

## **Analysis Of The Correlation Background of Vocational Teacher's Education With Teaching Professionalism And Student Achievement**

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### **ABSTRACT**

*This research aims to know: 1) the relationship between the background education of teachers of the vocational mining with student learning achievements, 2) the relationship of teaching professionalism with the learning performance of students, 3) the relation of background education teacher of the professional mining to the professionalism teaching. This is an ex-post-facto study. Research subjects of 45 SMK State and Private Pematangsiantar teachers. Data collection techniques using questionnaires. Data analysis techniques using correlation test analysis using SPSS 22.0 Research results: (1) there is a positive relationship between the educational background and the student's learning performance of 24% and it is not significant that it is likely that the education background may not directly affect the students' learning performance. It is expected that professional teachers to always improve the quality of teaching professionalism and pursue higher education.*

**Keywords:** *Teacher education background, competence of teaching professionalism, student learning achievements.*

## A. INTRODUCTION

Human resources become an important factor because the competitive advantage of a country will be determined by the quality of available Human Resources (HR). The number of population that continues to increase each year is one of the causes of unemployment growth in Indonesia, when the large number of people does not immediately make the country have a good quality of HR.

Education plays a very important role in improving the reliable HR where the low quality of education is the biggest cause of the HR crisis. The HR in the educational environment consists of 5 elements: 1) the head of the school, 2) the teacher, 3) the administrative staff, 4) the student participant, and 5) the supervisor of education[1]. Teachers as human resources in education become the determining factor of educational success. In other words, the success and quality of education should come from the teacher and end up with the teacher as well.

Current problems related to the academic qualifications and the authority of teachers to teach in a particular field of study, still there are teachers whose educational backgrounds are less relevant to the area of study taught. Article 28 of the Government Regulation No. 19 of 2005 states that: "Educators must have academic qualifications and competence as agents of learning, physical and spiritual health, and have the ability to realize national educational goals."[2]. The academic qualification referred to herein is the minimum level of education to be met by an educator must be demonstrated with the relevant degree and/or certificate of expertise in accordance with the provisions of applicable laws. The background of teachers' education can be seen from two sides, namely the compatibility between the field of science that is occupied with the fields of duty and the context of education [3]. For the professions of teachers must come from the institution of teacher education. Teachers having an education background are different from those without since they already have a body of theories to support their work. Instructors with no education background are not prepared to do this. Based on the results of an interview with one of the teachers at SMK State 3 Pematangsiantar who has 2 fields of expertise, namely Tourism and Information and Communication Technology. There are still professors in these two specialties—tourism and computers—whose educational backgrounds don't line up. The professionalism of teachers will decline if they teach subjects that are improper for and unrelated to their educational backgrounds. Similar to this, certain teachers with professional training who are not instructing in line with their

educational backgrounds can still be found at SMK State 2 Pematangsiantar. Professionalism as a supporter of the teacher's smoothness in carrying out his duties, is strongly influenced by two factors: internal factors that include interests and talents, and external factors related to the environment around the means and facilities, as well as various exercises performed by the teacher. The professionalism of teachers in some SMK, especially SMK 2 and SMK 3 are still not optimal with their field of science. For example, English teachers can teach tourism. This can result in what is transmitted or knowledge is transferred to a maximum. Teachers should and should have an educational background that corresponds to the subjects being taught. Teachers are not deprived of a duty and obligation where these duties and obligations differ from the work mostly understood by society in general. This is because the work as a teacher requires certain conditions and criteria called professions. According to the Law No. 14 of 2005 [4] on teachers and lecturers that teachers are professional educators with the main task of educating, teaching, guiding, directing, training, evaluating, and evaluates students on Early Childhood Education, formal education, primary education, and secondary education. Professional teachers in teaching means the ability of a teacher in carrying out the basic tasks as an educator and educator that includes the ability in planning, conducting, and evaluating learning outcomes. As a professional teacher, then a teacher must have the competence that according to the Law Number 14 of 2005 on Teachers and Docents in Chapter 1 of Article 28 paragraph 3 mentioned competence as an agent of learning at the level of primary and secondary education and early childhood education includes: a) pedagogical competence, b) personal competency, c) professional competence and d) social competence [4]. According to [5], the professionalism of teachers is formed as a result of the continuous professionalization that means that the longer a person occupies the profession as a teacher, the higher the level of professionalism and so on. Based on [6] Renstra DitPSMK in 2016 stated in terms of competence, teachers who have a Bachelor and Master/Doctor education appear to have competences that are not much different from teachers with a Diploma 3 education and below Diploma 3. Teachers as managers of teaching learning activities have a role in changing behavior in students who learn where such changes should lead to positive behaviors and have new abilities[7].

Teachers as managers of teaching learning activities have a role in changing behavior in students who learn where such changes should lead to positive behaviors and have new abilities. The management of curriculum, learning, and evaluation are the areas

where instructors have difficulties in carrying out their professional responsibilities. In order to promote student interest and participation in learning, teachers should select the proper models and methods. In reality, there are still many found teachers who are not professional in carrying out their duties, such as not preparing the learning device, not being able to design learning (diplate) related to the competence required by the industry, still using the conventional learning model in teaching and monotonous, does not cooperate with the World of Business and Industry (DUDI), the need for professional tools is still minimal [8]. Professional milling instructors play a significant part in generating SMK graduates with certain professional traits. The government released Presidential Instruction No. 9 Year 2016 on revitalizing SMK in order to solve this issue, and it became a focal point in efforts to enhance the quality of human resources, particularly for the provision of qualified teachers [4]. The resuscitation of educators and education, curriculum, graduates, and collaboration are among these four points.

When the teacher can perform his duties professionally, it can grow the interest of students in learning. With the growth of interest and participation of students in learning can good performance. Learning achievement is one way to measure self-disability that plays a very decisive role in learning success. Learning performance can be seen after an evaluation. According to [9] said the performance of teaching subjects and field work practices is still low. The learning performance of professional subjects is not only influenced by knowledge but there must be student work readiness such as guidance from parents, peer status, circumstances of the community, family background and work world, interests and personal issues. According to [10] in his research said that the high quality of teacher education background is influenced by many supportive factors, the quality of teachers' educational background is strongly influenced by the level of education, the educational path taken must correspond to the field of study and there is a positive relationship between the background of education with the mastery of pedagogical competence. In line with the research carried out by [11] and [12] said teaching experience and work ethos had an influence on the professional competence of professional grinding teachers, but in this study did not reveal about the educational background of the teacher grinding professions. According to [13], only 22% of instructors in SMK are professions teachers, and 78% of them are national loading and qualification loads (normative-adaptive) teachers. One of the threats to the graduate SMK students' low level of competition is presented by this presentation [14]. The educational background of

professional teachers with the professionalism of teaching will determine the quality in learning. This quality of learning can be seen from planning, implementation, until evaluation is carried out. The success or failure of a learning process is largely determined by the learning achievements achieved by the student.

## **B. METHODS**

This type of research is ex-post facto because in this study there is no specific treatment, but only reveals events that have occurred and already exist in respondents without providing treatment or manipulation to the variable being studied. The study aims to analyze the relationship between the background of teacher education and the professionalism of teaching towards student performance. This research uses a quantitative approach, all data or information is realized in the form of numbers in the height and its analysis is based on statistical analysis. The subjects in this study are the teachers of the occupation of 3 State SMK and 2 Private SMK in Pematangsiantar.

## **C. RESULT AND DISCUSSION**

The data obtained is taken from the results of the dissemination of the questionnaire then presented in the form of a description of the research data. The description of the research data includes the average (mean), median, mode, standard deviation, and trend table of each variable. Respondents in this study were all productive teachers at SMK State and Private Schools in Pematangsiantar of 45 teachers.

### *a. Variable background of teacher education*

Data variables of the educational background were measured using elevators distributed to 45 teachers, statements covering 4 positive statements. The maximum score of the alternative answer is 4 and the minimum score is 1, the highest score is 16; the lowest point is 10; the average is 15, 56; the median is 16,00; the mode is 16, and the standard deviation is 1,145. Furthermore, the trend of the variable background of education in the category of Education, S1 Education according to the field of study of 32 teachers or 71.1%, S1 Non-pedagogical and according to study fields of 17.8%, S2 Non-pedagogic and not in accordance with the study field of 6.7% and in the same category of D3 Linear Field of Study taught by 2 teachers or 4.4%.

### *b. Variable Description of Teaching Professionalism*

Data variable professionalism teaches teachers consisting of two competences, pedagogical and professional, with the spread of a questionnaire of 30 questions. Based on data analysis using the SPSS 22 For Windows program, you can get the highest score of 150, the lowest score is 31, with the average value of 127; the mode is 150; and the standard deviation is 20.

*c. Description of Student Performance Variables*

Student learning performance is obtained from the dissemination of a questionnaire consisting of 15 questions. The Likert scale has been modified to 5 alternative responses: Always (5), Frequently (4), Sometimes (3), Rarely (2) and Never (1). The maximum score of an alternative answer is 5 and the minimum score is 1. Based on data analysis using the SPSS 22 for Windows program, the highest score of 75 can be obtained, the lowest score is 49, with an average (mean) of 63; the mode is 62; and the standard deviation is 7.

The preliminary test in this study is the homogeneity test and the linearity test. The results obtained from the homogeneity test that is teacher education background (X1) obtain a significance value of 0,000 and the Teaching Professionalism data obtains a signification value of 0,000 for Kolmogorov-Smirnov but for Shapiro Wilk obtaining the significance of 0,052. On the variable data Student Learning Performance obtained a significance value of 0.216. Therefore, for the normality test on this research variable is declared normal for professional teaching data and learning performance because the significance value is greater than 0.05, while for the background data Education is not normal because the significant value is less than 0.05. Next, a linearity test is performed to see the linear relationship of the three variables. The linearity test is as follows:

Table 1. ANOVA<sup>a</sup>

1	Sum of Mode Squares	df	Mean Square	F	Sig.
Achievement of learning	13.249	2	6.624	13.945	.203 <sup>b</sup>
Background	19.951	42	.475	4.423	.505
Professionalism teaches	1.454	1	1.125	10.339	.946
Total	33.200	45			

a. Dependent Variable: Achievement of learning

b. Predictors: (Constant), Background, Profesionalism Teaches

Based on “table 1” above, the significance value of the deviation is greater than 0.05, namely, among other things, 0.203 for the Learning Performance variable, 0.505 for the Education Background variation, 0.946 for the Teaching Professionalism variation. Based on the linearity test, the value of the significance of the variable is known, as long as it can be concluded that there is a linear relationship between the three variables.

After the linearity test is done, the next step is to test the correlation of the third variable. Using SPSS 22 software, the output results are obtained as in the table below:

Table 2. Correlations

Correlations					
			Background Education	teaching professionalism	Student Achievement
Spearman's rho	Background Education	Correlation Coefficient	1.000	.478**	.242
		Sig (2-tailed)	.	.001	.110
		N	45	45	45
	teaching professionalism	Correlation Coefficient	.478**		
		Sig (2-tailed)	.001	.	.000
		N	45	45	45
	Student Achievement	Correlation Coefficient	.242	.659**	1.000
		Sig (2-tailed)	.110	.000	.
		N	45	45	45
**Correlation is significant at the 0.05 level (2-tailed)					

Based on the output of the “table 2” above it can be seen that the large relationship between the teacher background variable with pedagogical competence is 0,478 with a significant level of 0,01 and N = 45. Based on the correlation hypothesis test, then between the background variable Education with Professional Competence has a relationship that is shown through a level of significance of 0.01 ( < 0,05 )  $H_a$  received with a large relationship 47,8% entered the medium category. As for the correlation coefficient between the Variable of Professional Competence with Learning Performance of 0.659 with a level of significance of 0,000 which means having a relationship,  $H_a$  is accepted that of 65.9% enters the category of strong relationships. For the test of the hypothesis of the relationship between the educational background variable and learning performance of 0.110 showed that it had no meaningful relationship with a correlation coefficient of 24.2% falls into the low relationship category.

Table 3. Model Summary



Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632 <sup>a</sup>	.399	.370	.68923

a. Predictors: (Constant), Latar Belakang, Profesionalisme Mengajar

In this section is shown the output of the second part (model summary) in “table 3” above explaining that the size of the correlation value or relationship R is 0.632. From this output is obtained a determination coefficient (Rsquare) of 0.399. This demonstrates the understanding that together Education background (X-1) and Teaching Professionalism (X2) are related to Learning Performance (Y) by 39.9%, while the remaining 60.1% are due to other factors not mentioned in this study.

Based on the results of the analysis of the simple correlation data obtained is the background of teacher education (X1) and Professional Competence Teaching (X2) with the variable Student Learning Performance (Y) have correlations with each of the corresponding coefficients on the description of the research results, but the relationship between the background Education with performance possesses a low relationship, this is due to the background education against the majority of the SMK has no significant influence, because the ability of the teacher to improve student learning performance is more influenced by the professionalism of teaching and learning experience. In addition to the analysis that the researchers have done,

The relationship between teacher education backgrounds with the competence of teacher professionalism and student learning achievements, this can be strengthened by looking at and comparing with relevant research.

In accordance with the identification of the problem that a professional educator is required to have a profound mastery of the field of study to be taught and able to channel the material to the pupils, both are correlated between the educational background and the professionalism of teaching teachers that affect the learning performance of students. Teachers who have an educational background that corresponds to the lessons they are able to evaluate both in providing science and teachers with long teaching experience, will be a reliable and skilled educator. The findings of this third research question can provide information that the educational background and teaching professionalism together have a positive and significant correlation to the student’s learning performance.

#### **D. CONCLUSION**

According to the data analysis results, there is a correlation between a teacher's educational background and professional teaching teachers' levels of competence and how well students learn: The higher a teacher's educational background (X1) and professional teaching teachers' levels of competence, the higher a student's learning performance (Y).

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