DEVELOPMENT OF CONTEXTUAL TEACHING LEARNING (CTL) LEARNING MODEL BASED ON BLENDED LEARNING PPKn LEARNING IN CLASS IV SDN 060901 MEDAN POLONIA

Eliana Purba
Student at Medan State University, Indonesia

Daulat Saragi
Lecturer at Medan State University, Indonesia

Zulkifli Matondang
Lecturer at Medan State University, Indonesia

Abstract

This study aims to: (1) Look at the CTL learning model based on Blended Learning in PPKn learning in class IV SDN 060901 Medan Polonia in the form of CTL Model Syntax based on Blended Learning, RPP in accordance with the CTL model based on Blended Learning, PPT learning media, LKPD and Learning Outcomes Test. (2) Testing the effectiveness of the CTL model based on Blended Learning PPKn learning in class IV SDN 060901 Medan Polonia. This type of research is development research using the ADDIE model, namely Analyze, Design, Development, Implementation, and Evaluation. The subjects of this study were fourth grade students at SDN 060901 Medan Polonia for the 2021/2022 academic year which opened 30 students. 1) The Feasibility Instruments used are the results of the questionnaire expert validation of the CTL learning model based on Blended Learning by 80%, the validation of the learning media experts by 93%, the RPP expert validation by 93%, the LKPD expert validation by 94% and the Learning Outcomes Test conducted by the results of the validation of N = 30 students, the r table value shows the number 0.361, the results of the reliability of the questions are 0.844 and the results of the teacher's response are 91.6% and the results of student responses are 96%. With these results the CTL model based on Blended Learning PPKn learning in class IV SDN 060901 Medan Polonia is said to be "Very Appropriate" to be used in learning. 2) The effectiveness of the instrument was carried out with a pretest and posttest test with a gain score of
0.76, so it can be said that the CTL learning model based on Blended Learning PPKn learning in class IV SDN 060901 Medan Polonia is "Effective".

**Keywords:** CTL Model, Blended Learning, PPKn

### A. Introduction

As a means to optimize the benefits of using this technology, it can be seen that the role of education is to strengthen information technology-based learning to support the implementation of a learning system in the era of the industrial revolution 4.0.

Moreover, during the COVID-19 pandemic, there was an attack by the corona virus or severe actue respiratory syndrome (SARS-Cov-2), an infectious disease that can attack the respiratory system. So for the time being, learning is limited by the division of time which causes face-to-face learning at school to be less than optimal and reduces the quality of learning.

According to Jean Piaget, the age of elementary school students (7-12 years) includes a concrete operational stage. Therefore the teacher designs varied learning to attract the attention of students. This is important because the attention of children at that age is still easily influenced. As it is known that elementary school children have a lot of moving characteristics, meaning that movement is not only limited to physical activity but also includes active thinking, which can be accompanied by movement to achieve the expected results.

From the above, PPKn learning strategies in high-grade elementary schools must be able to trigger the ability of students who are oriented to the activeness of students in learning activities to observe, ask questions, reason, try and communicate. With an effective learning strategy that can
develop children's thinking skills, a blended learning model was developed that adapts to the 4.0 revolution in the 21st century and is also adapted to the conditions of the COVID-19 pandemic where learning is carried out through online learning.

The application of the CTL learning model that is centered on students is able to instill problem solving, critical thinking, creative and independent. Exploring the potential of students based on the experience they have had to be associated with the knowledge to be learned. According to Amir (2015) where contextual learning students will experience a thinking process involving experiences close to their lives, going through this thinking process can improve students' problem solving abilities.

The CTL learning model was developed in accordance with the current technological era through blended learning learning techniques as a learning medium by combining online and face-to-face learning. This is also related to the COVID-19 pandemic by implementing distance learning or through online learning using blended learning-based CTL learning models as a forum for PPKn learning in grade IV SD.

The Blended Learning learning model provides opportunities for students to play an active role in learning both individually and in groups, face-to-face or online, so that they have the ability to define problems, identify, interpret and transfer learning outcomes in everyday life, and in the end students' thinking skills can develop. explored through this learning model. The concept of blended learning learning model is associated with incorporating online media.

The development of the times must be used optimally, the use of mobile phones based on Android is no stranger to students. as an online learning medium, HP is used as a learning room with the use of the
internet, teachers can apply blended learning. Implementation of the blended learning learning model with 75% face-to-face presentations and 25% online. However, in the Covid-19 condition, online learning is prioritized while face-to-face learning is carried out if there is a need that allows for schools, the teacher will serve face-to-face learning with health protocol requirements.

Online blended learning can take advantage of various learning applications, we are familiar with online learning applications that are widely applied to learning. The learning applications that are widely used are WA, FB, YOUTUBE, CLASS MEET, ZOOM, GOOGLE CLASSROOM. The teacher can choose one of the uses of the application according to the teacher's ability to use the application so that learning can run effectively.

Based on observations at SD Negeri 060901 Medan Polonia that some fourth grade students have used various online media learning using the WA, ZOOM application and some classes have used the google classroom application and face-to-face learning is constrained by the Covid-19 condition, face-to-face learning is possible if learning, students do not understand the learning material, the teacher provides learning services through parents by giving directions according to the textbook.

The learning that is carried out is sometimes still not effective where some of the obstacles in learning are related to internet packages that are not always available, the use of cellphones that are shared with parents, the lack of understanding of students towards the material presented. The online learning model is still less varied, where online learning is teacher-centered.

The implementation of online learning is dominated by lecture model learning, and does not explore the abilities of students. Some parents find it difficult to accompany their children's online learning
process, so it is necessary to establish communication between teachers and parents to provide solutions on how to assist children in online learning.

Through the development of blended learning learning models are expected to be implemented effectively. With online learning, the author develops the use of interactive internet media so that students are able to explore learning activities properly and effectively.

B. Method

The type of research used in this research is development research (R&D). The product to be developed is a blended learning-based CTL learning model along with learning support tools, namely the Learning Implementation Plan (RPP), Student Worksheets (LKPD) and Learning Outcomes Test (THB). This research was conducted in class IV SDN 060901 Medan Polonia, Medan City. The time of the research will be carried out in February 2022 for the 2021/22 academic year with learning theme 7, sub theme 3 on the content of PPKn subjects.

The research development model used is the ADDIE model which was pioneered by Dicky and Carry (Endang, 2014:199). Based on the explanation above, the ADDIE research model used will be used in this research referring to the prototyping model according to Nieveen which includes (1) preliminary research, (2) prototyping stage, and (3) assessment stage.

Research Procedure

The following is an explanation of the ADDIE development stage in (Endang, : 2000, 2001) which will be carried out in this research, namely: Analyze Stage (Learning Analysis, Student Analysis and Competency [276]
Analysis), Design Stage (Blended Learning-Based CTL Learning Model Design, RPP Design, Learning Media Design, LKPD Design and Learning Outcome Test Design), Development Stage, Implementation Stage (Expert Test and Field Test) and Evaluation.

Data Collection Technique
In this study, the data collection techniques are: Interviews, Questionnaires and Documentation.

Data Collection Instruments
To measure the validity, effectiveness and feasibility of developing a CTL model based on blended learning in PPKn learning, research instruments and data collection techniques were developed. The instruments used in this study were: validation sheets (material experts and learning design experts, technology experts), and tests in the form of posttest questions contained in the LKPD and student response questionnaires.

Feasibility Assessment Instruments From Teacher and Student Responses
The development product is said to be feasible if it meets the criteria (1) experts and teachers state that the developed learning model can be applied and (2) actually in the field, students as users state that the developed model is easy to apply.

Data analysis technique
Feasibility of Blended Learning-Based CTL Model in PPKn Class IV learning
The feasibility analysis of the CTL model based on blended learning
The Effectiveness of the CTL Model Based on Blended Learning in PPKn Learning

The initial data analysis in this study was by analyzing the pretest and posttest data obtained by testing the Gainscore. The gain score is a good indicator to show the level of treatment effectiveness from the posttest score acquisition.

C. Finding and Discussion

1. Result

This research was conducted in the fourth grade of SD Negeri 060901 Medan Polonia. This study uses the reach and development (R&D) method of the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The results of this study are learning tools in the form of preparation of lesson plans, learning media, LKPD, and evaluation of class IV learning with theme 7 "The Beauty of Diversity in My Country" sub theme 3 "The Beauty of Unity and Unity" by paying attention to the components and characteristics of the CTL model based on Blended Learning.

Question Validity

a. Validity of PPKn Questions for Class Theme 7 Sub-theme 3

The validity of the questions calculated using the biserial point formula. Then the rtable was consulted at the 5% significance level, so that it was known that N = 30, the rtable value showed the number 0.361. Based on the analysis of the 20 items, it can be seen that there are 15 items in the valid category (75%). While the questions that fall into the
invalid category are 5 items (25%). The validity analysis is presented in the figure below;

![Question validity](image)

**Figure 1.** Calculation Results of Question Validity

b. Reliability of PPKn Questions for Class IV Theme 7 Sub-theme 3

The reliability analysis technique used in this research is Cronbach's alpha formula technique. It is known that the reliability of the questions is 0.844 which means that the PPKn Test with Blended learning-based CTL learning model that has been used has a very high reliability category.

c. Level of Difficulty of PPKN Questions for Class IV Theme 7 Sub-theme 3

A good question is a question with a moderate level of difficulty. The level of difficulty of the questions with good categories is at 0.3 < p 0.7. Based on data analysis, there were 3 questions in the difficult category (15%), 10 questions in the medium category (50%) and 7 questions in the easy category (35%). The results of the analysis of the difficulty level of small groups are presented in the diagram below:
d. Distinguishing Power of Questions

The discriminatory analysis of item items aims to distinguish between students who have high ability and medium ability and low ability 2 items (10%), questions with medium category 9 items (45%) and questions with high category 9 items (45%). The results of the analysis of the discriminatory power of questions that have been tested are as follows:

![Difficulty Level](image1)

**Figure 2. Difficulty Level**

![Power of Differing Questions](image2)

**Figure 3. Power of Differing Questions**

**Product Revision**

[280]
Product revision is an improvement made before using the product in research. As for some of the products in the research on the development of the CTL model based on Blended learning in PPKn learning in grade IV SD Negeri 060901 Medan Polonia on theme 7 sub-theme 3 are as follows; 1) Syntax of Blended Learning-based CTL Learning Model, 2) Learning Implementation Plan, 3) Interactive PPT Media, 4) LKPD, 5) Learning Outcome Test.

These products have been validated by a system of validation by several expert lecturers at the State University of Medan by revising the validation twice to get good results so that they can be used in learning in school research activities for class IV SD Negeri 060901 Medan Polonia.

**Results of Feasibility of CTL Model Based on Blended Learning**

The results of the feasibility of the CTL model based on Blended Learning in PPKn learning class IV SD Negeri 060901 Medan Polonia in the form of several learning products, namely 1) learning model syntax 2) RPP 3) Learning Media 4) LKPD 5) Learning Outcomes Test validated by expert validators and calculation of results teacher and student response questionnaire.

**a. Research Product Eligibility**

**Table 1.** Research Product Validation Assessment Recapitulation

<table>
<thead>
<tr>
<th>No</th>
<th>Name Validator</th>
<th>Research Products</th>
<th>Average Percentage R</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>R1</td>
<td>R2</td>
</tr>
</tbody>
</table>

[281]
<table>
<thead>
<tr>
<th></th>
<th>Syntax of Blended Learning-based CTL Learning Model</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RPP</td>
<td>73%</td>
<td>93%</td>
<td>Very Worthy</td>
</tr>
<tr>
<td>2</td>
<td>Instructional Media</td>
<td>73%</td>
<td>93%</td>
<td>Very Worthy</td>
</tr>
<tr>
<td>3</td>
<td>LKPD</td>
<td>75%</td>
<td>94%</td>
<td>Very Worthy</td>
</tr>
</tbody>
</table>

b. Teacher Response Eligibility

**Table 2. Teacher Response Results**

<table>
<thead>
<tr>
<th>Sub Variable</th>
<th>Blended Variable</th>
<th>CTL models</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial activity</td>
<td>Information seeking phase</td>
<td>1. The teacher tries to attract students' interest by relating the subject matter topics to everyday life and giving reference questions to students (CTL: Constructivism and questioning).</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Core activities</td>
<td>Phase: Acquisition of Information</td>
<td>2. The teacher carries out a class presentation (CTL: modeling)</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. The teacher explains the working steps of cooperative learning</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. CTL model based on blended learning.</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. The teacher forms a heterogeneous group, in one group there are</td>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>

[282]
6. Teachers involve students in the learning process (CTL: inquiry)

7. The teacher guides each group to learn the subject matter (CTL: learning community)

8. Information data is managed by students then written down and communicated

9. The teacher guides the class presentation activities

10. The teacher reflects and concludes the results of the discussion (CTL: reflection)

11. Teacher gives assignment

12. Teacher gives final test

Percentage 91.6%

Criteria Very Worthy

c. Eligibility of Student Response

Table 3. Student Response Results
Results of the Effectiveness of the CTL Model Based on Blended Learning for Class IV PPKn Education at SD N060901 Medan Polonia

Table 4. Recapitulation of Test Results for Class IV PPKn Subjects

<table>
<thead>
<tr>
<th>No</th>
<th>PPKN Test Questions</th>
<th>Average</th>
<th>Category</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pretest</td>
<td>62</td>
<td>Enough</td>
<td>Currently</td>
</tr>
<tr>
<td>2</td>
<td>Posttest</td>
<td>91</td>
<td>Well</td>
<td>high</td>
</tr>
<tr>
<td></td>
<td><strong>Gainscore</strong></td>
<td>0.76</td>
<td></td>
<td>Effective</td>
</tr>
</tbody>
</table>

[284]
Based on the table above, it shows that the results of the posttest assessment after using the CTL learning model based on blended learning in PPKn learning in grade 4, Theme 7, sub-theme 3. Amounting to the effective category. This is indicated by the increase in the learning test with a gainscore value of 0.76 so it can be concluded that the blended learning-based CTL learning model in PPKn learning theme 7 sub theme 3 class 4 is declared effective.

2. Discussion

The CTL learning model based on Blended Learning in PPKn Learning Theme 7 sub-theme 3 class IV SDN 060901 Medan Polonia is one of the learning models that can be used as a guide in classroom learning applied by teachers in developing models of PPKn subject content.

The learning activities carried out at the school were carried out in 7 meetings by discussing the learning material for Theme 7 Sub-theme 3, the content of PPKn subjects in learning 3, learning 4 and learning 5 with the topic "The Beauty of Unity and the Unity of My Country".

The steps carried out in learning are adjusted to the CTL learning model based on Blended Learning as follows;

1. The initial activity before carrying out learning is praying according to the beliefs of each student
2. Then the students sing the nationalism song that has been provided in the learning media
3. Displays the KD menu and learning indicators and explains the objectives of the learning to be carried out
4. Discuss the previous material that has been studied to recall the learning
5. The teacher displays a menu of learning materials through the
learning media that have been provided
6. Students are given the opportunity to ask about learning materials
7. Students are given a mathematical task that has been shown
8. Students reads the results of the assignments given
9. Students are given the opportunity to ask questions about the material discussed
10. The teacher gives a learning reflection to discuss the material that has been studied
11. Students work on the quiz that has been provided on the learning media.

The type of development of the CTL learning model based on Blended learning is to use the ADDIE development model which aims to be used to analyze the feasibility and effectiveness of the CTL learning model based on Blended Learning for PPKn learning in class IV SDN 060901 Medan Polonia.

Feasibility of CTL Model Based on Blended Learning PPKn Learning in Class IV SDN 060901 Medan Polonia

The development of the CTL model based on Blended Learning is carried out to accommodate creative PPKn learning so that it can form PPKn learning that is fun and attracts children's desires in PPKn learning. A good learning model is able to meet the eligibility criteria to determine the feasibility of the CTL learning model based on Blended Learning by conducting a validity test by Learning Model expert lecturers, learning media experts, implementation plan experts, learning media experts and experts in LKPD test design for PPKn learning in the classroom. IV SD.

The first product validation is the learning steps of the CTL model based on Blended Learning by Prof. Dr. Yusnadi, MS made two repairs in order to get maximum results. The assessment criteria provided on the [286]
learning model validation instrument are related to syntax, social systems, reaction principles and the impact of instructional accompaniment, obtaining a percentage of 68% with the criteria "feasible and must be revised" with assessment suggestions "it is not yet clear how the syntax of the blended learning model is. and a blended learning-based CTL model that still looks abstract". Then from the results of the next validation revision, it obtained a value of 80% with the criteria "fit for use and without revision".

The second product validation is a learning tool for implementing a learning plan adapted to the syntax of the CTL learning model based on Blended Learning by Mr. Dr. Tappil Rambe, S.Pd., M.Si carried out two validations in order to get improvements with maximum results. The assessment criteria attached to the RPP validation instrument are an assessment of the formulation of indicators, formulation of learning objectives, time allocation, presentation of learning materials, and learning activities obtaining a percentage of 73% with the criteria of "appropriate and revisited" with suggestions that learning activities must be adjusted with the CTL learning model based on blended learning and learning activities must be described clearly.

The validation assessment on this media by Mrs. Dr. Samsidar Tanjung, M.Pd with the criteria of the assessment instrument on the feasibility of content, presentation, quality of learning strategies, graphics and the quality of the virtual classroom display obtained a percentage of 73% with the criteria of "feasible and must be revised" with suggestions for improvement "the instructions for using media are not yet available, coloring which must be adjusted to the child's criteria, the presentation of monotonous material must be designed by presenting a schematic drawing of the material". Then from the results of the next validation
revision, it obtained a value of 93% with the criteria "fit for use and without revision".

The evaluation of this LKPD product validation by Mr. Drs. Liber Siagian, M.Si was assessed twice in order to get maximum results. And the assessment aspects provided on the assessment instrument are the suitability of the content, the suitability of the construction requirements and the suitability of the technical and technical requirements by obtaining a percentage of 75% with the criteria of "appropriate and must be revised" with an assessment suggestion "the material must be designed attractively, the questions must be clear in accordance with KD the learning material. Then from the results of the next validation revision, it obtained a value of 80% with the criteria "fit for use and without revision".

The fifth product validation is a learning outcome test which is carried out by means of a question validity test which is calculated using the biserial point formula. Then the rtable was consulted at the 5% significance level, so that it was known that N = 30, the rtable value showed the number 0.361. Based on the analysis of the 20 items, it can be seen that there are 15 items in the valid category (75%). While the questions that fall into the invalid category are 5 items (25%). The reliability analysis technique used in this research is Cronbach’s alpha formula technique. It is known that the reliability of the questions is 0.844 which means that the PPKn Test with Blended learning-based CTL learning model that has been used has a very high reliability category. A good question is a question with a moderate level of difficulty. The level of difficulty of the questions with good categories is at 0.3 < p 0.7. Based on data analysis, there were 3 questions in the difficult category (15%), 10 questions in the medium category (50%) and 7 questions in the easy
category (35%). The discriminatory analysis of item items aims to distinguish between students who have high ability and medium ability and low ability 2 items (10%), questions with medium category 9 items (45%) and questions with high category 9 items (45%).

Then the results of teacher and student responses regarding the CTL model based on Blended Learning with the results of the instrument in the form of a questionnaire that has been provided indicate that the results of the teacher's response to the CTL model based on Blended Learning are said to be feasible with a percentage of 91.6%. This shows that the developed model can meet the demands of learning needs so as to facilitate learning. Then the instrument in the form of a questionnaire regarding student responses that has been provided shows that the results of student responses to the CTL learning model based on Blended Learning in PPKn learning Theme 7 Sub Theme 3 in class IV SDN 060901 Medan Polonia reached 96.9% with very feasible criteria. Thus it can be used in classroom learning.

The Effectiveness of the CTL Model Based on Blended Learning for PPKn Class IV Learning at SDN 060901 Medan Polonia

The results of the gainscore test or increase in the average value of fourth grade students at SDN 060901 Medan Polonia in the posttest test activities that have been carried out after the application of the CTL model based on Blended Learning on the material in Theme 7 Sub-theme 3 has the "high" criteria, namely with an average score of 91 compared to the value of the acquisition of pretest activities before using the CTL model based on Blended Learning with the acquisition of a score of 63 with the criteria of "medium". This can indicate that there is an increase in knowledge in PPKn learning with theme 7 sub-theme 3 material with a gainscore value of 0.76 with the criteria of "high effectiveness" so it can
be concluded that the CTL model based on Blended Learning in PPKn learning can be said to be "effectively used in learning in grade IV SD in PPKn learning".

D. Conclusion

Based on the results and discussion of the CTL model development instrument based on Blended Learning in PPKn Class IV Medan Polonia learning, it can be concluded as follows:

1. The results of this study are several learning products, namely 1) Syntax of Blended Learning-based CTL Learning Model, 2) RPP, 3) Learning Media, 4) LKPD, 5) Learning Outcomes Test. With the results of the validation assessment of the research model products by 80%, learning media products by 93%, RPP products by 93%, LKPD products by 94% and Learning Outcomes Tests carried out with validation results N = 30, the table value shows the number 0.361 reliability results questions of 0.844 and the results of the teacher's response obtained were 91.6% and the results of student responses were 96%. From these results, it can be said that it is feasible to use PPKn learning in class IV at SDN 060901 Medan Polonia.

2. The results of the PPKn pretest questions carried out in learning with an average of 62 and the PPKn posttest results carried out in learning with an average of 91 with a gain score of 0.76 which can be said to be a CTL model based on Blended Learning PPKn learning in class IV SDN 060901 Polonia field is effective.

Bibliography

Aulya Alamanda Putra, (2017). PENERAPAN MODEL PEMBELAJARAN JARAK JAUH BERBASIS MEDIA GOGGLE CLASSROOM UNTUK KETERAMPILAN MENULIS.Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu
Clemente Charles Hudson, Ph.D. dan Vesta R. Whisler, Ph.D. dalam jurnal yang berjudul Contextual Teaching and Learning for Practitioners. Adult and Career Education, Valdosta State University Valdosta, GA 31602, USA.
Peraturan Menteri tentang pendidikan dan kebudayaan nomor 36 tahun 2018
Rofiah, Eri, Nonoh Siti Aminah, and Elvin Yusliana Ekawati."Penyusunan Instrumen tes kemampuan berpikir tingkat tinggi fisika pada siswa SMP." Jurnal Pendidikan Fisika 1.2 (2013).

[292]


