Student Psychological Responses to English For Biology Course in Biology Department of Universitas Negeri Padang

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Abstract. Education at the university expects graduates who are able to integrate with social life, including with international life. Students who graduate become a benchmark for the quality of the place they study. So, the quality of a university depends on the quality of the individual graduates. The quality of graduates is marked by their achievement index at the end of each semester. Students who have high intelligence have the possibility of getting high scores, and vice versa. The "English for Biology" course is an effort to harmonize the world's needs of qualified graduates with the role of the university's function as a place to prepare it. In each lecture will appear a variety of student responses psychologically to the lectures that are happening. These responses include perceptions, interests and attitudes. The response has an effect on student competence after lecturing. We have observed these psychological responses using questionnaire, and we had analyze them on Biology Department students at Universitas Negeri Padang. The result shown about student’s perception, interest and attitude.

1. Introduction
Education is a continuous process to improve human quality through academic activities. The activity is carried out by teachers, students, and education staff together. These components do not play their respective roles separately. The success of the educational process that occurs in the classroom is determined by several factors.

The determinants of educational success come from within the learner and from the environment. Both of these factors play an important role as a reference for success. Environmental factors include the strategies and methods used by teachers in learning, learning tools and social conditions of the community. While internal factors include learning styles[1], psychological responses, motivation and metacognition.

In some cases, internal factors can be directly influenced by environmental factors. Then the affected internal factors can also be the foundation of successful learning. These internal factors are psychological responses, which include perceptions, interests and learners' attitudes towards learning methods and teaching materials delivered during learning.

Psychological responses can affect learning outcomes, because psychological response is an unconscious state that cannot be controlled by each individual. This response arises from outside treatment. A good response to learning will lead to good learning outcomes. So, we deserve to
conclude that learning methods and learning materials can influence one's learning outcomes, through the integration of these factors with psychological responses.

We have observed the psychological response of Biology Department students at the Faculty of Mathematics and Natural Sciences, Universitas Negeri Padang in the "English for Biology" course. This course is an effort so that students have the ability to interact in an international scope. English as an international language is very important for students to understand, at least to interpret existing scientific writings.

2. Literature

2.1. Student’s perception
Perception is an assumption that exists in a person towards something, which is one component of cognitive ability[2]. Perception can be the basis of thinking for that person[3]. Student perception is one form of students' psychological response to things that have a learning process. Student perceptions can be formed by the methods used by teachers in the classroom to carry out learning. Quality teachers are teachers who can create good perceptions for students[4]. Perception formed will influence student interest in learning[4], also affect learning motivation[5] and confidence in self[6]. A student's perception is also influenced by age[7] and gender[8].

Students' perceptions of learning, whether learning methods[9], learning models[10], and teaching materials, are very important to know by the teacher. Perception should be measured in order to change the perception of the bad to be better, so that students can improve their learning abilities[10]. Although some studies show a weak relationship between perceptions of learning on affective and psychomotor competencies[10]. Students' perceptions of things are very important to know, especially in the introduction and use of technology[11]. Another advantage that can be felt by identifying student perceptions is that the teacher can group students in certain classes/groups according to their perceptions[12]. Teachers' perceptions in learning can also be an important study material which is no less important[13].

2.2. Student’s interest
Students who have an interest in learning have the opportunity to get a meaningful, long-term, and good job learning process[14]. Optimal learning outcomes can be achieved because there is interest in students to learn[15][16][17]. Interest in learning is influenced by learning media used[18], for example online media - Pinterest[19] and television[20]. In addition, interest in learning can also be influenced by the learning methods used by the teacher, the type of teaching material[21], and the learning approach[22].

2.3. Student’s attitude
Attitude is a result of one's judgment of an event, as well as someone else[23][24]. The results of the assessment make students show a response to the learning process. For example, the attitude of willingness to learn, arises from the assessment that learning requires initiative, responsibility, discipline and confidence[25]. A good attitude can bring good learning outcomes[26]. Teachers are asked to design learning so that they can make a positive attitude for students, such as video games based learning[27][28]. Learning attitudes can also be influenced by non-academic factors, namely residence and age[29]. Analysis of learning attitudes can be an ingredient for choosing and using effective and innovative learning models[30].
3. Method

3.1. Research initiation
We have introduced students to the integrated learning method that will be used during lectures. Then we explained that at the end of the lesson, students would be given a questionnaire that had to be answered. Before giving it to respondents, the questionnaire was tested for validity.[31]

3.2. Data collection
We have collected data using a questionnaire. Although some researchers have used online questionnaires[32], we only use print questionnaires. The reason is that there are not too many respondents.

3.3. Data tabulation

3.4. Data analysis

3.5. Conclusion

4. Result and discussion

4.1. Student’s perception to the material course (A1) and on learning method (A2)

We have assessed students' psychological responses to aspects of their perceptions of the learning material they have learned. The highest value in this aspect is 83 and the lowest value is 61. Only one person has a very good perception value. While others have good perceptions. Very good perception of the material raises a variety of circumstances that allow students to study very diligently. Students' perceptions are directly proportional to the learning outcomes they will achieve[4], including those on sociology subjects[10].

Students' perceptions of the learning methods used in lectures also give rise to variations. Most students have good perceptions, in the range 61-75. Three students had very good perceptions, 83 points. This situation can be interpreted that there is an attraction of learning methods for students, this could be because of the element of innovation in it. Not all learning methods can give rise to perceptions that are good or very good for students, depending on the situation[9], one of which is the factor of parents' perceptions of the child's condition[13]. We did not calculate the significance value of perceptions of the learning method, but previous research found that there was no significant relationship between perception and the method used by the teacher[12][33].
4.2. Student’s interest to the material course (B1) and on learning method (B2)

![Data of student’s interest to the material course and on learning method](image)

Students’ interest in learning material for English for Biology shows more diversity compared to A1 and A2. There are 12 students who have an interest value at a fairly good level (58 points), one student is interested in a very good level (86 points), and the other is at a good level. Usually, students who are interested in learning in English are those who are accustomed to and have the spirit to understand it. Students who have an interest in learning will focus their attention on this learning so that they can produce good learning achievement. Students’ interest in the method used also showed unsatisfactory symptoms, even though they were at a good level and quite good. This is because learning with less desirable material can weaken the learning method used. This research proves that the method we use cannot make students interested in learning to a very good level. The right learning method can stimulate the emergence of student learning interest.

4.3. Student’s attitude to the material course (C1) and on learning method (C2)

![Data of student’s attitude to the material course and on learning method](image)

The attitude shown by students during learning, and attitudes that arise after learning are overall at a good level, namely the range of 65-78 points. Based on these results, we get information that the English material that has been studied by students is delivered in a method that is not optimal. The right method is very influential on the formation of good attitudes. The attitude of students towards the learning method is at a fairly good and good level (mostly). This attitude can be seen directly by the lecturer who teaches in the class, but we only display quantitative data in this article. The attitude intended in this article is an attitude that can support the learning process, such as seriousness, perseverance and active learning.

5. Conclusion

We conclude this study with the statement that the integrated learning method that we use raises different psychological responses from students. These results illustrate that the lecture methods and materials are well received by students. However, the limitations of this study are that there is no further information about any other responses that have arisen and there is no information about how each of these responses appears in the student unit. Further research is needed to find out.
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