The Influence of Lecturer Achievement Index (LAI) toward
Student Achievement Index (SAI)
Case Study of STIE Madani of Balikpapan

Kartini Rahmatillah Wahab, STIE Madani Balikpapan, Indonesia

Abstract

Good lecturer brings good student. The result of student achievement is determined by the performance of lecturer. This study aims to determine lecturer performance seen from student achievement index for 1 (one) semester and focused on lecturers nurturing a certain course. This research is expected to contribute information of reducing lecturer shortcomings and improving lecturer performance seen from student perception. This observational research was conducted in STIE Madani Balikpapan by distributing questionnaires to all students of 2011 – 2012 class. Data were analyzed using regression analysis, descriptive statistics and statistical tests.

Lecturer Achievement Index (LAI) showed an average of 2.867 with a standard deviation of 0.39015 with minimum value of 1.46 and maximum value of 3.91. The average value of LAI is still below 3.0 indicates shortfall in lecturer performance in STIE Madani Balikpapan. Student Achievement Index (SAI) showed an average of 3.1186 with a standard deviation of 0.73075 with a minimum value of 0.40 and a maximum value of 4.00. The average value of SAI is above 3.0 indicates student achievement of STIE Madani Balikpapan which has been ideal. SPSS output display models of summary magnitude R Square (R^2) was 0,137, this means 13.7% of the variation of SAI can be explained by the variation of LAI. Based on SPSS output display, for the unstandardized beta coefficient value, the variable of LAI is significant which can be seen from LAI significance probability of 0.000 (below 0.05). Then it can concluded that LAI influence SAI significantly positive.

Keywords: Lecturer Achievement Index, Student Achievement Index, STIE Madani

Introduction

Learning and Teaching Process (PBM) is a complicated process in which it involves not only student, but also teacher/lecturer and college which focuses much on student and teacher/lecturer as 2 (two) main involving parties directly. Teacher/lecturer is a giver and student is a receiver in transferring knowledge process inside class and within college.

To be able to result a qualified output or graduate, it needs a qualified teacher/lecturer also. This is not to stand aside the role of college that also tries to prepare facilities and tools for the learning and teaching process. Honestly, there are still rumors that blame the role of teacher/lecturer because of not succeeded in resulting a qualified graduate. Teacher/lecturer is blamed not capable to teach or transfer their knowledge to their students. Therefore many students, even though they graduate but still cannot compete in similar subject with other students. In fact, there are many factors affecting the lack of qualified student graduating from college. We cannot misjudge teacher/lecturer only from one side without seeing the other side that may affect this fact.

High-quality universities are universities that are able to create qualified graduates also who are able to produce quality as well. This would require the participation of many parties. These parties are also required must have the drive to achieve, not only lecturers but also students, staff or employees who always think to excel. Emotional intelligence is also needed in an educational organization. Achievement motivation is the spirit of hard work to always give the best contribution to the creation of human resources that have good quality. It gets even better when paired with emotional intelligence (Mardatillah & Rahmatillah, 2008). Therefore, when the lecturer has a sense of high achievement motivation to improve the insight and knowledge of the subjects to which it aspires, then indirectly they will be motivated to improve student achievement.

Lecturer is one of the essential components of the education system in college. Roles, duties and responsibilities of the lecturers are very significant in realizing the goal of national education, i.e. educating the nation; improve the quality of human beings, including the quality of faith and piety, character, and the mastery of science, technology and art. To be expected to create an advanced Indonesian society, fair, prosperous and civilized. Because their roles and responsibilities are heavy, lecturers are always prosecuted shown to have a good performance. To produce a good performance, lecturers need a few things such as high motivation, adequate competence, good leadership and a supportive work environment to be able to improve its performance (Pramudyo, 2010).

In the process of teaching and learning, the higher Education (PT) need to evaluate the teaching and learning process performed in the PT environment. It is intended to see how is the lecturer ability of teaching from semester to semester for each subject taught, as well as the correction of the deficiencies that have been made so that in the future it could be better. There are many similar researches about influence of lecturer's performance toward student's achievement. The difference with this research lies on the matter that we can find out lecturer's performance from student's achievement in a period of 1 (one) semester and focuses on every lecturer that taught

at least 1 (one) lecture. Of the distribution of questionnaires to the respondents, in this research is student, we can evaluate lecturer's deficiency seen from student appraisal and other things that should be reduced in order to make it better.

This is what lies behind the researcher to raise this issue, especially at STIE Madani in Balikpapan. Therefore the problem of the research is the influence of lecturer performance toward student achievement at STIE Madani in Balikpapan

Theory

1. Lecturer Achievement Index (LAI)

In measuring lecturer's performance in learning and teaching process, one of which is by measuring the Lecturer Achievement Index (LAI) of one subject that is going to be evaluated. In LAI it is consisting how the appraisal of student's perception toward lecturer's profile being evaluated, including the appraisal of the subject that he is following. LAI has benefit of knowing how far a lecturer is able to deliver a qualified teaching method according to the students where everyone hopes that he/she can be a professional lecturer in his field.

2. Learning Achievement (Achievement Index)

One thing for sure that is hope within the process of learning and teaching in class is that there will be an achievement from students as real form of successful teaching that is done by lecturer. This achievement can be seen from the learning achievement (or Achievement Index) by the end of the lectures period. In Indonesian Dictionary, achievement, achievement can be said as a maximal ability or as a highest ability of someone (Poerwodarminta, 1999). Learning achievement is the result of student based on their value that they gain during lectures and from their lectures examination value. It is according to Sudjana (2000: 49) that said learning achievement can be explained as every value that anyone has for his level of ability in the form of score or value or cumulative score or every attitude changes gained by students.

Mediawati (2011) said that in implementing the learning and teaching process, student learning achievement is an output that is always hoped by people involving in that process, either lecturer, student, or parents that is indirectly has role for that process to be successful. Learning Achievement is a result of lecturer's hard work during lectures and students that function as receiver. It can also say that learning achievement is a result of learning of a student following and doing all task and activities during lectures in college (Tulus, 2004: 75).

The improvement of student learning achievement is influenced by the quality of learning and teaching process in class. Therefore, to be able to improve the quality of student learning achievement, the process of learning and teaching in class must be implemented well, usefulness, and effective. This process will run well if it is supported by lecturers having qualified competency and performance. It is in line in statement from Department of Education (regulation of 1991/1992) about lecturer being the spearhead and front implementer in student education, also as curriculum developer. Lecturer having a good performance will increase student motivation and spirit that in the end will lead to the improvement of a good learning and teaching

(Widoyoko, 2009). Learning achievement can be reached by student is influenced by internal factors, such as interest, talent, motivation, and intelligence level and external factors, such as learning method and environment. Beside student, the important factor that must exist is teacher or lecture. Lecturer is a person that gives knowledge and teaches values, morals, social thing at once. Having these roles, lecturer is in charge of having wider knowledge that will deliver to his student. Lecturer has to choose the perfect and suitable learning method according to his class and student so that everyone can involve well in the process of learning. Several learning method can be modified to be used in class. This is for one goal only, that is to improve the activity of student learning (Slameto,2003: 96).

3. Performance Theory

Performance becomes an important matter and get serious attention from many various circles, especially for those in the field of services. Education is one of this field. Measuring performance in education actually does not only direct to the lecturer as profession, but more on the supporting elements, like academic staff, administration section, cleaning section, and the others. This is because all of these sections is related to one another. Performance can be defined as something that we reach or it is about an achievement that shows us about the working ability (Poerwodarminta, 1999). Another definition about achievement is that, the word "achievement" comes from the word job performance or actual performance (working performance or achievement of someone). There, we can conclude that achievement (or working achievement) is the working result both quality and quantity that someone has reached in doing his task based on his responsibility given to him (Mangkunegara in Yuniastini, dkk. 2005). Also Stoner in Yuniastini, dkk. (2005) defined achievement as an achievement that is shown by employee. It is a result that he got in after doing his tasks given to him, based on ability, experience, seriousness, and the available According to Mangkunegara (2001: 67-68) factors affecting anyone's performance are:

a. Factor of ability, generally it is divided into potential ability (IQ) and reality ability (knowledge and skill) and lecturer should have these abilities to be able to finish formal education level, at least Postgraduate level and have ability to teach courses relating to his ability.
b. Factor of motivation, it is formed from anyone's attitude in facing working situation. While motivation for lecturer is important to reach vision and mission of educational institution. Being a lecturer is supposed to be motivation that is formed in the beginning (by plan), not because of compulsion or by chance only.

Evaluation of an effective performance measurement has to involve one side being evaluated and the assessor. There are 5 (five) criteria that are used to evaluate the measurement performance according to Dessler (in Ariyani, 2009: 114), that are:

a. Factor of clarity: time of implementation, goal, assessor, criteria of assessed, and procedure of measurement.
b. Factor of motivation: effect toward motivation, promotion, reward compensation, and the involvement of assessor and assessed.
c. Factor of justice: assessor objective, assessor is the right person.

d. Factor of feedback: report/measurement result, measurement result is discussed with employee.
e. Factor of follow up: improvement to lecturer that has minor performance, evaluation to the manual and implementation of measurement being held.

Lecturer performance is one of determining factors f the successful of learning and teaching process in higher education. Prawirosentono (1999) said that there is a close relation between individual performance and company performance. This statement shows that if lecturer performance is good, then the performance of the college will also good. Therefore, in this research, the alternative hypothesis is:

H1*: Lecturer Achievement Index (LAI) influences positively significant to Student Achievement Index (SAI)*

Methodology

Type and Research Data

This is an observational research that is done by cross-sectional way. Research is done by using questionnaire (primary data) distributing to all students of odd semester in academic year of 2011-2012, and this is become the population and sample at once. The data can be seen from the table below.

Table1. Distribution of Student of Odd Semester of 2011 – 2012

No.	Semester	Study Program	Amount
1.	Semester I	Diploma 3 (D3) Accountancy	103 people
2.	Semester I	Undergraduate (S1) Accountancy	149 people
3.	Semester I	Undergraduate 1 (S1) Management	74 people
4.	Semester III	Diploma 3 (D3) Accountancy	79 people
5.	Semester III	Undergraduate (S1) Accountancy	80 people
6.	Semester III	Undergraduate 1 (S1) Management	50 people
7.	Semester V	Diploma 3 (D3) Accountancy	81 people
8.	Semester V	Undergraduate (S1) Accountancy	38 people
9.	Semester V	Undergraduate 1 (S1) Management	17 people
		TOTAL	**671 people**

Source: Administration Section of STIE Madani Balikpapan (2011)

Research Measuring Instrument

Measuring instrument used in this research is a specific instrument based on the principle and lecturer certification appraisal aspect, which is divided into 9 (nine) criteria of lecturer performance, they are:

a) The clarity in delivering material;
b) The way of delivering material in class systematically;
c) Ability to encourage student to involve actively;
d) Ability to grow student learning motivation;
e) Lecturer discipline to given time class;
f) Ability to use learning and teaching strategy;
g) Ability to use learning and teaching media;
h) Similarity between subject material and syllabus and examination material (middle exam and final exam).
i) Lecturer's total presence in delivering lectures within 1 (one) semester.

Each aspect is measured with several items that have an alternative answer ranged from 4 (four) scale as the following:

a. Score 0 if it is very bad or very low;
b. Score 1 if it is not good or low;
c. Score 2 if it is usual or enough;
d. Score 3 if it is good or high;
e. Score 4 if it is very good or very high.

From these instruments, t is hoped that it can identified the lecturer achievement in giving teaching or lectures inside or outside class, student appraisal to lecturer quality and ability that they are following the class, and also treatment that they are facing in the learning interaction.

This method can be a reviewer tool for college leader about learning strategy given to students and the result can give many recommendations to sector and subsector policy, strategy and program of lecturer certification to improve the learning quality and lecturer ability, especially the impact to students.

Research Model and Analysis

This research uses regression analysis, which is developed into a research model to study the influence of lecturer achievement by students toward student achievement index with a formula or model like this:

$$\text{SAI} = \beta_0 + \beta_1 LAI + e$$

Notation:
SAI is Student Achievement Index
LAI is Lecturer Achievement Index
e is term error

After getting the estimation parameters, the next step will be doing some testing to these parameters by using : descriptive statistic and statistic test.

Result

Descriptive Statistic

Table2. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
LAI	129	1.46	3.91	2.8670	.39015
SAI	129	.40	4.00	3.1186	.73075
Valid N (listwise)	129				

Source: STIE Madani, (2012)

According to explanation from Table 2, it can be concluded as these following:

a. Lecturer Achievement Index shorten as LAI shows that the average of LAI is 2,867 with deviation standard of 0,39015 and the minimum value is 1,46 while the maximum value is 3,91/ From this result, it means that the average of LAI value is below 3,0 showing that the lecturer achievement of STIE Madani Balikpapan is not ideal yet.

b. Student Achievement Index shorten as SAI shows that the average of SAI is 3, 1186 with the deviation standard of 073075 and the minimum value is 0,40 while the maximum value is 4,00. From this result, it means that the average of LAI value is above 3, 0 showing that the student achievement of STIE Madani Balikpapan is already ideal.

Statistic Test

a. Goodness of Fit Size (R^2)

Table3. Determination Coefficient
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.370[a]	.137	.130	.68158

a. Predictors: (Constant), IPD

From the output display of SPSS, for the model summary, the value of R Square (R2) is 0.137 which means that 13.7% of SAI variation can be explained from the LAI variation. While the rest (100% - 13.7% = 86.3%) is explained by other causes outside the model.

b. Significance Test (T-test)

Table4. T-test
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.132	.447		2.534	.012
	IPD	.693	.154	.370	4.487	.000

a. Dependent Variable: IPM

According to the output display of SPSS, for the unstandardized beta coefficient, variable of Lecturer Achievement Index (LAI) is significant, which can be seen from the significance probability of LAI as much as 0.000 (below 0,05). Hence, it can be concluded that Lecturer Achievement Index (LAI) influences Student Achievement Index (SAI) positively significant with the mathematic formula as:

$$SAI = 1.132 + 0.693 \ LAI$$

- Constants as much as 1,132 said that if independence variable of the LAI is assumed to be constant, then the average of SAI is as much as 1.132;
- Regression Coefficient of LAI is as much as 0.693, it means that every addition of LAI as much as 1.0 will increase the SAI as much as 0.693.

Conclusion

According to analysis result above, it can be concluded that the alternative hypotheses that said the Lecturer Achievement Index (LAI) influence positively significant (0,693) to Student Achievement Index (SAI) can be accepted and it is also consistent with the performance theory that was previously explained before. This conclusion indicates that how importance the improvement of Lecturer Achievement Index (LAI) to upgrade the Student Achievement Index (SAI) in STIE Madani in Balikpapan. Furthermore, it needs a continuous program that focuses on improving Lecturer Achievement Index (LAI) in STIE Madani Balikpapan. Hopefully, the program in relation to this research will be some like workshop to improve these following problems:

1. The clarity in delivering material;
2. The way of delivering material in class systematically;
3. Ability to encourage student to involve actively;
4. Ability to grow student learning motivation;
5. Lecturer discipline to given class time;
6. Ability to use learning and teaching strategy;
7. Ability to use learning and teaching media;
8. Similarity between subject material and syllabus and examination material (middle exam and final exam).

For further research, it needs a development of wider research model for explaining the improvement of Student Achievement Index (SAI) by its independent variables. It can be done by making several criteria of valuing the Lecturer Achievement Index

(LAI) into independent variable, so that it will be clear about what STIE Madani Balikpapan must do to improve the Lecturer Achievement Index (LAI), not only for permanent lecturer but also temporary lecturer.

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Contact email: kartinirahmatillah@ymail.com