Development of Characteristic Learning Model Based on Simalungun Culture on Education and Citizenship Subjects in Class IV Elementary Schools in Simalungun District

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Abstract
This research is a development research (research and development) aiming to produce Simalungun Culture-Based Learning Model that is suitable for use, effectiveness, and can improve the learning outcomes of students in Civics Culture subject "My Nation's Cultural Diversity" in Class IV SD 091743 PLUS Tigabalata. This study refers to F-D research and development model by Thiagarajan and Semmel which in its implementation researches and tests to develop existing products. The sample in this research and development was class IV SD 091743 PLUS Tigabalata totaling 50 students. The learning model developed before being tested fulfilled the eligibility criteria based on the assessment of 4 experts, 2 cultural observers, and 2 practitioners. The results of the instructional design expert validation (92.36% = very good), the results of expert material validation (94.35% = very good). The results of cultural observer's validation on instructional design (92.25% = very good), the results of cultural observer on material (92.10 = very good)%). The results of practitioner validation as implementers of learning in the research location on instructional design (92.04% = very good), and the results of practitioner validation of the material (95.08)% = very good). Effective learning models can improve student learning outcomes based on individual trials, small group trials, and limited field trials. Hypothesis test results proved that there was a significant difference between the learning outcomes of students taught by using character learning method based on Simalungun culture with learning outcomes taught without a character learning model based on Simalungun culture. This is indicated by the results of data processing obtained tcount = 1.21 > ttable = 0.2647 with dk = (n1-n2-2) at the significant level α = 0.05. It is concluded that the effectiveness of using the Simalungun Culture-Based Learning Model is 20.52 while without using Simalungun Culture-Based Learning Model is 15.84.

Keywords: Learning Model, Characteristics, Citizenship Education, Simalungun

1. Introduction
Humans are seen as individuals who have potential. That humans have been born, in humans, there are a number of innate potentials. This potential refers to three main trends: right, good and beautiful. Humans basically tend to like something that is right, good and beautiful.

Based on this point of view it can be seen that humans basically have morals. Humans are motivated to do good and are praised by environmental influences, sometimes the tendency is often not visible. In relation to this moral dimension, the implementation of education is aimed at introducing good values and then interacting and implementing the morality into attitudes and behavior for life habituation.

Characteristics is defined as reason, character traits, character, good deeds, efforts, and endeavors. According to the draft competency-based curriculum (2001), manners contain the values of human behavior that will be measured according to their good and bad through religious norms, legal norms, manners and manners.

Citizenship Education is a subject that must be followed starting at every level of education. In accordance with Minister of National Education Regulation No. 22 of 2006 Citizenship Education Subject is a subject that focus on the formation of citizens who understand and are able to exercise their rights and obligations to become intelligent, skilled and characterized Indonesian citizens mandated by Pancasila and the 1945 Constitution.

Yadi Ruyadi (2014: 60) in her research Character Education Model Based on Local Cultural Wisdom (Research on Indigenous Peoples of Kampung Benda Kerep Cirebon in West Java Province for the Development of Character Education in Schools shows that the character education model is based on local cultural wisdom that can be applied effectively in schools. Based on the results of the above studies Local culture can present unique thoughts related to the lives of the people and the various events they experience.

Simalungun culture is one of the old cultures, thus in its development it has produced many cultural values that are still adhered to by its tribes. Some cultural values are often used as the basis of life, namely; habonaron do bona it means "God Almighty is the source of everything that exists" and Sipanganbei Manotok Hitei means to jointly build or work together/build shoulder to shoulder to build, and the motto Tolu sahundulan : sanina pangalopan riah, tondong pangalopan podah, boru pangalopan gogoh.
This research wanted to know the role of Simalungun culture, especially its cultural value in the education of people who still run the Simalungun culture itself, especially in Civic Education which can give birth to the values of Simalungun cultural habits and can instill values in the family, school and community environment. in accordance with the 18 national cultural characters, namely: (1) believe in the existence of God Almighty and always obey his teachings, (2) obey the teachings of religion, (3) possess and develop tolerance, (4) possess a sense of self-respect, (5) the growth of self-discipline, (6) develop a work ethic, (7) possess a sense of responsibility, (8) possess a sense of openness, (9) be able to control themselves, (10) able to think positively, (11) develop self-potential, (12) foster love and affection, (13) possess togetherness and mutual cooperation, (14) possess a sense of solidarity, (15) respect each other, (16) possess a system of manners and manners, (17) possess a sense of shame, (18) foster a sense of honesty.

To make a good learning plan and can carry out an ideal learning process, each teacher must know the elements of good learning planning. The learning planning element is to identify the needs of students, the objectives to be achieved, various strategies and relevant scenarios used to achieve the objectives, and evaluation criteria.

2. Theoretical Framework

2.1 Learning Model

The success of learning is largely determined by the learning model used. The model is a reference that becomes the basis or reference of certain simple images that can explain objects, systems and concepts. The term learning model is often interpreted as the learning approach. Related to the model, Joyce & Weill (1992: 4) stated that the learning model is a plan or pattern that is used as a guide in planning learning in class or learning in a tutorial and to determine learning tools including books, films, computers, curriculum and so on. Each learning model directs us in designing learning to help participants in such a way that learning objectives are achieved.

2.2 Definition and Scope of Character Education

Character Education refers to understanding in English, which is translated as morality. Morality contains several meanings, including: (a) customs, (b) manners, and (c) behavior. Understanding of character is essentially behavior. Meanwhile according to the draft of Competency Based Curriculum (2001), character contains the value of human behavior that will be measured according to its good and bad through religious norms, legal norms, manners and manners, cultural norms and community customs.

According to Cahyoto (2001:35), the goals and objectives of ethics education in the scope of Civics Education is to realize the process of developing the character of students who are directed to the ability to think rationally, possess moral awareness, dare to take decisions and be responsible for their behavior based on rights and obligations citizens who in turn are able to cooperate with other community members.

Further development of behavioral learning objectives is carried out by Bloom (1987: 1) which establishes taksanomi goal to be the classification of objectives of the education system which includes cognitive, affective, and psychomotor domains. The cognitive domain that contains the six stages for each achievement are knowledge, understanding, application, analysis, synthesis, and evaluation.

2.3 Civics Learning Outcomes

Learning outcomes are often called learning achievements that can be interpreted by the score gained in learning. Learning outcomes are the final determinant in carrying out a series of learning processes (activities). Djamarah and Zain (2002:59) explained that learning outcomes are mastery of students towards the material/subject matter that has been given when the teaching process takes place, learning outcomes are the level of mastery of students towards the subject matter delivered by the teacher.

Citizenship Education is a subject learned from primary to higher education. According to Azra (2008:7), Citizenship Education can be interpreted as a vehicle to develop and preserve noble and moral values rooted in the culture of the Indonesian nation which is expected to be realized in the form of daily life behavior of students as individuals, members of society in national life and state.

2.4 Cultural Based Learning Model

Winataputra, et al. (2012) explained that culture-based learning is a strategy for creating learning environments and planning learning experiences that integrate culture as part of the learning process. Culture-based learning is based on the recognition of culture as a fundamental part (fundamental and important) for education, expression and communication of an idea, and the development of knowledge. Culture is a medium to motivate students to apply knowledge, work cooperatively, and prepare linkages between various kinds of lessons. Culture-based learning as an alternative learning approach, namely linking learning material with concepts derived from local culture where students are located. Through developing the concept of local culture in the learning process, lectures will be easier to understand and be accepted by students.
2.5 Simalungun Culture as a Development Base
Simalungun cultural elements consist of: (1) Simalungun traditional building/house (2) Simalungun clothing, (3) Simalungun language, (4) Simalungun special food, (5) Simalungun dance, (6) Simalungun traditional ceremony, (7) tools Simalungun music, (8) Simalungun socio-economic/livelihood

3. Methodology
This research was carried out at SDN 091473 Plus Tigabalata Simalungun for students in class IV 2017/2018. The population of this study were all fifth grade students of SDN 091473 Plus Tigabalata Simalungun consisting of 102 students, distributed into 4 classes. The method used in this study was research and development (R & D), namely the Thiagarajan (F-D) development model. The Four-D development model stands for define, design, develop, and dissemination developed by Thiagarajan (Mulyatiningsih, 2012). The instrument used in this study was (1) questionnaire sheet for subject design experts, (2) questionnaire sheets for expert learning materials, (3) questionnaire for cultural experts, (4) questionnaire sheets for practitioners, and (5) questionnaire sheets for students. Data collection techniques used in the form of interviews, literature studies, questionnaires, observation sheets, product trial sheets, and documentation. In this study it was used a "research and development" approach, in which there were 2 types of data, namely qualitative and quantitative. Data analysis techniques used were descriptive and inferential techniques. Learning outcomes test was used to see the effectiveness of the application of the learning model by comparing the pre-test and post-test scores to students. The form of learning outcome test used was a multiple choice test form consisting of 25 valid test items including C2 (understanding) cognitive area, C3 (application), C4 (analysis).

Each correct answer was given a score of 1 (one) and the wrong one was given a score of 0 (zero). Before this instrument was used, the quality was examined first through trial. The quality of the instrument was indicated by the validity and reliability (reliability) in expressing what will be measured, the level of difficulty of the problem and the different power of the items.

1. Average score
To determine the average score, the formula used is:

\[ \overline{X} = \frac{\sum X}{n} \]  
(Sudjana, 2002:67)

2. Standard Deviation
To determine the Standard Deviation, the formula used is:

\[ S = \sqrt{\frac{\sum (X_i - \overline{X})^2}{n-1}} \]

Formula for population

\[ \sigma = \frac{\sqrt{\sum (X_i - X)^2}}{n} \]

where :
S = Standard Deviation
\( X_i \) = i data price
n = Total sample

3. Normality test
Data normality test was done using Lilliefors technique. The steps used are as follows:
a. Data on learning results \( X_1, X_2, \ldots, X_n \) made as a standard number \( Z_1, Z_2, \ldots, Z_n \) with the following formula

\[ Z_i = \frac{X_i - \overline{X}}{S} \]  
(Sudjana, 2002:99)

where :
\( \overline{X} \) = Calculated average score
S = Standard deviation

b. For each of these standard numbers using a standard normal distribution list, then the odds are calculated \( F(Z_i) = P(z \leq z_i) \)
c. Calculate the proportion of $S \left( \frac{z_i}{n} \right) = \sum_{i=1}^{n} z_i \leq \frac{z_i}{n}$

d. Calculate the difference of $F(z_i) - S(z_i)$ then determine the absolute price.

e. Determine the biggest price from the absolute price difference $F(z_i) - S(z_i)$ as $I_0$. To accept or reject a normal distribution and research can be compared to the calculated critical value of the table taken from the Lilliefors test table with a level $a = 5\%$.

Testing criteria:
If $I_{\text{count}} < I_{\text{table}}$ then the sample is normally distributed
If $I_{\text{count}} > I_{\text{table}}$ then the sample is not normally distributed

4. Homogeneity test
Homogeneity test variance is calculated by using the F-test:

$F = \frac{\text{Variansterbesar}}{\text{Viansterkecil}}$ or $F = \frac{S_1^2}{S_2^2}$

(Sudjana, 2002: 99)

where:
$S_1^2$ = Variance from bigger group
$S_2^2$ = Variance from smaller group

Testing criteria:
If $F_{\text{count}} < F_{\text{table}}$ then the sample has normal variance
If $F_{\text{count}} > F_{\text{table}}$ then the sample does not have the same variance

5. Hypothesis testing
Furthermore, the learning outcomes were tested using t-test, using the following formula:

$T = \frac{\bar{X} - \mu}{S} \sqrt{n}$

Note:
$T = \text{Value of } t_{\text{count}}$
$\bar{X} = \text{sample average}$
$\mu = \text{parameter value}$
$s = \text{sample standard deviation}$
$n = \text{total sample}$

Hypothesis:
$H_0 : \mu_A \leq A_2$
$H_a : \mu_A > A_2$

$\mu_A_1$ : The average learning outcomes of students with the character learning model based on Simalungun culture
$\mu_A_2$ : The average learning outcomes of students without a character learning model based on Simalungun culture.

4. Discussion of Research Results

4.1 Product Development Research Results

The process of implementing the development of the character learning model based on Simalungun culture was based on the Four-D (define, design, develop, disseminate) model which was carried out in 4 (four) stages. Each stage was carried out to establish and define development requirements. This research began with the initial stage (define) by analyzing needs, curriculum analysis, analysis of learning models, and analysis of regional culture.

a. Data on Results of Trials

Based on the assessment of the product through a series of trials and revisions that have been conducted, the model of character learning based on Simalungun culture is declared valid. The trial was conducted with seven (7) stages, namely: (1) validation of learning design experts, (2) expert validation of learning materials, cultural validation, practitioner validation (3) individual trials, (4) small group trials, and (5) limited field trials, (6) product results, and (7) distribution.
b. Data on Validation Results of Learning Design Expert

Based on the results of the overall instructional design expert assessment, it was concluded that the average value of the indicator was 92.36%. Because the range of values was at a score of $85\% \leq X \leq 100\%$, the tendency of the instructional design expert judgment was stated in the category of "very good" and can be concluded based on instructional design experts that the Simalungun Culture-Based Learning Model was "worthy of use."

c. Data on Validation Results of Learning Material Expert

To determine the feasibility of the material presented in the teaching material, the researchers validated the material to Mr. Dr. Daulat Saragi M.Pd. and Mr. Dr. Hidayat M. Hum. Hasil. Feasibility of character-based learning materials based on Simalungun was stated by the criteria "very good with an average score of 94.35% and can be concluded based on the assessment of material experts. The character learning model based on Simalungun culture” was worthy of use”.

d. Data on Research of Product Effectiveness Test

Based on the data obtained, it can be seen that the Civics learning outcomes by the students in SD PLUS Tigabalata without using the Simalungun Cultural Based Learning Model with the lowest score of 9, the highest score of 24, an average value of 15.84 and a standard deviation of 1.68.

Based on the data obtained, it can be seen that the learning outcomes of Civics by students in class IV SD 091473 PLUS Tigabalata without using the character learning model based on Simalungun culture obtained learning outcomes with the lowest score 12, the highest score 25, the average score of 20.52 and the standard deviation 1.68 Posttest data of students who taught using Simalungun Culture-Based Learning Model

4.2 Data Analysis Requirements Test

Data analysis requirements test was conducted to determine the parametric statistical test of the research hypothesis. Data analysis testing was carried out by testing the normality of research data with the Liliefors test. While to test the homogeneity of the research data was used for Fisher’s test. Summary of test data homogeneity with Fisher’s test.

4.3 Hypothesis Testing

In testing hypotheses, empirical evidence was obtained that the learning outcomes of students who used the Simalungun Culture-Based Learning Model in their learning were higher than without using the Simalungun Culture-Based Learning Model. The hypothesis tested in this study was that there was a significant difference between the learning outcomes of students who are taught using the Perbasis Budaya Simalungun Characteristics Learning Model and the learning outcomes of students without using the Simalungun Culture-Based Learning Model. Testing the hypothesis used was $t$ test. From the calculation calculation, the output of $t$ count was obtained and $t$ table was 1.21 at 95% confidence level. Then it was obtained that $t_{count} > t_{table}$ or $1.21 > 0.02647$ or in other words $H_0$ was rejected and $H_a$ was accepted.

5. Conclusion

Based on the discussion of the results of the research on the development of the Simalungan Culture-Based Learning Model presented earlier, it can be concluded as follows:

1. Based on the assessment of learning design experts, material experts, cultural observers, and practitioners, Simalungun Culture-Based Learning Model developed is categorized as very good thus it can be accepted and feasible to use as a learning model in Civics subject for fourth grade elementary school students in Simalungun district.

2. Based on individual trials (5 people), small group trials (9 people), and limited field trials (one class or more). The use of the Simalungun Culture-Based Learning Model developed is categorized as a very good category thus it is effectively used in Civics learning in the fourth grade elementary schools in Simalungun district.

3. Based on Hypothesis Testing by giving posttest to students taught without the Simalungun Culture-Based Learning Model and posttest for students taught using Simalungun Culture-Based Learning Model. Then the use of the Simalungun Culture-Based Pekerti learning model can improve student learning outcomes. This is shown by the learning outcomes of students taught by using the Simalungun Culture-Based Learning Model higher than the learning outcomes of students taught without using the Simalungun Culture-Based Learning Model.
References