; (1) Mastering the materials, structures, concepts, and scientific thinking patterns that support the learning that is being taught (2) Mastering the competence standards and basic competencies of learning (3) Developing creatively-taught learning materials (4) Developing professionalism in a sustainable manner by doing reflection measures (5) Utilizing information and communication technologies to develop themselves.

ii) Partial Effect of Self-Efficacy, on Student's Achievement on Economic Learning

There is partial influence of Self-Efficacy, on student's learning achievement on economic learning in class X *SMA Negeri 9 Pontianak* with $t_{\text{count}} 4,601 > t_{\text{table}} 1,669$. The results of this study were supported by Goulão (2014) [4] who conducted the study entitled "The Relationship between Self-Efficacy and Academic Achievement for Adults' Learners". Data were obtained from 63 students of both sexes, with an average age of 42 years, selected from the first years of undergraduate study. The results of the academic courses were analyzed using performance analysis. Data were analyzed using descriptive and inferential statistics. Pearson correlation coefficient has been used to see the relationship between self efficacy and academic achievement. The data analysis showed that the students' self efficacy level was high (mean = 45) and there was significant relationship between self-efficacy and academic achievement ($r = 0,286$, at level 0,05).

Adiresty and Wirandana (2016) [1] who conducted research on the influence of teacher self-efficacy and teacher creativity on student learning motivation and its implication on learning achievement in economic learning of all high schools in Ciamis. Samples of the study were 33 teachers, the method used was survey, while the data analysis technique using path analysis. The results showed that the self efficacy of teachers had a significant effect on the achievement of learning on economic learning seen from the national exam for children of *SMA Negeri* in Ciamis district.

The results showed that the self-efficacy of teachers positively affected the student's learning achievement of 0.158. This means that any increase in teachers' self-efficacy one unit will increase the learning achievement of 0.158. While the indirect influence of self-efficacy of teachers on learning achievement through learning motivation is -0.022, so the total effect of 0.136. That is, the self-efficacy of teachers in teaching will have a positive effect on learning achievement obtained by students. Based on data calculations, obtained a positive correlation coefficient between teacher self-efficacy in teaching and student achievement variable that is 0.678 and can be interpreted included in the high category because it is between the values of $r_{\text{count}} 0,600-0,799$. This means there that there is a high relationship between teachers' self-efficacy in teaching and students' achievement variables.

iii) The simultaneous influence of professional competence, Self-Efficacy on student achievement on economic learning

The empirical result found that there is simultaneous influence of professional competence, self-efficacy on student's learning achievement on economic learning in class X *SMA Negeri 9 Pontianak*. This research is empirically supported by Chorón (2015) that based on the results of his research which showed that there was an influence of professional competence of teachers, self efficacy, and interpersonal communication, and simultaneously to the learning achievement. The evidence seen from the value of $F_{\text{count}} (43.301)$ with significant 0.000 less than 0.05, then there is the influence of professional competence of teachers, self efficacy, and interpersonal communication simultaneously to the performance of teachers. The amount of coefficient of determination (Adjusted R Square) = 0.794 which means the amount of teacher professional competence, self efficacy, and interpersonal communication on teacher performance is 79.4%.

Factors that influence performance according to Mangkunegara (2005: 65) [7] who stated that the factors affected the performance include: 1) Psychic ability factors ability employees consist of potential ability (IQ) and ability of reality (education). Therefore, employees need to be placed on the job in accordance with its expertise. 2) Motivational factors formed from the attitudes, an employee in the situation of work. Motivation is a self-directed condition directed employee to achieve the purpose of work. Mental attitude is a mental condition that encourages a person to try to achieve the maximum potential work.

4. Conclusions

Based on the results of research and discussion, then the conclusions of this study are as follows:

1. There is an influence of professional competence of student achievement on economic learning in *SMA Negeri 9 Pontianak*. Evidenced by t_{test} obtained $t_{\text{count}} (4.545) > t_{\text{table}} (1.669)$ with partial regression coefficient value of 0.651. It means that the contribution of professional competence variable to student achievement on economic learning in class X *SMA Negeri 9 Pontianak* (Y) is 65, 10%.
2. There is an influence of self efficacy of teachers on student achievement on economic lesson in *SMA Negeri 9 Pontianak*. Proved by t_{test} obtained $t_{\text{count}} (4.601) > t_{\text{table}} 1.669$ with partial regression coefficient value of 0.636. It could be concluded that the contribution of Self-Efficacy (X2) variable to Student achievement on economic learning in Grade X *SMA Negeri 9 Pontianak* (Y) is 63,60%.
3. There is the influence of professional competence, self efficacy on student achievement in economic learning in *SMA Negeri 9 Pontianak*. Proved by the F_{test} obtained $F_{\text{test}} (150,555) > F_{\text{table}} (3.99)$ with the value of regression coefficient adjusted R-Square obtained by 0.817. It could be concluded that there is a strong influence of Professional Competence and Self-Efficacy simultaneously on student achievement in economic learning in class X *SMA Negeri 9 Pontianak* (Y) equal to 81,70%, while the rest 18,30% influenced by other variables not included in this study.

5. References

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