



## Development of a Jigsaw Type Cooperative Learning Model Based on 6C to Improve Social Attitudes and Interpersonal Skills Students' Civics in Primary Schools

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DOI: <https://doi.org/10.56855/ijcse.v3i1.981>

Received February 8, 2024; Accepted February 28, 2024; Available online March 2

**Abstract:** This research aims to: (1) produce a Jigsaw Type Cooperative Learning Model product, (2) determine the level of feasibility of the Jigsaw Type Cooperative Learning Model product in thematic subjects, and (3) determine the effectiveness of using the Jigsaw Type Cooperative Learning Model product. This development research refers to the steps developed. Type of research. The development procedure includes stages. The development model applied by researchers is the ADDIE model. The ADDIE development model consists of five stages, namely Analysis, Design, Development, Implementation and Evaluation. Research results: Field trial subjects comprised 30 class V students at SD Negeri 096140 Parhundalian. Data collection uses assessment sheets, questionnaires and responses. The data analysis technique uses a Likert scale. The results of the research show that the Jigsaw Type Cooperative Learning Model for class V elementary school according to material experts, model experts is in the very feasible category. The implementation and use of the Jigsaw Type Cooperative Learning Model can generally be carried out in the very feasible category and has received a positive response from students.

**Keywords:** Cooperative Learning Model, Interpersonal Skills Students', Jigsaw Type

### 1. Introduction

Education problems in Indonesia are already familiar to our ears. Educational issues are in the spotlight for observers whenever and wherever the place is. Almost all problems have no end. The right solution is always desired by various educational actors and education providers so that the condition of education in Indonesia continues to improve and creates satisfaction among multiple parties. The government has made various efforts to improve the quality of Indonesian education. Efforts made by the government include establishing national competency standards, improving the quality of teachers, improving materials, increasing the use of materials, providing facilities to support student learning, and improving the quality of student learning. The government does all this so that educational goals can be achieved.

The government's efforts to create professional human resources are by creating a curriculum that meets demands by always revising the education curriculum in Indonesia. The new curriculum is expected to solve educational problems, namely by developing an independent learning curriculum which is expected to

improve the quality of Indonesian education so that its expertise is on par with other countries. To realize the goal of developing an independent learning curriculum, support is needed, such as adequate infrastructure, competent teachers, and an active student role.

In reality, not only is the curriculum needed to achieve educational goals, but creative and interesting teaching materials are also needed so that students are able and have the ease of receiving learning. The teaching materials used by teachers when they want to convey material in class must be creative and attract students' attention. So, teachers must also be able to revise their teaching materials so they do not get bored. Complete school facilities and infrastructure, if not supported by learning resources and teaching materials such as textbooks or electronic books given to students, will not support the achievement of learning goals. Students are less active in the learning process during the subject. Students' lack of activity is evident when participating in learning; students are less focused and do not pay attention to the teacher delivering the material.

Based on the researcher's observations, the lack of student activity was because the students did not know the material presented by the teacher. Students answered that they did not know when the teacher gave an oral pretest before the lesson started. The teacher who plays an important role in educating students must be competent. Teachers must also be creative to produce innovative and unconventional learning methods and models. Teacher creativity is needed so that the classroom environment in which the learning process is not boring but increases students' interest in the material being presented.

This makes students less interested in participating in learning and sometimes feel bored. Apart from that, students' competence is still lacking when practice occurs. Students have been unable to do practical assignments independently and are seen as lacking. Teaching materials can also increase and direct children's attention to lead to learning motivation, direct interaction between students and their environment, and the possibility for students to learn independently according to their abilities and interests.

Based on the author's observations and interviews with the principal, Mrs. Tiodor Sinaga, S.Pd at SD Negeri 096140 Parhundalian, the teachers providing knowledge do not have innovation in the use of learning models, either making their own or searching on the internet, so they only use less varied models, books and lectures. Just. Researchers can see that many students still have difficulty digesting learning. The reason is that teachers lack variety in applying the learning media used, so students tend to get bored when facing learning; students still think that learning is very difficult, and there are still many students who do not have the confidence to ask teachers so that student's ability to solve questions is still low, The learning process does not motivate students.

When the researcher was teaching, the researcher tried to create a Jigsaw Type Cooperative Learning Model based on 6C to Improve Social Attitudes and Interpersonal Abilities in Civics with a background of photos of students' daily activities at school, which the author used in the Civics material on my obligations and responsibilities; the result was that the students were very enthusiastic and willing to explore by trying every command in the application compared to the assignment given after the teacher finishes lecturing. In delivering Civics learning material, simulations are needed so that students can understand the material and also the questions used to evaluate student learning outcomes. Therefore, the author wants to create an electronic model.

The research to develop a class V learning model is entitled "Development of a 6C Basic Jigsaw Type Cooperative Learning Model to Improve Students' Social Attitudes and Interpersonal Civics Abilities in Elementary Schools". Researchers chose to make this model because students not only use it as reading material but students can develop themselves with several menus in this interactive media. The model includes audio-video, visual, games, text, graphics and animation.

It is hoped that the model can be a source of learning for students outside of Civics learning hours. Thus, the model is thought to be suitable for use as a student learning resource. For this reason, in this research, media development was developed and studied in class V Civics subjects at SD Negeri 096140 Parhundalian. With this problem, the Jigsaw model was developed for class V Civics subjects at SD Negeri 096140 Parhundalian to achieve learning objectives.

Based on the background described above, the following problems can be identified:

1. Lack of variety of models used in the classroom learning process.
2. The use of technology in creating Jigsaw model development has never been done.
3. Students experience boredom and disinterest in learning because learning activities only follow the material in the textbook.

Based on the problem formulation above, the objectives of this research are:

1. To determine the feasibility test of lecturers and teachers regarding the development of the Jigsaw model in class V Civics subjects at SD Negeri 096140 Parhundalian
2. To find out students' responses to the development of the Jigsaw model in class V Civics subjects at SD Negeri 096140 Parhundalian

## 2. Method

This research developed a 6C Basic Jigsaw Type Cooperative Learning Model to Improve Social Attitudes and Interpersonal Abilities in Civics in class V elementary schools based on assessing validators, educators and student responses. This chapter will explain the steps for developing the Jigsaw learning model based on the research stages. The Jigsaw learning model was created using the ADDIE development model with the Analysis, Design, Development, Implementation and Evaluation stages.

Description of the Development of a Jigsaw Type Cooperative Learning Model Based on 6C to Improve Social Attitudes and Interpersonal Abilities in Civics in class V as follows:

- a. Information in the internet network (learning via gadget/android) means that students have a new look when using the Jigswa learning model with an internet network that can reach all learning needs that have a reciprocal response when learning takes place, information is obtained through the distribution of links
- b. The range of access to this learning media can be accessed by students with a link the class teacher has shared. Learning in the Jigsaw model can also be accessed remotely, such as at home, when students want to update their learning.
- c. Video presentations make things easier for students when previously students only saw pictures on the textbook display, in the Jigsaw model.

I am developing a Jigsaw Type Cooperative Learning Model Based on 6C to Improve Social Attitudes and Interpersonal Abilities for Civics in class V using ADDIE steps.

## 3. Result And Discussion

### 3.1 Result

Data analysis is the part that presents the results of analysis of data obtained when carrying out development research steps. Data analysis is aimed at answering research questions. The data collection tool is a questionnaire with five answer choices.

Material is the basis of a learning model. The preparation of material can influence the process and results of teaching and learning activities. The suitability of the learning module material can be determined through an evaluation by a material expert. The reading material expert then provides an assessment score with the help of a questionnaire. Data from assessing the development of the Jigsaw learning model in the material aspects were converted into feasibility-level categories. The assessment by material expert validators on the development of the Jigsaw model in Civics material can be seen in the following table:

**Table 1 - Eligibility Level Category**

Achievement Level	Qualification	Information
81 - 100%	Very Worth It	Not Revised
61 - 80 %	Worthy	Revision
41 - 60%	Decent Enough	Revision
21 - 40%	Not Worth	Revision
0 – 21 %	Not Worth It	Revision

**Table 2 - Percentage of Material Expert feasibility test results**

No	Rated Aspect	Percentage
1	Conformity of material with SK and KD	94%
2	Accuracy of Material	96%
3	Update of Material	100%
4	Encourage Curiosity	95%
	Average	96%

Based on the data that has been processed, the data obtained by the material experts obtained a material suitability score with SK and KD 94, material accuracy of 96%, material up-to-date of 100%, encouraging curiosity of 95% and an average of 96% from a maximum score of 50 including the qualification "Very worthy" with the statement No Revision Required.

Model experts are needed to test/provide an assessment of whether the model components in the 6C Basic Jigsaw Type Cooperative Learning Model can be said to be feasible.

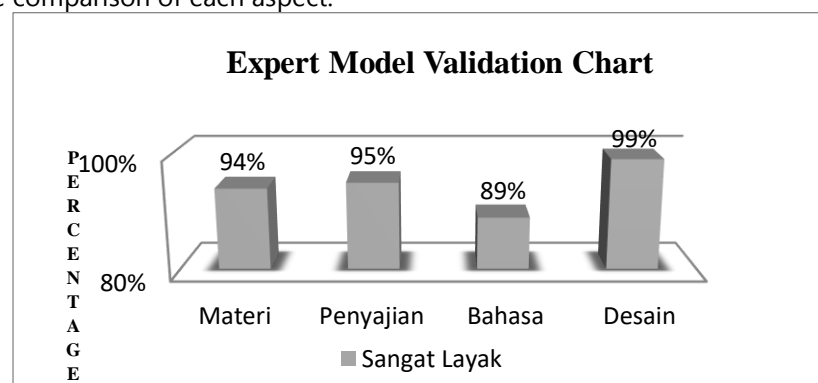
**Table 3 - Eligibility Level Category**

Achievement Level	Qualification	Information
81 - 100%	Very Worth It	Not Revised
61 - 80 %	Worthy	Revision
41 - 60%	Decent Enough	Revision
21 - 40%	Not Worth	Revision
0 – 21 %	Not Worth It	Revision

**Table 4 - Percentage of Expert Model Feasibility test results**

No	Rated Aspect	Percentage
1	Material	94%
2	Presentation	95%
3	Language	89%
4	Design	99%
	Average	94%

The model expert's results obtained a percentage of material of 94%, presentation of 95%, language of 89%, design of 99% and an average of 94% from a maximum score of 195, including the qualification "Very worthy" with the statement No Revision Needed. The expert model validation results can also be seen in the graph below to see the comparison of each aspect.


**Fig. 1 - Expert Model Validation Chart**

After the product was validated and declared very good by the validator, the product in the form of Developing a Jigsaw Type Cooperative Learning Model Based on 6C for Improving Social Attitudes and Interpersonal Civics Abilities of Students in Elementary Schools was tested at State Elementary School 096140 Parhundalian. The trial was carried out in several stages: field trials of student responses.

The field trial was conducted at school with 30 students at SD Negeri 096140 Parhundalian. Field trials were conducted by filling out a questionnaire assessing student responses—results of field trials at SD Negeri 096140 Parhundalian. Student response questionnaire data obtained from field trials at SD Negeri 096140 Parhundalian is displayed in the following table.

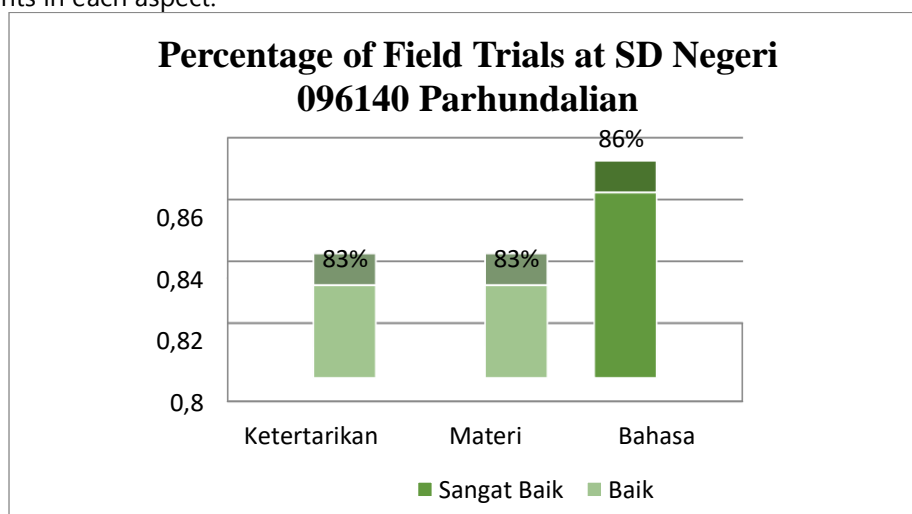
**Table 6. Student Response Category Criteria**

Percentage	Letter Grade	Weight	Category
86 – 100 %	A	4	Very Good
76-85 %	B	3	Good
60-75 %	C	2	Pretty Good
55-59 %	D	1	Not Good
0 – 54 %	E	0	Very Not Good

**Table 7. Percentage of Student Responses at SD Negeri 096140 Parhundalian**

No	Rated Aspect	Percentage
1	Interest	83%
2	Material	83%
3	Language	86%
	Average	84%

The table above shows the results of field trials at SD Negeri 096140 Parhundalian, which 30 students carried out. In the interest aspect, the percentage obtained was 83%; in the material aspect, 83%; in the language aspect, 86%; and the average rate of assessments for these three aspects was 84% with a letter B grade of 3 and a "good" category—results of interest, material and language trials. The percentage of field trials at SD Negeri 096140 Parhundalian is presented in graphical form to see the comparison of assessment results by 30 students in each aspect.



**Fig. 2 - Percentage of Student Responses at SD Negeri 096140 Parhundalian**

The results of feasibility trials by educators/teachers were carried out on six elementary school teacher educators at SD Negeri 096140 Parhundalian. The following is the percentage of educators' assessment results:

**Table 9 - Results of Model Feasibility Trial by Teachers**

No	Rated Aspect	Percentage
1	Material	97%
2	Presentation	93%
3	Language	100%
4	Design	100%
	Average	97%

Based on the results of the educator feasibility test, the Material assessment aspect received a percentage of 97%; the presentation aspect received a percentage of 93%; the language aspect received 100%; the Design aspect 100% and the average rate of educators' assessment of the above aspects were 97%. With the qualification "very worthy."

### 3.2 Discussion

This research aims to determine the quality of feasibility and performance of developing a Jigsaw Type Cooperative Learning Model based on 6C to improve students' social attitudes and interpersonal civics skills in elementary schools. The initial stages carried out in the research and development of the 6C Basic Jigsaw Type Cooperative Learning Model were conducting observations, distributing pre-research questionnaires to students and interviewing educators about the learning model used at SD Negeri 096140 Parhundalian. Next, carry out a needs analysis from the results of observations and interviews that have been conducted. From the needs analysis results in schools, it is known that teachers have not optimized existing facilities, still use textbooks, rarely use learning media, and the learning models used are still simple and less interesting. Students admit that they need a learning model in which there is not only material but also pictures and learning videos (Audiovisual Model). Educators have never developed a Jigsaw model, so researchers have developed a Jigsaw model that contains learning materials, images and videos packaged using an application. The Jigsaw learning model is declared feasible if the average feasibility reaches the "Fairly Feasible" criteria. The discussion includes discussing the feasibility of the model as contained in the problem formulation.

Elementary school teachers carry out the material expert eligibility test. The validation carried out includes four aspects of assessment, namely the suitability of the material with the SK and KD, the accuracy of the material, the up-to-date aspect of the material and encouraging curiosity. From all aspects it has a very decent assessment. The validation results obtained the average percentage of all elements to evaluate each component; the average review rate was 96%, with a decent assessment qualification. So, this Jigsaw model is very suitable for use and can be used for testing.

The suitability test for media experts was carried out by two experts in the field of modeling. Emelda Thesalonika Manalu, SP.d, M.Pd and Desi Sijabat, S.Pd., M.Pd The validation included four assessment aspects: material, presentation, language, and design. The design aspect received a higher percentage than other aspects because, in terms of design creativity, colors, images, patterns/stickers on each sheet of paper, it was attractive and suited to the appearance of elementary school children.

Based on data from expert model validation results, an average assessment percentage of 94% was obtained, with the assessment qualifications being very suitable for use in the learning process.

The results of the educator trials include four assessment aspects, namely material aspects, presentation aspects, language aspects and design aspects. Based on data from the validation results of educators' assessments, an average assessment percentage of 97% was obtained in the very appropriate category. These results indicate that the steps in the developed Jigsaw model are said to be feasible or by the related material. After the Jigsaw model was developed and validated, the Jigsaw model was then tested to determine the responses of students and educators. Product trials carried out on students were carried out

by distributing student response questionnaires to the Jigsaw model being developed. The trial was carried out at SD Negeri 096140 Parhundalian.

The trial was carried out by explaining and demonstrating the model in PPKn material, then students were asked to fill out a questionnaire to find out how students responded to this model. This trial was carried out by 30 students covering three assessment aspects: the Interest Aspect 83%, the Material Aspect 83%, the Language Aspect 86% and the average percentage of aspects obtained was 84% in the good category. Based on the data from assessing educators' responses by the supporting teachers, 97% was obtained with decent qualifications. These results show that the model can be used in learning.

#### 4. Conclusion

The model expert feasibility test was carried out by two experts in the field of modeling, namely Emelda Thesalonika Manalu, SP.d, M.Pd and Hetdy Sitio, S.Pd., M.Pd. The validation includes four assessment aspects: material, presentation, language, and design. The design aspect received a higher percentage than other aspects because, in terms of design creativity, colors, images, patterns/stickers on each sheet of paper, it was attractive and suited to the appearance of elementary school children. Based on data from expert model validation results, an average assessment percentage of 94% was obtained with adequate assessment qualifications.

The results of the educator trials include four assessment aspects, namely material aspects, presentation aspects, language aspects and design aspects. Based on data from the validation results of educators' assessments, an average assessment percentage of 97% was obtained in the very appropriate category. These results indicate that the steps in developing the Jigsaw Type Cooperative Learning Model Based on 6C to Improve Social Attitudes and Interpersonal Abilities in Civics are feasible or related to the related material.

Student's response to the field trial products carried out in class V of SD Negeri 096140 Parhundalian was good. The results of the percentage of students on the model developed in schools obtained an average rate of 84%. These results indicate that developing a Jigsaw Type Cooperative Learning Model Based on 6C to Improve Social Attitudes and Interpersonal Abilities in Civics is Good.

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