

## EFFECT OF GENIUS LEARNING STRATEGY FOR STUDENT LEARNING OUTCOMES PHYSICS IN MAN I MEDAN

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**Abstract**-One factor that can support successful learning activity is the use of learning models vary according to the objectives to be achieved. Genius learning strategy is a learning model that tries to make learning faster, more effective and more fun by combining the use of music, art, color, visualization and mind map as the focus of the circle of physical and emotional atmosphere, so that the subject becomes more meaningful and memory become strong. This study was conducted to determine effect of genius learning strategy on student learning outcomes in man i medan on the subject of dynamic electricity using a quasi-experimental study and instruments test multiple-choice. Samples were taken from two homogeneous classes as experimental class and control class. Experiment classroom learning were treated with genius learning strategy and control classroom learning treated by conventional METHOD. Based on research, the average post-test score of experimental class higher than the control class and after testing the hypothesis t test is concluded that genius learning strategy influence to the learning outcomes of students in the subject matter dynamic electricity in man 1 medan. By looking at the success of learning, it is advisable to apply genius learning strategy in others subject of physics learning.

**Keywords:** Genius learning strategy, physics learning outcomes, dynamic electricity, learning models vary, successful learning

### 1. INTRODUCTION

Entering the 21st century. World of education in Indonesia in a furor. The furor caused not by the power of national education quality, but awareness of the dangers caused by the backwardness of education in Indonesia [2].

The quality of education in Indonesia is very alarming. This is evidenced among other things by the data UNESCO (2000) on the Human Development Index ranking, the composition of the level of achievement in education, health, and income per head that shows that Indonesia's human development index decline. Of the 174 countries in the world, Indonesia ranks 102 (1996), 99th (1997), 105th (1998) and 109th (1999). According to the survey Consultant Political and Economic Risk, the quality of education in Indonesia was ranked 12th out of 12 countries in Asia. Indonesia's position is under Vietnam. Data reported The World Economic Forum Sweden (2000), Indonesia has low competitiveness, which only ranks 37th out of 57 countries surveyed in the world. And according to a survey by the same institution predicated Indonesia only as a follower not a leader of technology from 53 countries around the world [5].

This shows the low quality of education in Indonesia. The low quality of education is evident from the low of student learning outcomes, especially for physics. Based on the preliminary study RESULTS obtained by the author in MAN 1 Medan were held on January 26, 2011 by interview and January 27, 2011 by questionnaire. results of interviews with physics teacher Drs. H. Samsul Bahri Nasution, M.Pd known the average value of the physics exam the first half by tenth graders year 2010/2011 is still low at 46.24 and this value is still below the minimum completeness criteria 65. Based on these facts it appears that student learning outcomes for a physics lesson is still low. The low yield of this study due to problems in learning.

In addition, based on the results of a questionnaire distributed to 47 students of MAN 1 Medan showed that 43 students were less fond of physics because for physics was considered difficult and tedious, it is a matter of design quality of teaching physics teacher who served in the learning activities. In addition 38 students rarely read guidebooks before taught, 34 students was not to repeat a lesson, and 18 students are not trying to learn physics beyond school eg counseling or private.

Generally, teachers are emphasizing the use of conventional learning or old method which does not respect our dignity as human beings. That as human beings we do not only consist of the physical body. Human consists of body and mental. The mental consists of four components, namely thoughts,

memories, feelings and consciousness. Learning atmosphere is not exciting and fun for the students usually bring more learning activities that are less harmonious. Students not excited to sit for long in their seats each. This condition would be a serious obstacle to the achievement of learning goals [4]. So that the learning process can be managed with the maximum, we have to accommodate both aspects, which is the body and mental.

Beside that not all of teachers who appreciate this aspect of feelings or emotions of students, physical and psychological readiness of students to receive lessons. The teacher always considers the student like empty container that ready to be filled in the information without considering the emotional aspects and diversity of student learning styles. Finally physics seem austere, difficult and frightening that most students are reluctant to learn physics.

For that we need a strategy in learning to appreciate the differences of each student and engage students fully in the learning process by first creating an atmosphere and the classroom environment conducive, because the classrooms are physically uncomfortable will minimize the ability of the student brain to function at the highest ability. Instead, encouragement, and a little motivation will increase the potential of the brain. Every individual is unique and will respond in a unique way as well, but generally, people can work with skill optimal environment if there is a balance between encouragement and motivation [6], so that the learning process becomes more effective, efficient, and fun.

So one effort that can be done to improve student learning outcomes in the field of the study of physics is implement Genius Learning Strategy. Application of Genius Learning Strategy in teaching and learning activities are expected to generate motivation and interest in learning the students to get interested in the field of study and were delighted to learn it. [3] argues that the genius learning is a term used to describe a series of practical approaches in an effort to increase the yield of the learning process. Efforts to increase is achieved by using the knowledge derived from a variety of disciplines such as knowledge about how the brain works, how memory, self-concept, improved memory, learning and teaching styles.

Basic genius learning is the concept of accelerated learning or learning accelerated. [7] defines that accelerated learning is empowering students to learn faster, more effective and more fun. Accelerated learning concept combines the use of music, art, color, visualization and concept maps as a circle focus physical and emotional atmosphere, so that the material becomes more meaningful and memory become stronger.

In 1993 the School of Bradley Moore High School in the UK, tested the effectiveness and efficiency of the A.L concept with the results broadcast by the BBC, students who graduated with a score of 90 or more up to 38% while using the conventional method only 3% [3]. The results of previous studies, [8] indicates that there is significant relationship between student learning outcomes using conventional learning with learning outcomes of students using Genius Learning Strategy, The value 35.56 for pre-test increased to 92.79 for post-test for the experimental class using the strategy genius learning and the value 37.35 for pre-test increased to 79.12 for post-test for control class.

Therefore, the authors conducted a study on the subject dynamic electricity in MAN 1 Medan Academic Year 2010/2011.

## **2 METHODS**

The research method used is purposive sampling techniques, also called judgmental sampling and performed with random system. This technique selected from two classes. The first class as a class experiment with Genius Learning Strategy and the second class as a control class that uses conventional learning models. From this technique obtained that class X featured I as an experimental class and class X featured II as the control class amounted to respectively 25 students. As for the stages of implementation techniques for the study was to conduct pre-test the experimental class and the control class to determine student learning outcomes before being treated, analysis of data on the pre-test that is test of normality and homogeneity, giving treatment Genius Learning strategy for experimental class and giving treatment conventional models for control class, implement postes to determine the ability of the student's final the experimental class and control class, the last stage of data analysis postes namely normality test, homogeneity test and t test experimental class and control class. Hypothesis tests to know the influence of Genius Learning Strategy to student learning outcomes.

### 3 RESULTS AND DISCUSSION

At the beginning of the study, both classes are given pre-test which aims to find the ability beginning of students' learning. Of the value pretest showed that initial ability of students in the two classes are the same, namely 33.06 in the experimental class and 23.13 in the control class. Furthermore applied different learning models and post-test values obtained 54.99 for experimentally class and 68.33 for control class. These results indicate that the average value of the treated experimental class learning with Genius Learning Strategy higher than the control class treatment conventional method. Based on tests of normality and homogeneity of the data pretest and posttest can be concluded that the research data has met the test requirements for testing the research hypothesis. From the results of hypothesis testing on the data postes obtained  $t_{\text{calculation}} > t_{\text{Table}}$  means  $H_a$  accepted and  $H_0$  rejected, so that it can be concluded that there is influence Genius Learning Strategy to student learning outcomes physics in MAN I Medan.

In its application the researchers conducted a successful cycle stages Genius Learning Strategy. With eight stages, the atmosphere is conducive, connect, big Figure, set goals, in come information, activation, demonstration, repeat (review) and connected. Starting from the stage of an atmosphere conducive to doing brain exercises are accompanied by music until the repeat stage and connected with donuts techniques.

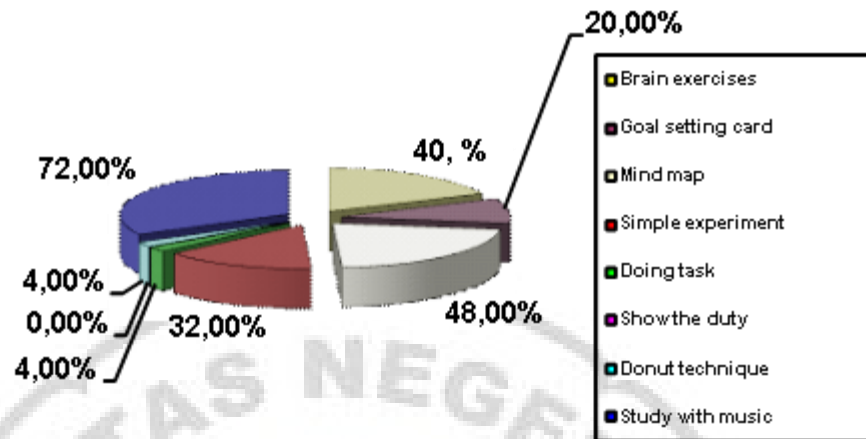
It's ever been studied before by [1], with action research where there is a difference in student learning outcomes cycle 1 to cycle 2 student learning outcomes in the subject matter rigid body balance by implementing Genius Learning Strategy. Thus the use Genius Learning Strategy in the teaching and learning of physics gives a better effect in improving student learning outcomes. This is because the teaching and learning activities with Genius Learning Strategy emphasis on student involvement maximum to think critically and analytically, activate both hemispheres and presenting the material to accommodate all learning styles as well as creating a conducive learning climate in preparation for entry into the learning process.

From the observation of the study, students' learning activities at the meeting of 1 to meeting of 2 there was an increase. At the first meeting the average score obtained by the student activity is 79.70 with a category value of C and the second meeting of the average score of student activity reached 81.71 to the value category B. The frequency distribution of scores of student learning activities at the meeting of 1 and 2 can be seen in Table 1.

**Table 1.** The frequency distribution of scores of student learning activities at the meeting of 1 and 2

No	Interval Score	Meeting I		Meeting II	
		Absolute frequency	Relative frequency (%)	Absolute frequency	Relative frequency (%)
1	66,66-70,66	3	12	1	4
2	71,66-75,66	4	16	4	16
3	76,66-80,66	6	24	4	16
4	81,66-85,66	11	44	7	28
5	86,66-90,66	0	0	7	28
6	91,66-96,66	1	4	2	8
	Calculation	25	100	25	100

This is Because at the first meeting of the students are not familiar with the use of Genius Learning Strategy while at the second meeting of students are getting used to Genius Learning Strategy so that there are Increased scores in the second meeting. While the students' opinions about the overall Genius Learning Strategy that is a category B or fun and for each stage of a successful circle Genius Learning Strategy, students learn more dominant with 72.00% using the music, read by using a mind map 48.00%, doing brain exercises 40.00% and do a simple experiment 32.00%, goal setting card 20%, doing task 4%, repeating the lesson with the donut technique 4% and show the duty 0%. Opinions of students to stage a successful circle genius learning can be seen in Figure 1.



**Figure 1.** Opinions of students to stage a successful circle genius learning

The advantages of this study from researchers earlier, at the stage of getting information researchers used the help of audio-visual media by of instructional video of dynamic electricity, so that students feel interested and motivated in the following study. While the obstacles is the students are not familiar with how to learn to use Genius Learning Strategy.

The advantages of this study from researchers earlier, at the stage of getting information researchers used the help of audio-visual media by of instructional video of dynamic electricity, so that students feel interested and motivated in the following study. While the obstacles is the students are not familiar with how to learn to use Genius Learning Strategy. The time allocated for each stage of learning need more because it takes time to explain each stage will be carried out, so that each stage of learning genius can be implemented to the maximum. Moreover, the process of getting information (the sixth stage of Genius Learning Strategy), when the teacher delivering the material becomes less because of the time allocated to the stages of learning another genius is more to the process of remembering and understanding the material presented is not too deep.

#### 4 CONCLUSIONS

Some conclusions can be drawn from the findings of this study: (1) Pre-test score of student learning outcomes physics on the subject dynamic electricity at class X featured I in MAN 1 Medan T.P. 2010/2011 before being given Genius Learning Strategy is 33.60 and after that the post-test score is 68.33. (2) Pre-test score of student learning outcomes physics on the subject dynamic electricity at class X featured I in MAN 1 Medan T.P. 2010/2011 before being given conventional method is 23.13 and after that the post-test score is 54.99. (3) At the first meeting the average score obtained by the student activity is 79.70 with a category value of C and the second meeting of the average score of student activity reached 81.71 to the value category B with Genius Learning Strategy. And (4) The students' opinions about the overall Genius Learning Strategy that is a category B or fun and for each stage of a successful circle Genius Learning Strategy, students learn more dominant with 72.00% using the music, read by using a mind map 48.00%, doing brain exercises 40.00%, do a simple experiment 32.00%, goal setting card 20%, doing task 4%, repeating the lesson with the donut technique 4% and show the duty 0%.

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