

The Effects of Facility and Interpersonal Communication on Learning Achievements of Entrepreneurial Subject

Munawaroh Munawaroh

The study program of Economics Education, STKIP PGRI Jombang, Indonesia

Keywords: Learning Facilities, Teacher Interpersonal Communication, Achievement Entrepreneurship.

Abstract: The interaction of teaching and learning was supported by several other factors in education, namely others: the purpose of education, teachers, students, and educational facilities, teaching methods, subject matter and environment. This research was a quantitative research with Multiple Linear Regression Test, The population in this research was all students in class XI SMK Nusantara Bogem Jombang in academic year 2014 / 2015 with the number of students was 42 students, Research variable consisted of independent variable in the form of learning facility (X1), Interpersonal Communication of Teacher (X2) and dependent variable in the form of Entrepreneurship learning achievement (Y). Data collection techniques were such as observation, questionnaires and documentation. Data analysis used multiple linear regression test. Based on the result of hypothesis testing that was obtained by t count of learning facility variable (X1) as big as 3,345 and t table as big as 2.023. So that H_a was received and H_o was rejected in the significance level as big as 0,002 and the result test was obtained by t count of teacher's interpersonal communication variable (X2) as big as 2,878 and t tables as big as 2,023, so that H_a was received and H_o was rejected in the significant level as big as 0,006. And Partially The results showed that learning facility variables had a positive and significant effect to student's learning achievement in class XI in SMK Nusantara Bogem Jombang than The results showed that teacher's interpersonal communication variables had a positive and significant effect to student's learning achievement than simultaneously of The results of research could be concluded that learning facility variable and teacher's interpersonal communication had a positive and significant influence to the student's learning achievement of entrepreneurship.

1 INTRODUCTION

Communication was a very important skill in human life, where we could see communication to be capable of occurring at the time of human's movement. Teachers who did not interact with students closely, causing the communication process became less smoothly so that it made students feel away from teachers and students feel reluctant to participate actively in learning. Interpersonal communication of teachers with students was one form of relationship between teachers and students.

Slameto's opinion (2003: 64) suggested that, "school factors that influenced learning include teaching methods, interpersonal curriculum of teachers with students, student's relationships, school discipline, school lessons and school time, learning standards, building conditions, learning

methods And home work. Learning and teaching were cores of behavior in the educational process where students and teachers interacted. The interaction of teaching and learning was supported by several other factors in education, namely others: the purpose of education, teachers, students, and educational facilities, teaching methods, subject matter and environment".

Teaching and learning process needed to have stimulation namely everything outside the individual that stimulates the individual to conduct reactions / learning behavior. Stimulation in this case included the assignment as well as the external environment atmosphere that had to be accepted or learned by students. Personal factors directly affected the accuracy of perception, it was not the process itself. Great interpersonal perceptions did not only influence to interpersonal communication, but also to interpersonal relationships. Experience also

influenced the perception of accuracy. Experience increased through the series of events that have ever been encountered. When the teacher faced his various students, he would group them into certain concepts that are intelligent, ignorant, ugly, industrious, and lazy. The use of this stimulation simplified the stimulation that was received. The success of interpersonal communication depended on self-concept (positive or negative). The knowledge of one's self would improve communication and at the same time, communicating with others increased the knowledge of one's self.

Education at School was not limited to formal time but also informally. Education at School also included intercommunication between students with another student and student with teacher including head master outside the classroom or it was not in the interaction of teaching and learning activities. At this time it opened the opportunity for teachers to create an educational association for students. For that matter the interpersonal communication of teachers with students as a means of knowledge transfer was very important. Even it was very big role in determining the success of education concerned. It was often said that the high level of an education quality achievement was also influenced by communication factors among teachers and students such as interpersonal communication. Associated with the learning process at schools, interpersonal communication among teachers and students is effective if the message that is delivered by teachers could be accepted and understood, and also it generated positive feedback for students. With the positive interaction between student and teacher through good interpersonal communication could solve various differences so that students' learning achievement would increase through the spirit of learning because they were motivated by the teacher.

Research that was conducted by Karina in 2012 showed that there was influence of learning interest and interpersonal communication of teacher-student to learning motivation of Sharia Banking student in class X IPS SMA N I Sanden in academic year 2011/2012. Good interpersonal communication between teacher-student and interest in learning influences with student's learning motivation. In the research mentioned was explaining that good interpersonal communication between teacher-student and interest in learning was a factor that could grow student's learning motivation that could improve student's learning outcomes. It was also showed the results of research from Ridwan Maulanaa *, Marie-Christine Opdenakker a , Perry den Brokb and Roel Boskera by titles Teacher-

student interpersonal relationships in Indonesia: profiles and importance to student motivation Ridwan Maulanaa *, Marie-Christine Opdenakker a , Perry den Brokb and Roel Boskera a Groningen Institute for Educational Sciences (GION), University of Groningen, Groningen, The Netherlands; b Eindhoven School of Education, Eindhoven University of Technology, Eindhoven, The Netherlands (Received 9 February 2010; final version received 1 September 2010) This research was designed to investigate the distribution of interpersonal profiles based on student and teacher's perceptions and to examine the association between student's perception of teacher interpersonal behavior and learning motivation in Indonesia. Participants were 1900 secondary school students (grades 7 to 9) across 66 (Mathematics and EFL) classes from 11 public schools in Indonesia. The results showed that a variety of interpersonal profiles could be distinguished, that teachers perceive themselves more favorably than their students do, and that student's perception of teacher interpersonal behavior and their learning motivation were associated. Influence and Proximity were found to be important determinants of student's motivation; both dimensions were related to a more autonomous motivation, while Influence was also associated with a more controlled motivation. Contrary to the existing knowledge base, this research revealed that the relationship between teacher's interpersonal behavior and student's learning motivation was more strongly connected to Influence than to Proximity. Keywords: interpersonal behavior; student and teacher's perceptions; secondary education; student's motivation Rationale For the last three decades, scholars in the domain of learning environment research have shown a considerable interest in conceptualizing, measuring and examining perceptions of psychosocial characteristics of the learning environment in terms of teacher-student's interpersonal relationships (e.g., Fraser, 1998; Fraser & Walberg, 1991; Wubbels & Brekelmans, 1998). A number of studies have revealed the importance of teacher-student's relationships for student's outcomes (e.g., den Brok, Brekelmans, & Wubbels, 2004; Henderson, Fisher, & Fraser, 2000). Studies have shown that teacher-student interpersonal relationships have effects on both teachers and students. Teachers who were experiencing healthy interpersonal relationships with their students were argued to experience better satisfaction with their job and with preventing of burnout (Ben-Chaim & Zoller, 2001). Similarly, students' perceptions of teacher interpersonal behavior are strongly associated with their motivation and achievement in all subjects (den

Brok et al., 2004). Hence, healthy teacher–student interpersonal relationships set a prerequisite for students to engage in learning activities (Brekelmans, Slegers, & Fraser, 2000). In Indonesia, research on teacher – student interpersonal relationships was scarce. However, the small amount of studies mainly focusing on computer education in higher education indicated a similar importance of teacher – student relationships (Margianti, Fraser, & Aldridge, 2001, 2002; Schibeci, Rideng, & Fraser, 1987; Soerjaningsih, Fraser, & Aldridge, 2002). The present study examines the extent to which interpersonal profiles that were found in previous studies apply to Indonesian teachers of secondary education. The results of this study may be useful for teachers, teacher trainers and policy makers in Indonesia and neighboring countries sharing similar cultural backgrounds, by providing empirical evidence of teacher’s behaviors that are common in the Indonesian (and Southeast Asian) context. Moreover, this study may provide an additional knowledge base in terms of teacher – student’s relationships from an Indonesian perspective. While the problems that are encountered in this research : Based on the background above so that the formulation of the problem in this research : 1) Was there any effect of learning facilities in the classroom to student ‘s learning achievement of Entrepreneurship subjects in Class XI SMK Nusantara Bogem Jombang Academic year 2014/2015? 2) Was there the influence of interpersonal communication of teachers with students to student’s learning achievement of Entrepreneurship subjects in Class XI SMK Nusantara Bogem Jombang in Academic year 2014/2015? 3) Was there any influence of learning facilities and interpersonal communication of teacher with student to student’s learning achievement of Entrepreneurship subjects in Class XI SMK Nusantara Bogem Jombang in Academic year 2014/2015? While the purpose of this Research is to explain of the influence of learning facilities and interpersonal communication of teachers and students on the student achievement in the grade eleven class SMK Nusantara bogem jombang 2014/2015.

2 METHODS

The design in this research was the type of quantitative research with multiple linear regression test. The design of research as follows:

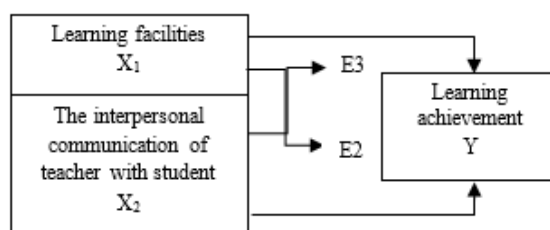


Figure 1: Research design.

Information:

- E1: The influence of X1 (Learning Facility) to Y (Learning Achievement)
- E2: The influence of X2 (Interpersonal Communication of teacher with student) to Y (Learning Achievement)
- E3: The influence X1 (Learning Facility) and X2 (teacher interpersonal communication with student) to Y (Learning Achievement)

Population in this research was all students in Class XI SMK Nusantara Bogem Jombang Academic year 2014/2015. The number of students in Class XI SMK Nusantara Bogem Jombang Academic year 2014/2015 was 42 students. Because the population was less than 100 so that the samples were not done.

Variable in this research was independent variable (X) and dependent variable (Y). The independent variables (X1) were Learning Facilities with indicators. While the independent variables (X2) were: The interpersonal communication of teachers and students (X2). While the dependent variable or dependent variable (Y) was: student’s learning achievement with the indicator of the value of the uneven semester report on the students of Entrepreneurship in Class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015.

The technique of Data collection was done with; A) Observation, b) Questionnaire was intended to collect data about the influence of student’s learning facilities and teacher’s interpersonal communication with students to student’s learning achievement of Entrepreneurship subjects, then, the validity and reliability of result questionnaire were tested c) Documentation.

Techniques of data analysis that would be used in this research used the help of computer programs, namely SPSS for windows Version 17. As for the analysis which was conducted namely: Multiple linear regression test, classical assumption test and hypothesis testing. Hypothesis testing used F test to analyze influence simultaneously and t test was used to analyze for influence partially.

3 RESULTS AND DISCUSSION

The description of Research Data The description of research data was a description of data collection results from each variable that was researched .In this research three variables that were studied. However the variables mentioned were: a) student learning facilities as the first independent variable (X1). B). Teacher's interpersonal communication as the second independent variable (X2), c) student's learning achievement as dependent variable (Y). Data about the utilization of student's learning facilities and interpersonal communication of teachers were obtained by questionnaire and documentation techniques.

Questionnaire techniques were used to obtain data about the use of student's learning facilities And interpersonal communication of teachers, whereas documentation techniques were used to obtain data about school inventory and student's achievement based on the score of report of students in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015.

The research data that has been collected then it was analyzed by using statistics with the help of SPSS software version 17. The descriptive statistics provided description or a descriptive data from average value (the mean), standard deviation, minimum, and maximum values from independent variables and dependent variables. This descriptive Statistic presented sample 42 in class XI SMK Nusantara Bogem Jombang in Academic year 2014/2015.

The results of descriptive analysis about the utilization of student's learning facilities and teacher's interpersonal communication and student's learning achievement, researchers suggested as follows:

- The utilization of student's learning facilities (X1)
The utilization of student's learning facilities was the first independent variable (X1) in this research. Based on the descriptive data in table 4.1 showed that the number of respondents who were made the sample of this research as many as 42 students. Mean was 56.95 that means the average value of student's learning facilities utilization that was obtained by 42 students as big as 56.95 and standard deviation (SD) as big as 3.319.
- The interpersonal communication of teachers (X2)
The interpersonal communication of teachers with students was the second independent

variable (X2) in this research. Based on the descriptive data in table 4.1 indicated that the number of respondents were who made the sample of research was 42 students. Mean amounted to 43.11, which means the average score of teacher's interpersonal communication which was obtained 42 students as big as 43.11 and standard deviation (SD) as big as 2,923. 59

- Student's learning achievement (Y)
Student's learning achievement was dependent variable (Y) in this research. Based on data description in table 4.1 showed that the number of respondents who were made this research sample was 42 students. Mean amounted to 74.59 which means the average value of student's learning achievement that was obtained 42 students as big as 74,59 and standard deviation (SD) as big as 3,378.

3.1 Analysis of Multiple Linear Regression

Based on the result of regression analysis obtained, then the result of regression equation as follows:

$$Y = 29.791 + 0.452 X1 + 0.442 X2$$

Information:

Y= Student's learning achievement in class XI

X1= Learning Facilities

X2= The interpersonal Communication of teacher with Students

The equation of the regression line above could be explained as follows:

The constant value (a) of 29.791 mathematically stated if the variable value X1 and X2 equal to zero or there was not influence of the use of learning facilities and the communication Interpersonal of teachers with Students so that Y value or student's learning achievement as big as 29.791.

The value of regression coefficient X1 had positive value as big as 0.452.means Student's Learning achievement had a positive effect to student's learning achievement. Coefficient 0.452 means that each increased in one score of learning facility variables so that it was predicted to form a contribution to increase student's learning achievement as big as 0.452.coefisien regression X1 had a significance level as big as 0.002 .

The value of regression coefficient X2 was positive value as big as 0.442 meant that the interpersonal communication of teachers with the students had a positive effect to student's learning achievement. Coefficient 0.442 meant that each

increased one value of interpersonal communication of teachers with students so that it was predicted to form a contribution to increase student's learning achievement as big as 0.442. The regression coefficient X2 had a significance level as big as 0.006.

Based on the equation of regression line above that was known learning facility variables (X1) had the largest coefficient value that was compared to other independent variables so that the variable mentioned gave the greatest influence to student's learning achievement.

Before performing the test on the research hypothesis, it had to perform testing requirements analysis. This was done to determine whether the data in the study is normally distributed or linear. Therefore, in this research was done classical assumption test.

3.2 Hypothesis Testing

After hypothesis testing and hypothesis interpretation, then further put forward the conclusion of hypothesis testing in this research as follows:

3.2.1 T Test (Partial Test)

- Hypothesis I
Based on the results of hypothesis testing that was obtained t count of learning facilities variable (X1) as big as 3.345 and t table as big as 2.023. So that H_a was accepted and H_o was rejected at the level of significance as big as 0.002. Thus the hypothesis that stated that "there was a significant influence of learning facilities to Student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015" was acceptable.
- Hypothesis II
Based on hypothesis test results that was obtained t count score of teacher's interpersonal communication (X2) as big as 2.878 and t table as big as 2.023, so that H_a was accepted and H_o was rejected at the level of significance as big as 0.006. Thus the hypothesis stated that "there was a significant influence of interpersonal communication of teachers with students to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015 " was acceptable.

3.2.2 Test F (Simultaneous Test)

Based on the test of hypothesis testing results that was obtained value and f table as big as 22.738 and f table as big as 3.238.

So that it could be concluded that the value of f count $>$ f table, so that H_a was accepted and H_o was rejected at the level of significance as big as 0.000. Thus the hypothesis which stated that "there was a significant influence of interpersonal communication of teachers with students to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 014/2015" was acceptable.

3.3 Analysis Prerequisite Testing

3.3.1 Normality Test

Normality test was used to find out whether the data had a normal distribution or not. In here this research used Kolmogrov - Smirnov Test. The basis of decision making was to see the number of significance, with the provision of significant value < 0.05 so that the data is normally distributed and on the other hand.

Normality test results could be seen that:

- The normality test of learning facility variable (X1)
The result of data normality test calculation of learning facilities was gotten significance value as big as 0,408. Because the value of significance was greater than 5% alpha value or $0.217 > 0.05$ so that it could be concluded that the distribution of data was normal.
- The normality test of Interpersonal communication of teachers with students (X2)
The counting result of data normality test of interpersonal communication of teachers with students was obtained by significant value as big as 0,598. Because significant value was greater than the alpha value as big as 5% or $0.598 > 0.05$ so that it could be concluded that the distribution of data was normal.
- The normality test of Learning achievement
The calculation result of data normality test of student's learning achievement that was obtained by significant value as big as 0,079. Because significant value was greater than alpha value as big as 5% or $0.079 > 0.05$ so that it could be concluded that the distribution of data was normal.

To strengthen the normality test results by looking at the distribution of data at diagonal sources on a normal graph of P-P plot of regression standardized and using a histogram. By using the histogram graph

therefore could be compared between the observation data and the distribution that was approaching the normal distribution. On the normal graph of plot was seen that the points spread around the diagonal line and followed the direction of the diagonal line. It could be concluded that the regression model fulfilled the assumption of normality.

3.3.2 Multicollinearity Test

The multicollinearity test was used to determine whether there was a correlation between independent variable with another. This research used multicollinearity test with pearson correlation see Tolerance Value or Variance Inflation Factor (VIF). The tolerance value ≤ 0.01 or equal to the VIF value was not ≥ 10 indicating that there was not the occurrence of multicollinearity.

The result of multicollinearity test could be seen that the tolerance value of both variables is 0,671, tolerance value had value more than 0, 1 ($> 0, 1$) and VIF value of both variable as big as 1,490 that was less than 10 (<10), hence could be concluded that between Independent variable did not occur multicollinearity issues.

3.3.3 Autocorrelation Test

Autocorrelation test was used to determine whether or not the deviation of classical autocorrelation assumption that occurred between residuals on one observation with other observations on the regression model. The prerequisite that had to be fulfilled was the absence of autocorrelation in the regression model. The test method is commonly used by Durbin Whatson Test (DW Test).

Test results used Durbin-Watson test (DW test) could be seen DW value 2,393, this value would be compared with significant table value 5%, the number of sample was 42 (n) and number of independent variable was 2 ($K = 2$) = 2,42. So that it was obtained that the value of du was 1.602 and less than (4-du) 4-1,602 +2,398. $DU < DW < 4-dU$, 1,602 $<$ 2,393 $<$ 2,398. It could be concluded that there was not auto correlation.

3.3.4 Heteroscedasticity Test

Heteroscedasticity testing was used to test whether or not heteroscedasticity in the model namely it was a condition in which all interference factors did not have the same variant or variant was not constant. One way to know the existence of heteroscedasticity was seeing the chart scatter plot.

Based on the scatter plot graphic image between the predictive value of the independent variable with

the residual that was obtained there wasn't a clear pattern, as well as the spots spread above and below the number 0 on the Y axis. Thus it could be concluded that there didn't happen heteroscedasticity problem in the regression model.

After analysing the data for hypothesis testing then it was discussed the results of data analysis. The discussion of research results as follows:

- The influence of learning facility (X1) to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014 / 2015, Based on the results of t test analysis that there was a significant influence of learning facility variables to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015 with a t count as big as 3.345 and t table as big as 2.023 so that it got the influence of student's facilities to student 's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015. This case supported the previous research, namely it was research that was conducted by Prihatmoko (2013) with the result that the learning facilities had a direct positive effect to student's learning motivation. The result of student's learning facility questionnaire reply ability in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015 as big as $3150: 2362 = 0,7498$ or 74,98% and it could be concluded that student's learning facilities in class XI SMK Nusantara Bogem Jombang has not yet reached the maximum point so that it needed to be improved and increased. Thus there were still some things that have not been fulfilled. It could be seen from the results of questionnaires tabulation that had low value data on items 5.7, and 11 where item no 11 about students were less comfortable for using the laboratory to improve the ability of practice and science. This items mentioned could be concluded that in the learning facilities, students tended to utilize the presence of laboratory. This case would affect to the ability of students in the practice of science that was gained. Students felt uncomfortable with laboratory facilities. Thus, both schools and parents could organize or improve the facilities that were less mentioned in order that students could learn comfortably and it could have a positive effect to their learning achievements so According to Subroto inside (Arikunto: 2008: 2) "the facility was everything that could facilitate and expedited in the

implementation of a business could be either objects or money". Learning facility was everything like equipment.

- The influence of interpersonal communication of teachers with students (X2) to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014 / 2015

Based on the test results of t test analysis that there was a significant effect from the variables of interpersonal communication of teachers with students to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015 with t count as big as 2.878 and t table as big as 2.023 so that it was obtained the influence of interpersonal communication of teachers with Students to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015. This result supported previous research that it was conducted by Lestari (2012) with the result of research that interpersonal communication of teacher with student significantly influenced to student's learning motivation. The data collecting result of questionnaire reply ability level to answer questionnaire of interpersonal communication of teachers with students in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015 as big as $2100 : 1800 = 0,8571$ or as big as 85,71% and it could be concluded that interpersonal communication of teachers with students in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015 has not reached the maximum point so that it needed to be improved and adjusted with each student. It could be seen from the questionnaire in the tabulation of low value data on item 16 and 20, where some students haven't been satisfied with the ways and strategies of teachers in delivering the material, to students and teachers who were less to be able to explore the ability of students to express their opinions.

Both statements could be concluded that students felt to be want to understand the material which was presented by teachers and students want to learn in two ways where teachers were not dominant and students were given space to express opinions. Therefore it was recommended that for teachers improved how to deliver interesting and easy-to understand material and provide space for students to express their opinions. Teachers should be able to explore students to express

their opinions in order that students were critical of the material which was presented by the teacher so Slameto's opinion (2003: 64) suggested that, "school factors that influenced learning include teaching methods, interpersonal curriculum of teachers with students, student's relationships, school discipline, school lessons and school time, learning standards, building conditions, learning methods And home work. Learning and teaching were cores of behavior in the educational process where students and teachers interacted. The interaction of teaching and learning was supported by several other factors in education, namely others: the purpose of education, teachers, students, and educational facilities, teaching methods, subject matter and environment".

- Influence of learning facility (X1) and teacher interpersonal communication with student (X2) toward student achievement of class XI SMK Nusantara Bogem Jombang lesson year 20114/2015

The significant test results of regression equation simultaneously used F test to show the value of count as big as 22,739 and f table as big as 3,238 with probability $0,000 < 0,050$. This meant that the third hypothesis in this research was accepted because there was a significant influence between learning facility variables and interpersonal communication of teachers together (simultaneously) to student's learning achievement in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015. Thus it could be said that the complete learning facilities along with the good interpersonal communication of teachers with students, so that students would be able to display learning achievements With the existence of adequate learning facilities and interpersonal communication of teachers with students well so that student's learning achievement could be achieved optimally, but from the data that was obtained by researchers assumed that the achievement of students in class XI SMK Nusantara Bogem Jombang in Academic Year 2014/2015 was not only influenced by the variables of Learning facilities and interpersonal communication of teachers with students but also it was influenced by other variables that were not covered in this research.

4 CONCLUSIONS

Based on the results and discussion of research could be concluded that Partially The results showed that

learning facility variables had a positive and significant effect to student's learning achievement in class XI in SMK Nusantara Bogem Jombang than The results showed that teacher's interpersonal communication variables had a positive and significant effect to student's learning achievement And simultaneously. The results showed that the variable of student's learning facilities and interpersonal communication of teachers with students had a positive and significant impact to student's learning achievement.

Slameto 2003. *Faktor sekolah yang mempengaruhi belajar ini meliputi metode mengajar.*

Soerjaningsih, W., Fraser, B.J., Aldridge, J.M. 2002. Instructor-student interpersonal behavior and student outcomes at the university level in Indonesia. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana

REFERENCES

- Arikunto, S., 2006. *Prosedur Penelitian*. Jakarta: Rindu Cipta.
- Ben-Chaim, D., Zoller, U., 2001. Self-perceptions versus students' perceptions of teacher interpersonal style in college science and mathematics courses. *Research in Science Education*, 31, 437– 454.
- Brekelmans, M., Slegers, P., Fraser, B.J., 2000. Teaching for active learning. In P.R.J. Simons, J.L. van der Linden, & T. Duffy (Eds.), *New Learning* (pp. 227–242). Dordrecht: Kluwer.
- Den Brok, P., Fisher, D., Koul, R., 2005. The importance of teacher interpersonal behavior for secondary science students' attitudes in Kashmir. *Journal of Classroom Interaction*, 40, 5–19.
- Fraser, B.J., Walberg, H.J., 1991. *Educational environments: Evaluation, antecedents and consequences*. Oxford: Pergamon Press
- Henderson, D., Fisher, D.L., Fraser, B.J., 2000. Interpersonal behavior, laboratory learning environments, and student outcomes in senior biology classes. *Journal of Research in Science Teaching*, 37, 26–43.
- Karina 2012. *Pengaruh Minat Belajar Dan Komunikasi Interpersonal Guru- Siswa Terhadap Motivasi Belajar Perbankan Syariah Siswa Kelas X Ips Sma N I Sanden Tahun Ajaran 2011/2012*
- Lestari 2012 dengan hasil penelitian bahwa komunikasi interpersonal guru dengan siswa secara signifikan berpengaruh terhadap motivasi belajar siswa.
- Maulana, R., Opdenakker, M.-C., den Brok, P., Bosker, R. (in press). Teacher-student interpersonal relationships in Indonesian lower secondary education: Teacher and student perceptions. *Learning Environment Research*. M
- Margianti, E.S., Fraser, B.J., Aldridge, J.M. 2001. Investigating the learning environment and students' outcomes in university computing courses in Indonesia. Paper presented at the annual conference of the Australian Association for Research in Education, Fremantle, Australia
- Prihatmoko 2013. Dengan hasil bahwa fasilitas belajar berpengaruh secara langsung positif terhadap motivasi belajar siswa.