

# Effect of Blended Learning Model and Learning Style to Civic Education Learning Results in Class VII in Junior High School Panca Budi Medan

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**Abstract**— This study aims to determine differences in learning outcomes of students who are taught by Blended Learning Model and Resource Based Learning Model, to determine the difference of learning outcomes of learners who have auditory and visual learning style, and to determine whether there is interaction between learning model with learning styles of learners in their influence on the results of learning Civics in Class VII SMP Panca Budi Medan. This research method used quasi experiment method (Quasi Eksperimen) by using experiment in class. The design used in this research is 2x2 factorial design with 2-lane variance analysis technique (ANOVA). The design used in this research is 2x2 factorial design with 2-lane variance analysis technique (ANOVA). This design sets the experimental class treated with the Blended Learning model, and the control class is treated with the Resource Based Learning model. The results showed There significant Blended Learning model differences obtained higher learning outcomes of civic compared with learners taught by Resource Based Learning model shown by  $0.012 < 0.05$ ; significant are differences in learning outcomes of civic higher auditory learning style compared with learners who have a visual learning style  $0.014 < 0.05$ ; there is a significant not interaction between learning model and learning style in influencing learners civic education learning outcomes  $0.238 > 0.05$ .

**Keywords**—civics learning outcomes, blended learning model, resource based learning model, auditory learning style, visual learning style

## I. INTRODUCTION

Currently the national education system has been perfected and adapted to the progress of science and technology as well as socio-cultural conditions. It is full of educational objectives

based on national unity and integrity, upholding the dignified and moral personality of the nation, and the creativity and skills produced by the quality of good education.

The quality of education is determined by several important factors, namely the condition of the learners in terms of (interests, talents, potential, motivation, and attitude), the process of creating an atmosphere of learning that is emphasized on the creativity of teachers (teachers), environmental support related to the atmosphere or situation and conditions that support the learning process (such as family environment, community, nature) and facilities or infrastructure as a tool that can facilitate learning activities (such as buildings, laboratory equipment, computers and so on).

Increasing the quality of education at the school level should be improved to produce a smart generation to be able to compete in the era of globalization. For that, in order to achieve success in the learning process, an educator is required to be able to choose and use learning model in accordance with a development such as using conventional models, cooperative models and technology-based models. According to Ibrahim and Syaodih (2010), "In the interaction occurs influence process, not just educators who affect learners, but learners can also influence educators"[4]. In that case the educator must have many effective learning models. In addition, curriculum changes also require educators to be more creative and innovative in creating an exciting learning environment in the classroom.

In the learning model seen from its development including in information and communication technology developed so

fast, demanding human resources that can be responsive to such developments. The influence of information and communication technology in the world of education is increasingly felt in line with the shift in face-to-face learning patterns that are conventional toward a more open and media education.

Educators are facilitators in conducting the learning process using various models of learning so that learners understand about the material to be delivered interaction process occurs. So there must be an intermediary (learning media) as a model in learning for the realization of learning activeness. According to Ibrahim and Syaodih (2010: 31), "In the interaction occurs influence process, not just educators who affect learners, but learners can also influence educators" [4]. In that case the educator must have many effective learning models. In addition, curriculum changes also require educators to be more creative and innovative in creating an exciting learning environment in the classroom.

The abundant application of varied learning models conducted by educators both conventionally and technology-based requires that learners can understand the learning materials. It's just that in the application of educators more apply the conventional learning model (such as lecture model, discussion, and question and answer) without providing variations of other learning models (such as technology-based learning model). The technology-based model is the Blended Learning model. Models that apply mixing conventionally with technology as the main source.

According to Dick & Carey (2005), a lecturer should be able to recognize and know the characteristics of learners, because a good understanding of the characteristics of learners is very influential on the success of learning process learners [3].

Application of Blended Learning Model Learning is a learning paradigm opportunity from learning centered to learners to technology-based learning. Blended Learning is actually a chance to do more factual interaction between teachers with learners with varied sources of learning content that will be expected to be more interesting so that learning is more effective. Every development included in the teaching and learning process has more development starting from traditional or conventional teaching to a more modern teaching system. Learning style (learning style) is the way people learn or how a person absorbs and processes information. Deporter & Mike (2010) divides learning styles into two main categories that have been generally agreed on: the modality and dominance of the brain. Modality is how one absorbs information easily, while the dominance of the brain is how to organize and process the information. Based on the tendency of modalities, learning styles can be divided into three kinds: visual learning styles (visual learners), auditory learners, and kinesthetic (tactical learners) [2]. Learning style is one of the factors that influence student learning outcomes and comes from within the students themselves. Each student has a more dominant and different learning styles, so that in

certain learning process students with certain learning styles also have different learning outcomes.

Rose & Nicholl (2002) states based on "sensory preference or ability possessed by the brain in absorbing, managing and conveying information, then individual learning styles can be divided into 3 (three) categories. The three categories are visual, auditorial, and kinesthetic learning styles"[7]. The results of Panggabeh (2009) study on the achievement of learning based on the type of mahapes and students showed that the learning achievement is very satisfying have tendency on visual learning type (72,5%), auditory (62,7%), kinestik (50%) and visual-auditory 60%). It's just that during this learners usually have different learning characters. Some have auditory learning characteristics only, and some only use visually. This is what affects the learning outcomes of learners in accordance with the typical style of learning style using the Blended Learning model of learning.

Problems that often occur in the classroom on observations that have been done, that many models of learning done by an educator are not interested by the learners. And the number of students only meet the standards of criteria Minimum Completeness (KKM) that is reaching 65 for the subject of Civics. So that the educator should also try to make learners improve the learning outcomes of Civics beyond criteria Minimum Completeness (KKM) standards by using various models of learning. As well as the lack of interaction between educators and learners that causes no continuity in terms of teaching and learning process. Teachers began to develop models of learning with technology-based as Blended Learning to compensate with Resource Based Learning model that uses only a variety of sources.

It can be seen that an educator must have media that support both conventionally and using technology as a tool in teaching and learning process. In each model of learning and learning styles included in the learning of Civics in particular affect the learning outcomes. So that raises an achievement that has been done by an educator to achieve the competencies that exist in the curriculum as a success in the learning process

## II. METHODS

This research was conducted in SMP Panca Budi Medan In class VII Lesson Learners 2016/2017. This research method using pseudo experimental method (*Quasi Eksperimen*) using experiments in the classroom. Urchin (1983: 50) states "experimental research is a scientific inquiry that requires researchers to manipulate and mengadalkan a or more independent variables and observe the dependent variable to see the differences in accordance with the manipulation of these independent variables"[10]. The design used in this research is 2x2 factorial design with variance analysis techniques (ANOVA) 2 lanes. This design sets the experiment class were treated with blended learning model and control classes were treated with Resource Based Learning model. This study is a quasi-experimental research that aims to determine whether the Blended Learning model

gives a significant effect on the learning outcomes of students learners than the Resource Based Learning in particular and Are there differences in learning outcomes of students who have auditory and visual learning styles. And to know there is interaction between both free variable and dependent variable.

Table 1 Research Design

| Learning Model(A)<br>Learning Style(B) | Blended Learning<br>(A <sub>1</sub> ) | Resource Based<br>Learning (A <sub>2</sub> ) |
|--|---------------------------------------|--|
| Audiotori (B <sub>1</sub> )            | $\mu_{A_1B_1}$                        | $\mu_{A_2B_1}$                               |
| Visual (B <sub>2</sub> )               | $\mu_{A_1B_2}$                        | $\mu_{A_2B_2}$                               |

Information:

- A = Learning Model
- B = Learning Style
- A1 = Blended Learning Model Learning
- A2 = Resource Based Learning Learning Model
- B1 = Audiotory Learning Style
- B2 = Visual Learning Style

### III. RESULTS AND DISCUSSION

Table 2 Description of Postes Data Learners

| Kelompok    | Mean    | N  | Std. Deviatio<br>n | Minimu<br>m | Maximum | SUM  |
|-------------|---------|----|--------------------|-------------|---------|------|
| Eksperiment | 67.2222 | 18 | 23.4660            | 15.00       | 95.00   | 1210 |
| Control     | 61.1111 | 18 | 8.32352            | 45.00       | 80.00   | 1100 |
| Total       | 66.1111 | 36 | 17.5300<br>2       | 25.00       | 95.00   | 2380 |

Learning result data obtained from 18 learners that was learned by using Resource Based Learning obtained the highest is 80, the lowest is 45, the average is 61.11, and standard deviation 8.32352. This control class postes data is normally distributed with Kolmogorov-Smirnov = 0,056 > P = 0,05. Testing of data normality is done by using kolmogorov - smirnov statistic test. Test normality of postes data as a whole:

Table 3 Summary statistics Test Normality Value Postest learners

| Group           | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|-----------------|---------------------------------|----|------|--------------|----|------|
|                 | Statistik                       | df | Sig. | Statistik    | df | Sig. |
| Eksperi<br>ment | .244                            | 18 | .066 | .873         | 18 | .056 |
| Control         | .209                            | 18 | .056 | .940         | 18 | .288 |

The result of normality test of postes data of both groups of samples can be concluded that the postes data of experimental class students and control class learners have distribution of normal distributed data with value of progitry or sig value > 0.05.

#### Homogeneity Test Results

Table 4 Data Homogeneity Test

| Statistik<br>Levene | Degrees<br>Free1 | Degrees<br>Free | Sig. |
|---------------------|------------------|-----------------|------|
| 23.681              | 1                | 34              | .056 |

Indicates that based on postes data both groups of samples from homogeneity test results with Test of

Homogeneity of Variance based on mean value (based on mean) obtained probability value or sig value. for the control class of 0.052 > 0.05 so it can be concluded that based on the control class postes data and homogeneous population. The experimental class is 0.056 > 0.05 so it can be concluded that based on the postes both groups of samples have homogeneous variance or originating from the same population.

#### Learning Outcomes Control Class

The result of control class learning that is class VII which is taught with Resource Based Learning model can be seen by frequency distribution of postes learners control class:

Table 5. Postes Frequency Distribution of Students Control Class

| No. | Class interval | Frequency | Percentage (%) |
|-----|----------------|-----------|----------------|
| 1.  | 45-51          | 2         | 11.1%          |
| 2.  | 52-58          | 4         | 22.2%          |
| 3.  | 59-65          | 9         | 50.0%          |
| 4.  | 66-72          | 1         | 5.6%           |
| 5.  | 73-79          | 2         | 11.1%          |
|     | Jumlah         |           | 100%           |

Can be seen the learning result of control class learners who taught with Resource Based Learning model with predicate *kentuntasan* minimum 45, hence the complete is 16,7% with predicate C (enough). More details can be seen in the following chart diagram 4.5 for learners in the control class declared complete and incomplete. It was concluded that there were 15 students or 83% of students who did not complete while 3 students with the predicate B (Good) or 5.60% learners who completed with the predicate C (Enough). This shows that in the Control class using the Resource Based Learning model is not suitable to apply to human rights material because the percentage is not complete greater than the thorough one.

#### Learning Outcomes Learners Experiment Class

The experimental class learning result that is class VII taught with Blended Learning model can be seen frequency distribution postes learners experiment class in the following table:

Table VI Frequency Distribution Postes Learners Experiment Class

| No | Interval kelas | Frekuensi | Presentase (%) |
|----|----------------|-----------|----------------|
| 1. | 40-50          | 2         | 11.11%         |
| 2. | 51-61          | 4         | 22.22%         |
| 3. | 62-72          | 4         | 22.22%         |
| 4. | 73-83          | 4         | 22.22%         |
| 5. | 84-94          | 4         | 22.22%         |
|    | Jumlah         | 18        | 100%           |

Results learners who have learning style auditory 22.22% of students with the predicate A, 22.22% of students with the predicate B, 22.22% of students with the predicate C, and 33% of learners with the predicate D.

**Hypothesis testing**

Based on the research data, after the analysis requirements are met normality and homogeneity of data, the next step is to test hypothesis. The influence of each learning style on student learning outcomes can be seen using the two-way ANAVA below

Table 6. Test Result Data of ANAVA 2 Path

| Sources             | The sum of squares    | df | Mean Square | F       | Sig. |
|---------------------|-----------------------|----|-------------|---------|------|
| Corrected Model     | 1496.528 <sup>a</sup> | 3  | 498.843     | 1.664   | .194 |
| Intercept           | 147584.028            | 1  | 147584.028  | 492.232 | .000 |
| Group               | 306.250               | 1  | 306.250     | 1.021   | .012 |
| Learning Style      | 756.250               | 1  | 756.250     | 2.522   | .014 |
| Group * Style_Learn | 434.028               | 1  | 434.028     | 1.448   | .238 |
| Error               | 9594.444              | 32 | 299.826     |         |      |
| Total               | 158675.000            | 36 |             |         |      |
| total correction    | 11090.972             | 35 |             |         |      |

Description: (a) = Significance Value

Based on table 4:15 it can be concluded that sig 0.238 > 0.05 it shows that the significant effect of Blended Learning model and learning style.

Table 7 Tukey Test Result Data

| (I) Interakt<br>ioni | (J) Interak<br>tion | Mean<br>Differen<br>ce (I-J) | Std<br>error | Sig. | 95% Confidence<br>Interval |                |
|----------------------|---------------------|------------------------------|--------------|------|----------------------------|----------------|
|                      |                     |                              |              |      | Lower<br>Bound             | Upper<br>Bound |
| Auditor<br>i- BL     | Auditori<br>RBL     | -12.78                       | 8.163        | .412 | -9.34                      | 34.89          |
|                      | Visual - BL         | 16.11                        | 8.163        | .219 | -6.00                      | 38.23          |
|                      | Visual<br>RBL       | 15.00                        | 8.163        | .275 | -7.12                      | 37.12          |
| Auditor<br>i- RBL    | Auditori<br>BL      | -12.78                       | 8.163        | .412 | -34.89                     | 9.34           |
|                      | Visual - BL         | 3.33                         | 8.163        | .977 | -18.78                     | 25.45          |
|                      | Visual<br>RBL       | 2.22                         | 8.163        | .993 | -19.89                     | 24.34          |
| Visual<br>- BL       | Auditori<br>BL      | -16.11                       | 8.163        | .219 | -38.23                     | 6.00           |
|                      | Auditori<br>RBL     | -3.33                        | 8.163        | .977 | -25.45                     | 18.78          |
|                      | Visual<br>RBL       | -1.11                        | 8.163        | .999 | -23.23                     | 21.00          |
| Visual<br>- RBL      | Auditori<br>- BL    | -15.00                       | 8.163        | .275 | -37.12                     | 7.12           |
|                      | Auditori<br>- RBL   | -2.22                        | 8.163        | .993 | -24.34                     | 19.89          |
|                      | Visual<br>BL        | 1.11                         | 8.163        | .999 | -21.00                     | 23.23          |

Based on the average observation  
Error type quadratic average (error) = 299 826.

Based on the results of the test tukey concluded that the learning outcomes of learners who have auditory learning

style higher than the visual learning style then, the CONCLUSION is the learning outcomes of learners who have a lower visual learning style compared with auditory learning style. Furthermore, to know the interaction between Blended Learning model with learning style in influencing learning result. Summary of tukey test interactions between Blended Learning models and learning styles.

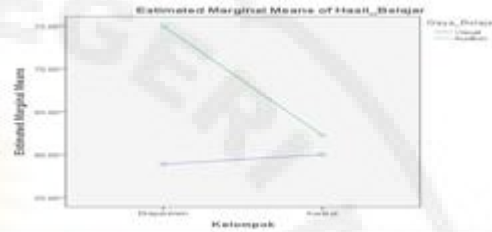


Fig. 1 Pattern Line interaction between learning model and learning styles to the results of learning Civics in class VII SMP Panca Budi Medan

In Figure no interaction of learning model with learning style, it is seen from both pattern of learning result line both at learning style and model of learning is same. No pieces are shown by the graph. In other words, both learners who are taught with Blended Learning and Resource Based Learning that have a learning style show the same learning outcomes. Likewise with learners who have auditory and visual learning styles. In this graph it is clear that the line is getting smaller for learners visual learning style that is taught with Blended Learning and with Resource Based Learning. This means that the value of learning outcomes learners show the difference. Likewise with the style of auditory learning shows different results with the learning model of Blended Learning and Resource Based Learning. Based on the results of calculations in the research obtained showed that the average learning outcomes of student citizenship education taught by Blended Learning model is higher than the Resource Based Learning model. From the data obtained describes that the average learning outcomes of students' civic learner taught by using Blended Learning model is 71.11 higher than the average of civic education learning outcomes of learners who are taught using Resource Based Learning Model 61, 11. From the results of comparison of the average obtained concluded that the average learning outcomes of civic education of learners who were taught by the Blended Learning model is higher than the Resource Based Learning model. This is in line with the cybernetic theory put forward by Pask & Scott (in Budiningsih, 2005) which states that a thorough thinking and tend to leap forward by obtaining information and managing it. And according to the allegation that led to the model of learning Blended Learning as the right model of the learners [1]. This is in accordance with research conducted by Protsiv, et al (2016) which states the interaction of learners is higher by using the Blended Learning model. Similarly, Sigaroudi, et

al (2016) that using the Blended Learning model can show the learning process better than other models [8].

The dominant factors that determine the success of the learning process is to recognize and understand that learners have characteristics with different learning styles with each other. Recognizing learners' learning styles is paramount to producing more effective learning. Learning style is one form of the characteristics of learners which is the ability to absorb information, remember, think and solve problems encountered. This condition is empirically tested by research findings that prove that there is a significant difference between groups of learners who have visual and auditory learning styles. This is acceptable because learners who have an auditory learning style receive more knowledge through hearing. This is in line with research conducted by Mulyono, et al (2007) that learning styles affect the outcome of learners and adapt to learning styles [5].

Based on the results of the calculation proved that there is no interaction between the Blended Learning model with learning styles in influencing the learning outcomes of citizens' civic education. The results of research conducted by Syarif (2012) The results showed no interaction influence the application of learning models and motivation on student achievement [9].

Although in the research results there is a difference between the learning outcomes with the learning model, and there is a difference between the results with learning styles, this gives an indication that the group of learners who have a visual learning style is different from the group of learners who have auditory learning style means that one of the second the group obtained better learning outcomes when taught using the Blended Learning model or with the Resource Based Learning model.

#### IV. CONCLUSION

Based on the research results obtained, it can be concluded There is the influence of learning model Blended Learning on the results of learning Civic Education students class VII Junior High School Panca Budi Medan. this is seen from the results of student learning taught by Blended Learning model is better than the results of student learning taught by Resource Based Learning. There is influence of learning styles to learning outcomes Civics students class VII Junior High School Panca Budi Medan. this is seen from the results of student learning that has a higher learning style Auditori better than the student learning outcomes that have a visual learning style. There is no interaction between the learning model and learning style in influencing the learning outcomes of citizenship education of students of class VII Junior High School Panca Budi Medan. the absence of such interactions is evident from the absence of significant differences between the mean of learning outcomes taught by Blended Learning model with auditory learning style and resource based learning model of auditory learning style, Blended Learning

model with visual learning style and Resource Based Learning model with style visual learning.

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