
THE EFFECT OF SUPERVISORY PERFORMANCE ON THE QUALITY OF MATHEMATICS EDUCATION IN GRADE II STUDENTS OF EBC TURISCAI

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ABSTRACT

Improving the performance of supervisors and the quality of student education has a positive relationship because a maximum and good learning style will provide good quality education. To find out whether or not students succeed in the learning process in the field of economics studies, it is necessary to assess (evaluate). Evaluation according to Tardif (1989), means an assessment process to describe the achievements achieved by a student in accordance with predetermined criteria. Thus, assessment (evaluation) can be known the ability, ability, mastery of students to knowledge skills and values. The quality of education is a demand from the community to carry out a work action that has a positive impact and is professional, objective, selective, disciplined and open. The hypothesis of the supervisor performance variable (X) on the quality of education (Y) of students in Ensino Basico 3o Ciclo Turiscai shows that there is a positive and significant influence individually because the $t_{table} > t_{count}$ is $7,937 > 2,000$ then H_a is accepted. Thus, the supervisor performance variable (X) has a significant effect on the quality of education (Y) of students in Ensino Basico 3o Ciclo Turiscai. This means that better supervisor performance (X) will provide higher quality education for students at Ensino Basico 3o Ciclo Turiscai. From the results of the calculation of a simple regression correlation analysis, it shows that the coefficient (r) of 0.722 or 72.2% means that the supervisory performance variable (X) has a fairly close relationship or has a strong enough correlation with the variable Education quality (Y) in Ensino Basico 3o Ciclo Turiscai and the coefficient of determination (r^2) of 0.521 or 52.1% means that the contribution or contribution of supervisor performance (X) is given to the variable Education quality (Y) of 0.521 or 52.1% while The remaining 47.9% was influenced by other factors. Based on the calculation results with a simple linear regression analysis model, the value is obtained that the supervisory performance variable (X) shows a unidirectional or positive regression coefficient value of 0.628 against the education quality variable (Y). This can be

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interpreted that the performance of supervisors (X) affects the quality of education (Y) by 0.628 or 62.8% in Ensino Basico 3o Ciclo Turiscai.

KEYWORDS *Supervisory performance and Education quality*



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INTRODUCTION

According to Fleming and Mills (1992), supervisory performance is the tendency of students to adapt certain strategies in their learning as a form of responsibility to get a learning approach that suits the demands of learning in the classroom / school as well as the demands of the subject, Drummond (1998: 186) defines supervisory performance as, "an individual's preferred mode and desired conditions of learning." That is, supervisor performance is considered as a way of learning or learning conditions preferred by learners and Willing (1988) defines supervisory performance as a study habit that is preferred by learners. Keefe (1979) views supervisory performance as a person's way of accepting, interacting, and perceiving his environment. Dunn and Griggs (1988) view supervisory performance as an innate biological character. Supervisory performance or learning style is a characteristic of cognitive, affective and psychomotor behavior, as a relatively stable acting indicator for learners to feel interconnected and react to the learning environment (NASSP in Ardhana and Willis, 1989: 4). A more suggestive definition of language supervisor performance and which is used as a guide in this study is put forward by Oxford (2001: 359) where supervisory performance is defined as the approach used by students in learning a new language or learning various subjects.

Understanding supervisory performance according to Winkel (2009) is a typical way of learning for students. Whatever method is chosen, the difference in supervisory performance shows the fastest and best way for each individual to be able to absorb information from outside himself. If someone can understand how different the performance of each supervisor is, if one day, for example, must guide someone to get the right supervisor performance and provide maximum results for himself. According to Nasution (2011), the performance of supervisors or student "learning style" is the way students react and use stimuli received in the learning process. According to the author, supervisory performance is a way for students to make a strategy in learning and can affect a person's learning outcomes.

The researchers found a variety of supervisory performance in students that could be classified according to specific categories. The conclusion was that: (1). Each student learns in his or her own way called supervisor performance. Also, teachers have their own teaching styles. (2). Students can find the supervisor's performance with certain instruments and (3). The suitability of teaching style to supervisory

performance enhances learning effectiveness. Information about the performance of different supervisors has an influence on the curriculum and teaching and learning process. This problem is very complex, difficult, time-consuming, not small, frustrating. According to Deporter and Hernacki (2011), supervisory performance is a combination of how someone absorbs, and then organizes and processes information. Supervisory performance is not just an aspect of dealing with information, seeing, hearing, writing and saying. But also the sequential, analytical, global or left-brain-right-brain aspect of information processing, another aspect is when responding to something to the learning environment (absorbed abstractly and concretely).

As for Miscellaneous Performance supervisor, (1). Visual (learning by seeing) Glance up when speaking, speak quickly. For students who perform visual supervisors, who play an important role is the eye / vision (visual), in this case the teaching method used by the teacher should be more / focused on demonstrations / media, invite them to objects related to the lesson, or by showing the props directly to students or drawing them on the board. Children who have visual supervisor performance must look at the teacher's body language and facial expressions to understand the subject matter. They tend to sit in the front in order to see clearly. They think using pictures in their brains and learn faster by using visual displays, such as diagrams, picture textbooks, and videos. In the classroom, visual children prefer to take notes in detail to get information, (2). Auditory (Learning by Listening) Glance left/right flat when speaking, speaking moderately only. Auditory students rely on successful learning through the ear (hearing instrument), for that the teacher should pay attention to his students to his hearing device. Children who have auditory supervisory performance can learn faster by using verbal discussion and listening to what the teacher has to say. Auditory children can digest the meaning conveyed through tone of voice, pitch (high and low), speed of speech and other auditory things. Written information sometimes has little meaning for auditory children to listen to. Such children can usually memorize faster by reading text aloud and listening to tapes, (3). Kinesthetic (learning by moving, working and touching) Glance down when speaking, speaking more slowly. Children who have kinesthetic supervisory performance learn through moving, touching, and doing. Children like this find it difficult to sit still for hours because their desire for activity and exploration is very strong. These supervisory performers learn through motion and touch.

According to Tardif (1989), it means an assessment process to describe the achievements achieved by a student in accordance with predetermined criteria. Thus, assessment (evaluation) can be known the ability, ability, mastery of students to knowledge skills and values. Educational assessment is an assessment of the development and progress of students regarding the mastery of the learning materials presented to them and the values contained in the curriculum, (Arikunto, 2002: 3) and The objectives of assessment (evaluation), according to Shah Muhibbin, (2007: 142) are; To know and gather information towards development and progress, in rare achieve the objectives set out in the curriculum. The purpose of the assessment can be said to be an evaluation carried out by the school has 5 (five) main objectives,

including: 1) To determine the level of progress that has been achieved by students in a certain period of learning process. 2) To know the position or position of a student in his class group. Thus, the results of the evaluation can be used by the teacher as a tool to determine whether the student belongs to the fast, medium, or slow category in the sense of the quality of student learning ability. 3) To know the level of effort made by students in learning. This means that with evaluation, teachers will be able to find out a picture of the student's level of effort. 4) To determine the extent to which students have utilized their cognitive capacity for learning purposes. So, the results of the evaluation can be used as a teacher as an illustration of the realization of the use of student intelligence. 5) To determine the level of usefulness and results of using teaching methods that have been used by teachers in the teaching and learning process. Thus, if a method used does not encourage the emergence of satisfactory quality of student education, teachers are advised to replace the method or combine it with other compatible methods.

Mathematics is a science to realize the meaning of lifelong life, and encourage the improvement of life in the economic field. The scope of the field of study allows humans to obtain answers to business questions in the economic field that emphasize aspects of human existence, so that humans understand the characteristics of economic life and their place of life. The field of economic studies includes the economy and the processes that shape it, the relationship between humans and primary, cyclope, and tertiary needs, and the relationship between humans and the environment. As an intergnative discipline, economics combines the dimensions of the market and people in the business world. Economics subjects develop students' understanding of efforts to understand the needs of society.

Related to the student learning process, it can be measured in terms of cognitive (knowledge), affective (attitude), and psychomotor (skills) which appear in: a) the existence of awareness to build and develop an understanding of variations and special organizations of society, place and environment, b) knowledge of skills and values obtained in the field of economic studies is expected to help the ability of students to act, Behave wisely and responsibly in dealing with social, economic, and cultural problems.

In relation to this study, to regulate the results of students' economic learning interest in school, an analysis of student learning outcomes contained in the test results scores of student answers to a number of questions given by researchers is used to measure student abilities.

RESEARCH METHOD

This research is a quantitative research, this research is housed at Ensino EBC Turiscaí, . The study focused more on the Effect of Supervisor Performance on the Quality of Mathematics Education in Grade II Students of Ebc Turiscaí and The data analysis technique used was a simple regression analysis. Correlation analysis is used to determine the relationship with supervisory performance on education quality.

Meanwhile, simple linear regression analysis is used to measure the magnitude of the relationship between supervisory performance and education quality using numbers. To determine the performance of supervisors with the quality of student education, using the simple linear regression general equation formula, namely: $y = a + bx$, The population used is the total number of students at EBC Turiscai is 60 students. Where the population is; all research subjects, (Arikunto, 1998: 115). According to Burham Bugin, in the research method, the word population is very popular, used to refer to a cognate or group of objects that are the target of research. Therefore, the study population is the whole (*universum*) of the object of research which can be in the form of symptoms of human life which is the source of research data. In this case, more emphasis is placed on limited populations because they have clear data sources quantitative boundaries, (Burham Bugin, 2005: 99). So the population in this study was 60 students in the 2013 school year while the sample used according to Riduwan (2007: 56) said that the sample was "part of the population". A portion of the population taken as a data source can be representative of the entire population. For just ancerc-ancer, if the subject is less than 100, then it is better to take all so that the research is a population study. Furthermore, if the subject is large, it can be taken between 10%-15% or 20%-25% or more so that according to the opinion above, the sample in this study the total number of the population is used as a sample of 60 people.

Research Variables

Research variables are the object of research, or what is the point of attention of a study, (Arikunto, 1998: 99). Kerlinger (1973), states that variables are; construct or property to be learned. Based on the above understanding, it can be formulated that the research variable is an attribute or trait or value of people, objects or activities that have certain variables set by the researcher to be studied and then conclusions drawn. In this study, there are two variables, namely; the effect of supervisory performance on the quality of education of students at EBC Turiscai . So, in this study there are two research variables, namely: (a). The independent variable is; the level of education of the teacher, which is denoted (X), which variable will give influence or will explain the dependent variable. With the indicators are as follows: Academic level (X₁), Expertise. (X₂), The field of care. (X₃). Experience (X₄) and Quality of Education (X₅) while (b). The dependent variables are; The teacher's work performance, which is denoted (Y), which variable will be influenced or will be described by an independent variable. With the indicator is as follows: Innovative. (Y₁), Ability to run educational administration. (Y₂), Able to provide student learning grades/evaluations, (Final exams) (Y₃), Dedicated and loyalty. (Y₄) and Able to manage work programs well. (Y₅)

Data Collection Techniques

The data needed to complete this research are; data that can describe and help the problem faced so as to get an overview of the object studied. The data needed in this study are primary data and secondary data both quantitative and qualitative. Thus the data collection methods used in this study are as follows: (a) Observation Method,

(Observation) Observation or observation is a method of collecting data by observing directly in the field, including focusing on an object using sensory tools, (b). Documentation Method, The documentation method is; looking for data about things or variables in the form of notes, transcripts, books, newspapers, magazines, "legger", agendas, and so on, (Arikunto, 199: 36). This method was carried out to obtain data on the performance of supervisors and the quality of education of students, the author used a tool to list semester exam scores – I, Academic Year – 2013. (c). Questionnaire or Questionnaire Method, Questionnaire is a collection of data in the form of a list of written questions compiled and disseminated to obtain information from data sources or respondents. The questionnaire is ; how to collect data by making an orderly and systematic list of questions, and can be done by telephone, letter, or face-to-face with respondents selected as samples, (Ferdinand; 2006) while Research Instruments Used In this study the instrument used data collection questionnaire where researchers prepare closed questions in the form of alternative answers that will be distributed to students (Nursalam, 2001: 106). The measurement scale used in this study uses the scale model "LIKERT" with four alternative answers. Very Good (SB) is scored (5), Good (B). Given a score of 4, Good Enough (CB) is given a score of 3, Less Good (KB) is given a score of 2 and Very Not Good (STB) is given a score of 1

Test Validity and Reliability

Before the questionnaire is used, it is necessary to test the validity of each statement in this data sampling tool. Thus, a trial was first held on the questionnaire and then the results of this trial were analyzed. According to Umar (2003), the validity test shows the extent to which a measuring device measures what it wants to measure. To measure the validity of each data retrieval or questionnaire, it is done by correlating the score of question items to the total score on each factor of each respondent tested. The correlation formed based on *the Product Moment* correlation technique whose mathematical formulation according to Umar (2000: 195) is as follows:

$$r_{XY} = \frac{N \sum XY - (\sum X) (\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$$

To determine whether an item is valid or not, the existing r count will be compared to the r of the *Product Moment* table. If r count is greater than r table which has previously been compared with a significant level of 5% then the instrument used is valid. While the Reliability Test, this test is intended to determine the correctness of the questionnaire given to respondents and the index obtained from the calculation shows the extent to which the measuring instrument used is trustworthy or reliable. According to Santoso (2001: 270) "A questionnaire is said to be reliable if a person's answers to questions are consistent or stable over time". According to Sugiyono (1997), this reliability test can be done with *internal consistency* with a halving technique which means that instrument items are divided into two groups, namely odd-numbered

instrument items are grouped into one and even-numbered instrument items are grouped into one. Then each group of scores for each item is added together which results in a total score. Furthermore, the total score between the odd and even groups was searched for correlation. Then the correlation coefficient is included in the Spearman Brown formula as follows:

$$R = \frac{2 r\beta}{1 + r\beta}$$

R = internal reliability of all instruments

rβ= correlation coefficient between odd and even instrument hemispheres.

If the calculation result r Alpha is positive and r Alpha > r table, then the item or variable is reliable. And if the calculation result r Alpha is positive and r Alpha < r table, then the item or variable is not reliable. Determinant value = r², To calculate the correlation between supervisory performance to the quality of student education using the formula:

$$r = \frac{n\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{(\Sigma X^2 - (\Sigma X)^2)(n\Sigma Y^2 - (\Sigma Y)^2)}}$$

(Sugiyono, 2007; 261 – 274)

For testing the significance of the correlation coefficient, in addition to using the table can use the t test with the formula:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Furthermore, the data was analyzed with the relationship between the two variables shown by tabulating the data using the help of SPSS version 20 for windows with a meaning level of 0.05% (95% confidence level). After the data is entered, the computer searches for the correlation coefficient and p value then compared with the value of α = 0.05 (Arikunto; 2002). And if you get p value or Asymp value. Sig < α (0.05) which means rejecting Ho and Accepting Ha so it is concluded that there is a significant relationship.

RESULT AND DISCUSSION

From the results of the calculation of a simple regression correlation analysis, it shows that the coefficient (r) of 0.722 or 72.2% means that the supervisory performance variable (X) has a fairly close relationship or has a strong enough correlation with the variable Education quality (Y) in Ensino Basico 3o Ciclo Turiscaí and the coefficient of determination (r²) of 0.521 or 52.1% means that the contribution or contribution of supervisor performance (X) is given to the variable Education quality

(Y) of 0.521 or 52.1% while the remaining 47.9% is influenced by other factors, the t-test is used to test the influence of the dependent variable. This test is used to prove the correctness of the results of the hypothesis which states that the supervisor performance variable (X) has a strong effect on the quality of education (Y) in Ensino Basico 3o Ciclo Turiscaí. Based on the results of the SPSS calculation in the table Reporting Regression Results above, it can be obtained $t_{count} 7,937$ and t_{table} value of 2,000 with a confidence level of 95% and an error rate of 5%, then $t_{calculate} (7,937) > t_{table} (2,000)$. It is proven that the supervisor performance variable (X) has a significant effect on the quality of education (Y) of students at Ensino Basico 3o Ciclo Turiscaí in a significant level $\alpha = 0.05\%$.

The hypothesis of the supervisor performance variable (X) on the quality of education (Y) of students in Ensino Basico 3o Ciclo Turiscaí shows that there is a positive and significant influence individually because the $t_{count} > t_{table}$ is $7,937 > 2,000$ then H_a is accepted. Thus, the supervisor's performance variable (X) has a significant effect on the quality of education (Y) of students in Ensino Basico 3o Ciclo Turiscaí. This means that better supervisor performance (X) will provide higher quality education for students at Ensino Basico 3o Ciclo Turiscaí.

Based on the calculation results with a simple linear regression analysis model, the value is obtained that the supervisory performance variable (X) shows a unidirectional or positive regression coefficient value of 0.628 against the education quality variable (Y). This can be interpreted that the performance of supervisors (X) affects the Quality of education (Y) by 0.628 or 62.8% in Ensino Basico 3o Ciclo Turiscaí.

CONCLUSION

Based on the results of the analysis that has been described, the author draws several conclusions. (a). From the results of the calculation of a simple regression correlation analysis, it shows that the coefficient (r) of 0.722 or 72.2% means that the supervisory performance variable (X) has a fairly close relationship or has a strong enough correlation with the variable Education quality (Y) in Ensino Basico 3o Ciclo Turiscaí and the coefficient of determination (r^2) of 0.521 or 52.1% means that the contribution or contribution of supervisor performance (X) is given to the variable Education quality (Y) of 0.521 or 52.1% while the remaining 47.9% is influenced by other factors, (b) The variable hypothesis of supervisor performance (X) on the quality of education (Y) of students in Ensino Basico 3o Ciclo Turiscaí shows that there is a positive and significant influence individually because the $t_{count} > t_{table}$ is $7,937 > 2,000$ then H_a is accepted. Thus, the supervisor's performance variable (X) has a significant effect on the quality of education (Y) of students in Ensino Basico 3o Ciclo Turiscaí. This means that better supervisor performance (X) will provide higher quality education for students at Ensino Basico 3o Ciclo Turiscaí, (c) Supervisor performance and

professionalism will run in accordance with community expectations if the needs and welfare of teachers must be considered by the government.

In order to improve the quality of student learning, the Government can always improve the ability of teachers by providing opportunities to participate: Training, courses, teacher seminars or continuing higher education, both formal and non-formal, improve the performance of teachers and create an influential school situation conducive and always motivate teachers to carry out their duties well.

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