

# THE IMPORTANCE OF PEDAGOGICAL COMPETENCE FOR BIOLOGY TEACHER IN FACING THE ASEAN ECONOMIC COMMUNITY

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## ABSTRACT

*There is a research that has been conducted with the title "The Importance of Pedagogical Competence For Biology Teacher In Facing ASEAN Economic Community". The study aims to determine the importance of biology teacher's pedagogical competence in facing the ASEAN economic community. The method used in this study was descriptive correlation. The instrument used in this study is the observation sheets and questionnaires interest in student learning. Data was analyzed using quantitative techniques, then processed using product moment correlation statistic. From the data processing and data analysis, the r value of 0.60 was obtained where  $r_{count} > r_{table}$ ,  $(0.60) > (0.254)$  in enough category.*

## I. INTRODUCTION

MEA is an agenda of economic integration of ASEAN countries. The aim is to minimize the obstacles in economic activity across the region. For Indonesia, the existence of MEA makes a new phase to develop a variety of quality economies in Southeast Asia in the free market economy. On the other side, it becomes an excellent opportunity to demonstrate the quality and quantity of products and human resources (HR) of Indonesia to other countries.

The existing problems of human resources are lower quality, such as level of inadequate education and expertise. The Indonesian government should encourage skills training held for the majority of Indonesian workers lacking in intelligence attitude, the ability to speak English and computer operation. It also relates to the competence of teachers. The Indonesian government has done a teacher certification program that aims to improve the competency of teachers.

Teachers are the professional educators that have a duty to teach, educate and guide the students to become a character man (Sardiman, 2011). The competent teacher is a teacher who is able to understand the education and teaching that all components related to learning problems include the mastery of teaching materials, management, teaching and learning program and able to process the classroom. In carrying out their duties and responsibilities, the teachers are required to have some specific abilities and skills which are called teacher competence. There are four competencies required of teachers; the pedagogical competence, the personal competence, the professional competence and the social competence (Pradika, 1013).

Pedagogical competence is one of the competencies that must be owned by a teacher. As stated in the National Education Standards, the elucidation of Article 28 paragraph (3) point a, Pedagogical competence is the ability to manage learning of learners that includes students understanding, design and implementation of learning, evaluation of learning outcomes, and the development of learners to actualize various potentials possession (Mulyasa, 2007). Therefore pedagogical competence is an important thing to be possessed by a teacher in order to increase student achievement and the creation of a good quality of education. From the statement above, it can be concluded that in order to achieve

the learning objectives and obtain the learning outcomes of students who satisfy required qualified and competent teachers, but the problem of teachers, in terms of quality, are usually caused by a sense of lack of dedication of a teacher on his job, maybe not their intention to become a teacher so it was forced out of the not working.

SMA Negeri 1 Krueng Barona Jaya is one part of the formal institutions that are equally required to strive continually to improve the quality of education. The conditions of SMA Negeri 1 Krueng Barona Jaya is more advanced than other high school in Aceh Besar, because the average teachers in that school especially for Biology teachers have the status of certified teachers, but student interest is low. It is known from many students are busy chatting and out of the classroom during the ongoing learning process. From this background, the authors are interested in examining the Importance of Pedagogical Competence for Biology Teacher in Facing the ASEAN Economic Community.

## **II. METHOD**

This research used descriptive correlation method, the research was intended to investigate the circumstances, conditions, or other things that have been mentioned, and the results are presented in the form of a research report.

### **2.1. Data and Data Sources**

#### **2.1.1. Data collection technique**

In this study the writer used data collection techniques as follows: (1) Mechanical observation, observation may be carried out systematically, using observation and could also not or no guidance, (2) Questionnaire, a questionnaire enclosed which contains a number of positive and negative questions about things related to the pedagogical competence of teachers for teachers and for students' learning interest.

### **2.2. Data analysis technique**

Data pedagogical competence of teachers and students' learning interest questionnaire was analyzed using a percentage formula is:

$$P = f / N \times 100\%$$

Information:

P = Percentage Score

F = Frequency obtained

N = Number of questions (Sudijono, 2005)

Conditions that survey, researchers guided by the benchmark by Arikunto (2005) are as follows:

> 80%: Very High

75 to 79.9%: High

70 to 74.9%: Enough

60 to 69.9%: Low

0 to 59.9%: Very Low (Rahmayanti, 2012).

The obtained results of pedagogical competency of teachers and students' learning interest questionnaire then the data were analyzed using correlation formula as follows:

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

$r_{xy}$  = The correlation coefficient

N = Number of respondents

X = pedagogical competence of teachers

Y = Interest in learning students (Sugiyono, 2008)

Arikunto (2011) states in providing interpret simple correlation to the index number "r" of Product Moment:

Table 1. Interpretation *Product Moment*

The amount of value r	Interpretation
Between 0,800 to 1,00	High
Between 0,600 to 0,800	Enough
Between 0,400 to 0,600	somewhat Low
Between 0,200 to 0,400	Low
Between 0,000 to 0,200	Very low (uncorrelated)

### III. DISCUSSION

#### 3.1. Result of Pedagogical Competence Biology Teacher

The data from the biology teacher pedagogical competence was collected by using observation sheet. The values of teachers' pedagogic results are presented in the table below.

Table 2. Results Values Competency Pedagogic Biology Teacher  
SMA Negeri 1 Krueng Barona Jaya

Teachers name	Results Values Competency Pedagogic Biology Teacher	Category
Yusmanidar	4	Very High
Muslim	4	Very High
Cut Amrida	4	Very High
Mariani	4	Very High
Sri Amalia	4	Very High
Delia Rawanita	4	Very High
Jumlah	24	
Rata-Rata	4	Very High

Based on Table 2 above, it can be seen that the results of pedagogic competence biology teacher SMA Negeri 1 Krueng Barona Jaya category is very high with an average of 4.

### 3.2. Data Results of Student Learning Interests

Data from the study is students' interest was collected using a questionnaire. The value of each students questionnaire answers are presented in the histogram below.

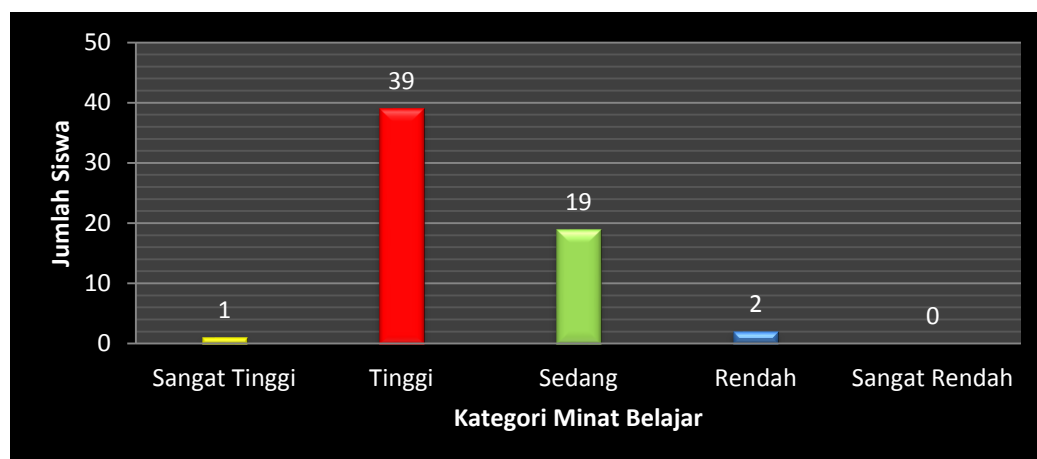


Figure 1. Histogram student interest

Based on students' learning interest histogram above, there is one student who has interest in learning at a very high category, 39 students in the high category, 19 students in middle category, two students in the low category, and the category of very low there.

## IV. DISCUSSION

The of results observation is that in general biology teachers are already using innovative instructional strategies, able to develop students' creativity in asking, thinking, collaboration and science process skills of students. This is because the biology teachers are already using cooperative learning, so that students can concentrate on learning in the classroom to follow. But there are still teachers who use the lecture method and strategy discussions, so that most students are not serious in listening and following discussions that teachers do that. In general, students lack concentration in participating in learning activities in the classroom. Lecture method makes students bored and sleepy, because the method is a conventional method, but not all biology teachers do that. There are some biology teachers who use cooperative learning methods, so that the learning can raise the spirit and activity of students in the classroom, the classroom atmosphere becomes more fun.

The results of research conducted at six (6) Biology teachers at SMA Negeri 1 Krueng Barona Jaya indicate that teachers have to have a good pedagogic competence. From the results of questionnaire data of students' learning interests SMA Negeri 1 Krueng Barona Jaya with an average value of 66 that is included in the high category. This is because the biology teachers have had a good pedagogical competence so that students can easily receive lessons and can boost student interest in learning. Besides, there are also students who have low learning interests; this is because students feel less comfortable with the learning strategies used by the teachers. It based on the research conducted by Sarminan (2009) about the relationship pedagogic Biology teacher to students' interest SMA Budi Darma 2008/2009. The result shows that there is a relationship pedagogical teacher and students' interest which in high category with an average value of 63.

Based on the calculation Product Moment Correlation coefficient values in the table "r" with a 95% confidence level, the results show that the value  $r_{count} > r_{table}$  ( $0.60 > 0.254$ ). Thus, there is a relationship between pedagogical competence Biology teachers with student interest SMA Negeri 1 Krueng Barona Jaya. It means that the hypothesis is accepted.

## V. CONCLUSION

The average value of pedagogical Biology teacher of SMA Negeri 1 Krueng Barona Jaya categorized to very high category. And the interest in learning Biology of SMA Negeri 1 Krueng Barona Jaya classified in the high category.

There is a relationship between Biology teacher pedagogical competences of SMA Negeri 1 Krueng Barona Jaya with students' interest in learning Biology.

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