

The Influence of Teacher's Role, Autonomous Learning Method and Student's Engagement on Student's Learning Outcomes in Vocational High School in Jakarta, Indonesia

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Abstract

To create the quality of human resources and achievers, the learner is required to have a good learning outcome. Learning outcome is the highest benchmark that person achieves after a learning activity during a given time. Learning outcome is not only determined by one's intelligence capabilities but also by the other factors. Sometimes, the learning process cannot achieve a maximum result because of the absence of appropriate teacher's role. This study aims at investigating (1) the influence of Teacher's role on English students' learning outcome (2) the influence of Autonomous Learning Method on English students' learning outcome (3) the influence of Student's engagement on the students' learning outcome? (4) simultaneously effect between Teacher's role, Autonomous Learning Method and Student's engagement on English students' learning outcome students of class? To answer the formulation of the problems above, this study was conducted with quantitative. A descriptive research design was conducted with population of 120 people and sample of 92 people. Sample were randomly selected proportional by applying formula of Slovin. Collecting data in this research used a questionnaire as the instrument. The result of descriptive analysis shows that the teacher's role has a significant impact on students' learning outcome of 70 % , while the Autonomous Learning Method had an influence of 71 % , whereas the students' engagement provided 71 % . The overall findings refers that those three three independent variables, namely teacher's role, autonomous learning method and student's engagement contributed an impact on students' learning outcome of 79,90 % . while, the remaining 20,1 % was caused by external variables.

Keywords: students' learning outcome, influence, autonomous learning, students' engagement, learning method

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Introduction

Improving the quality of national education is a necessity to align Indonesia with other countries. These needs will be met if the education process is able to produce reliable human resources. The phenomenon is certainly a responsibility of many parties, especially teacher in the world of education. The teacher is an intellectual profession that demands comprehensive competencies, competencies and abilities. Current conditions have not shown the maximum expectation so it is still needed a variety of efforts and appropriate strategies to improve children's learning outcomes. There are so many factors that can affect the achievement of children in school, one of which is the factor of self-learning methods that are increasingly developed, where the method of learning is centered on the students. In addition, the activeness of students which is very necessary in the learning process takes place to improve the creativity and independence of students while learning in the classroom.

Education is one of the efforts to deliver students to the process of maturity in various aspects of life. Education is a process of teaching that aims thoroughly, either in the form of knowledge transformation, appreciation and the formation of attitudes or behavior. In line with the national education objectives contained in Law no. 20 Year 2003 on SISDIKNAS (National Education System), that education aims to develop the potential of learners to become human beings who believe and piety to God Almighty, have a noble, healthy, knowledgeable, capable creative, independent and become citizens of a democratic and to be responsible.

Education is basically an effort to provide certain knowledge, insight, skill, and expertise to individuals to develop themselves so as to be able to face any changes that occur. Many factors cause the emergence of learning problems. These factors include internal factors and external factors. Internal factors are factors that arise from within students, such as the level of intelligence and personality. While external factors are factors that arise from outside the student self, such as teacher role factors, teaching methods and student activeness.

Education within the scope of the family is the first and main educational institution. The core family members, the elderly and other members of the family who first teach the child the knowledge of God as the one God, the experience of human interaction, and the obligation to develop responsibility, responsibility for oneself as a religious being, responsible As a student, is responsible as a social creature that lives in a society and is responsible as a citizen, and is responsible as a child against parents and others.

Because of the many factors that affect student learning outcomes, and the limited time, energy and cost, the researcher will limit the scope of the research on 4 (four) variables to be more focused and conclude the results of research closer to the research objectives. The variables that will be met include the role of teachers, independent learning methods, student activeness, and the results of learning English students. The research object is the students of Vocational High School in Jakarta. Based on the background and limitations of problems that have been identified then the authors formulate related to the research or thesis that will be prepared by the author as follows:

1. Is there any influence from teacher role to learning result?

2. Is there any influence of the independent learning method to the students' learning outcomes?
3. Is there any influence of students' activeness toward learning outcomes of English students ?
4. What is the factor of teacher's role, independent learning method, and student activeness simultaneously toward English student learning result?

Literature Review

Learning

Educational experts propose a different understanding between one another, but always refers to the same principle that everyone who is doing the learning process will experience a change in him. Some experts in the world of education provide a definition of learning among them is Wittig (1981) in his psychology of Learning which defines learning as, "Any relatively permanent change in an organism's behavioral repertoire comes as a result of experience."

Which means that learning is a relatively settled change that occurs in all sorts or whole behaviors of an organism as a result of experience. In this sense there is a word change which means change or change, which means that someone is changed when experiencing the process of learning, will experience the changes that make it necessary or require a good ability of the knowledge, skills and attitude to face or overcome the surrounding environment.

Learning outcomes

Learning process culminates in student learning outcomes or student performance. As a result then with the performance, the learning process stopped temporarily. And there was an assessment. With the assessment in question is the determination until something is considered valuable, qualified, or valuable. The size of something of value, worth, or quality comes from others. Teachers are key learners. Teachers design learning, implement learning and assess learning outcomes.

To be called learning, then the change must be relatively steady, must be the end of a long period of time. How long that time period lasts is difficult to determine with certainty, but that change should be the end of a month or years. This means that we must exclude behavioral changes caused by motivation, fatigue, adaptation, sharpness of attention or sensitivity, usually only temporarily. Behavior that changes due to learning concerning various aspects of personality, both physical and psychological, such as changes in understanding, solving a problem / thinking, skills, skills, habits, or attitudes.

Independent Learning Method

The paradigm shift in the learning process that was centered on the teacher becomes student-centered learning (Student Centered Learning) is expected to encourage students to be actively involved in the learning process. In the SCL process, students have the opportunity and facilities to learn independently, and ultimately can improve the quality of students. Innovative learning with the method of Student Centered Learning has a diversity of learning models that require the active participation of students.

Student activity

Active students are students who are intellectually and emotionally involved in learning activities. According to Amir (2009), active students are students who are involved continuously both physically and mentally in learning. According to Balcikanli (2010), Active students are students who are physically, psychologically, intellectually and emotionally involved continuously in the learning process. According to Benson (2001), the four conclusions can be concluded that the active students are the students who are involved continuously both physically, psychologically, intellectually and emotionally that form the process of compiling the subject matter received.

The activity of the students in the learning process is not only the involvement in physical form such as sitting around, doing things, but also in the form of process of analysis, analogy, comparing, appreciation, all of which are students' involvement in psychic and emotion (Brown, 2001).

Research Hypothesis

The hypothesis proposed by researchers in this research is a temporary estimate of the research problem formulation. Based on the theoretical review, literature review and thinking framework, furthermore the researcher wanted to test the hypothesis concerning the influence of teacher's role, the independent learning method and the students' activity toward the learning result of the students grade XI IPA SMA. The hypothesis in this study are:

1. Allegedly there is influence of teacher role to learning result of student.
2. Allegedly there is influence of independent learning method to English student learning outcomes.
3. Allegedly there is influence of student activeness to learning result of student.
4. Allegedly there is influence of teacher role, independent learning method and student activeness simultaneously to result of learning English student.

Methodology

The method used in this research is quantitative research method, where the measurement of quantitative data and objective statistics through scientific calculation comes from respondents as samples are asked to answer a number of questions. This research is also designed using casual design to analyze the relationship or influence between one variable with other variables, (Umar, 2011). In this research the design is used to test the influence of 4 independent variables namely, the role of teacher (X1), independent learning method (X2), and student active (X3) to one dependent variable that is the result of learning English (Y). Population is a generalization area consisting of: object / subject that has certain qualities and characteristics that are set by researchers to study and then in conclusion (Sugiyono, 2011). So the population is not just people, but also other objects and objects. Population is also not just the number of objects / subjects studied, but includes all characteristics / properties possessed by the subject or object. The population in this study includes students in Vocational High School in Jakarta. Total Population is 120 students and the number of samples as 90 students are calculated by the Slovin formula (Umar, 2003).

Results and Discussion

Validity Test

Validity Test Results Criteria used in this study is to compare the value of r arithmetic and r table. If r arithmetic $>$ r table then an item can be considered valid. R value table can be obtained by df (degree of freedom) = $n - k$, where n is the number of samples, and k is the number of grains statement. The level of significance or Alpha (α) used is 0.05. All the variables in this study have passed the validity test.

Reliability Test Results

One of the conditions for the test results of a test can be believed is that the test has adequate reliability. Reliability comes from the word reliability to what extent the results of a measurement can be trusted. The belief of the measurement results if in several times the implementation of measurements on the same subject group obtained relatively similar results, as long as the aspects measured in the subject have not changed (Suseno, 2013). In each study, there are often considerable measurement errors. One method of calculating reliability is the method developed by Cronbach, the Alpha Cronbach coefficient (α). In this study the coefficient is obtained from data processing using SPSS version 21.0. According to Kaplan and Scuzzo reliability coefficients of $>$ 0.7. An instrument is said to be reliable if the respondent's answer to the research instrument is consistent or stable.

Normality test

Inferential statistical analysis (good regression / correlation model) must meet several requirements, in addition to data must be interval scale, also requires data to be normally distributed (Sugiyono, 2010). For that the data need to be tested normality. Normality test of each variable is done with the intention to know whether the questionnaire or data distribution of each variable does not deviate from the characteristics of data that will be normally distributed. Normality testing is done using SPSS V.21 computer program. Test Kolmogorov-Smirnov. By criterion if probability value or significant less than 0.05 data is not normally distributed.

Multicollinearity Test

Multicollinearity is a condition in which one or more independent variables are correlated with other independent variables, or in other words a free variable is a linear function of other independent variables. To determine whether there is a problem multicollinearity, Marquadt method can be used (Ghozali, 2011), by looking at the value of Variance Inflation Factor (VIF). The results in the following table:

Table 1. Multicollinearity Test Results

Independent Variable	VIF	Keterangan
Teacher's role	4,981	There's no multicollinearity
Autonomous learning method	4,530	There's no multicollinearity
Student's Active	3,699	There's no multicollinearity

Heteroscedasticity Test Results

According to Ghozali (2011) the heteroscedasticity test aims to test whether in the regression model there is a residual variance inequality from one observation to another. If the variance of the residual one observation to another observation remains, then it is called homoscedasticity and if different it is called heteroskedatisitas. Due to the occurrence of heteroscedasticity, any change in the dependent variable causes the error (residual) also changes in line or increase or decrease. In other words the consequence if the dependent variable increases then the error will also increase.

Hypothesis test

Table 2. Result test

Variable	Hypothesis	Coefficient	T count (Partial)	F count (Simultaneous)	R2	Adjusted R Square	Conclusion
Teacher's role (X1)	Ho : $\beta_1 = 0$ H1 : $\beta_1 \neq 0$	0,326	15,522	118,7 15	0,732	0,729	Ho : refused H1 : accepted
Autonomous Learning Method (X2)	Ho : $\beta_1 = 0$ H1 : $\beta_1 \neq 0$	0,276	14,807		0,714	0,710	Ho : refused H1 : accepted
Student's Active (X3)	Ho : $\beta_1 = 0$ H1 : $\beta_1 \neq 0$	0,328	14,674		0,710	0,707	Ho : refused H1 : accepted
Teacher's role (X1), Autonomous learning method (X2), Student's Active (X3)	Ho : $\beta_{1,2,3} = 0$ H1 : $\beta_{1,2,3} \neq 0$				0,805	0,799	Ho : refused H1 : accepted

1. Discussion The first hypothesis

To test the first hypothesis stating that there is influence of teacher role to learning result of student is done partial regression test between technological variables with learning result variable which produce calculation where coefficient determination 0,732 and value t count equal to 15,522 at significant level 1% greater than t-table value so Ho is rejected and H1 accepted.

the model of regression equation as follows:

$$Y = 25,508 + 0,855X1$$

The model explains that every 100% change in the teacher role variables (XI) will positively affect the change in student learning outcomes (Y) of 85.5 %, With a constant value of 25.508.

From the analysis of aggression, it was found that teacher role variables have positive and significant influence on the learning result of Vocational High School students in Jakarta. This can be shown from the magnitude of regression coefficient marked positive is 0.326. This means that if the role of teachers improved, it will result in

increased student learning English results with the assumption of other factors are constant.

2. Discussion The second hypothesis

To test the second hypothesis stating that there is a positive influence of independent learning methods on the results of students' learning conducted partial regression test between independent learning method variables with learning result variable that produces calculations where the coefficient of determination 0.714 and the t count of 14,807 At a significant level of 1% greater than the t table value thus Ho rejected and H1 accepted.

The model of regression equation as follows:

$$Y = 37,393 + 0,805X_2$$

The model explains that every 100% change in the variable of independent learning method (X_2) will positively affect the change of student learning result (Y) by 80,5%, with constant value equal to 37,393.

From the analysis of aggression, it was found that the variable of independent self-learning method had positive and significant influence on the learning result of Vocational High School students in Jakarta. This can be shown from the magnitude of regression coefficient marked positive is 0.276. This means that if the positive self-learning method is improved, it will result in increased student learning English results with the assumption of other factors are constant.

3. Discussion The third hypothesis

To test the third hypothesis stating that there is a positive student activity influence on the result of learning English Vocational High School students in Jakarta done partial regression test between environmental variables with learning result variable that produces calculation where the coefficient of determination 0, 710 and the value of t count 14.674 at a significant level of 1% greater than the t table value thus Ho rejected and H1 accepted.

The model of regression equation as follows:

$$Y = 62,069 + 0,825X_3$$

The model explains that every 100% change in Student Activity variable (X_3) will positively influence to the change of student learning result (Y) equal to 82,5%, with constant value equal to 62,069.

From the analysis of aggression, it was found that the positive student activeness variable had a positive and significant influence on the students' learning outcomes of Vocational High School students in Jakarta. This can be shown from the magnitude of regression coefficient marked positive is 0.328. This means that if the activity of positive students is improved, it will result in increased student learning outcomes with the assumption of other factors are constant.

4. Discussion Fourth hypothesis

From F test known that simultaneously teacher role variable, independent learning method and student activeness influence student english learning result. This means that if the role of teachers, independent learning methods and student activeness is improved simultaneously then significantly will be able to improve students' learning outcomes Vocational High School students in Jakarta.

Furthermore, the extent to which the influence of the role of teachers, independent learning methods and student activeness affect student learning English results can be known from the adjusted R square (R²) of 0.799. This figure shows approximately that 79.90% students learning English Vocational High School students in Jakarta can be explained by teacher role variables, independent learning methods and student activeness. While 20.1% is influenced by other factors.

Thus the final discussion of the results of this study where the first hypothesis to the fourth that states that there is influence of the role of teachers, independent learning methods and student activeness of English students learning outcomes Vocational High School students in Jakarta, both partially and simultaneously been tested.

Multiple regression

Multiple linear regression analysis is used to determine whether the independent variable The influence of teacher role, independent learning method and student activeness simultaneously have an effect on to result of learning as dependent variable. Using SPSS 21.0 is obtained as follows:

Table 4.19

Multiple Analysis Results

From the table above can be formulated model of multiple regression equation obtained from result of analysis as follows:

$$Y = 29.342 + 0.326 X1 + 0.276 X2 + 0.328 X3$$

The model explains that simultaneously variable of independent variable The influence of teacher role, independent learning method and student activeness simultaneously have an effect on to learning result of english language. The amount of influence of the dependent variable on the dependent variable is indicated by each coefficient value of the independent variable. With the constant value of 29,342, the variable use of teacher role (X1) with coefficient 0,326 means that every 100% change on variable of teacher role (X1) will positively influence to change of student learning result variable (Y) equal to 32.6%. While the coefficient of independent learning method (X2) is 0.276 which means that if the variable of self-learning method (X2) changed by 100%, it will bring about 27,5% change to the learning result. Similarly, the student activeness variable (X3) which has a coefficient of 0.328 which means that the student activity change of 100% will affect 32.8% on student learning outcomes.

Conclusion

Based on the results of analysis and research and hypothesis testing can be taken as follows:

- Descriptive analysis results show that the role of teachers give a significant effect on the results of learning English Vocational High School students in Jakarta of 73.2%.
- Descriptive analysis results show that the independent learning method gives a significant effect on the learning outcomes of students in Vocational High School students in Jakarta of 71.4%.
- Descriptive analysis results show that students 'activity influences the students' learning outcomes of Vocational High School students in Jakarta of 71.0%.
- The results of the whole analysis show that simultaneously the three independent variables are the role of teachers, independent learning methods and student activeness to give effect to the learning outcomes of students in Vocational High School students in Jakarta for 79.9%. The remaining 20.1% is caused by other variables not involved in this research.

Suggestion

With the influence of the role of teachers, independent learning methods and student activeness of Learning Outcomes english language, then some suggestions that can be given include:

- For students need improvement and positive use for the role of teachers because appropriate teacher role can improve learning outcomes. Students should strive to adjust and know the appropriate role of teachers in the classroom while learning takes place.
- The importance of self-learning methods for the implementation of teaching and learning process in this case is of course on the supervision of teachers, because we know that science is not only obtained from books alone, but through the role of teachers and independent learning methods are interesting, children will be more enthusiasm to learn .
- The importance of providing a child's direction to do the best, always giving more support and attention to the child. And provide opportunities / involving students activeness in determining the learning that will take place in the class. Because this can stimulate and stimulate children always think clearly and positively.
- Need for cooperation between teachers, parents and community, in order to create a comfortable atmosphere for learning children. Because the learning process does not only happen at school, but in the environment where the child is located. Therefore we must work together to create a conducive, positive atmosphere.

Recommendation

Based on the results of the above research then some related recommendations that can the authors convey in this study are:

- Given the role of teachers influence the students' English learning outcomes, then the role of teachers in the field of education is maintained and applied as a source to increase knowledge.
- Given the independent learning method influences the student's learning outcomes, let us as a member of education direct the children and guide them so that the child always has a positive thinking, perspective on something and we direct and give examples in the application. So automatically the child will behave well in the act.
- Given the activity of students influence the student learning outcomes, it is necessary cooperation between parents, teachers and the community to always involve students in determining decisions in the learning process so that students will feel themselves needed and important, stimulate them to be interested in learning.

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