

Learning Tool Oriented Development of Cooperative Learning Model Type Think Pair Share (TPS) Ability to Improve the Problem Solving of Student Primary

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Abstract:- This study aims to improve the quality of teaching and learning process through the application of cooperative learning models oriented models learning Think Pair Share (TPS) type of problem solving skills in PPKn subject's social diversity and cultural diversity in class V SDN Belitung Selatan 5 Banjarmasin. The research design uses three stages of the 4-D model, namely the stages of defining, designing, and developing, tested on fifth grade students of SDN Belitung Selatan 5 Banjarmasin in the even semester of the 2018/2019 school year. The research variables measured were validity, practicality and effectiveness of the use of learning tools. The research data were obtained through the method of validation, observation, and tests with a posttest-only control group design, in which the control group and the experimental group were randomly selected. The results showed that the Mann-Whitney test results as a comparison of the posttest scores between the control group and the number of 22 students had an average value of 11.50 while in the experimental group with a total of 22 students had an average value of 33.50. Asymp count results. Sig. (2-tailed), that is 0,000. The results of calculations are known that the value of Sig. <0.05 which is 0,000 then H_a is accepted, meaning that there are differences in students' problem solving abilities in learning PPKn. Thus it can be concluded that the learning tools that have been developed are valid, and there are differences in students' problem solving abilities between the control group and the experimental group, so that the learning tools oriented towards cooperative learning model type Think Pair Share (TPS) to improve problem solving abilities can be used.

Keywords:- Think Pair Share (TPS), the Ability to Solve Problems.

I. INTRODUCTION

Model *cooperative learning* type of *Think Pair Share* (TPS) is a continuous learning process based on experience in learning is best understood in a process, learning involves the relationship between the environment with someone and create knowledge. The character of students who like to play, move, do things directly, work in groups, and learn by watching and observing and learning by doing activities can balance between teacher and student activities in learning will get better so that the desired goals are met.

The teacher presents real problems to students to be solved through various investigations, with the aim of the learning process to be more meaningful and students can build their own knowledge. Problem-solving skills really need to be trained and developed in elementary school students because problem-solving abilities are very useful for students in solving their own daily problems, so students become reliable individuals who are able to compete in the global era.

This study is expected to be used as a reference in developing and providing information on how the learning device-oriented model of *cooperative learning* type of *Think Pair Share* (TPS) to the problem-solving skills are applied in the learning process in primary school class V SDN Belitung South 5 Banjarmasin with subthemes social and cultural diversity of society. This research as a reference material in the implementation of learning subthemes, namely social and cultural diversity, requires interesting innovations for students and also as a treasury of learning models in implementing the 2013 curriculum. Teachers must innovate continuously so that learning remains interesting and enjoyable so as to facilitate students in understanding the material being taught and become their new experience in practicing PPKn subjects in the sub-theme of social and cultural diversity combined with learning tools oriented model *cooperative learning* types of *Think Pair Share* (TPS) to improve problem solving skills.

The Type of cooperative learning model *Think Pair Share* (TPS) is a very simple but very useful learning model developed by Frank Lyman where the teacher delivers the lesson in class and the students sit in pairs with their respective teams (Slavin, 2005: 25).

Djahri (1996: 91) explains the meaning of PPKn, namely "PPKn wherever and whenever the same / similar, namely educational programs and engineering to foster and teach children to be good citizens, faith, and piety to God Almighty, have nationalism (sense nationality) strong and stable, and able to foster and implement the rights and obligations of himself as a human being, a citizen of the community, and the nation of his country. In general, the objectives of the Pancasila and Citizenship (PPKn) subjects in the 2013 curriculum at primary and secondary education are to develop the potential of students in all dimensions of citizenship, namely: (1) citizenship attitudes including consistency, commitment and civic responsibility (*civic confidence, civic commitment, and civic responsibility*); (2) knowledge of citizenship; (3) citizenship skills, including skills and participation *civic competence and civic responsibility*.

According to Suhadi (2007: 24) learning tools are a number of materials, tools, media, instructions and guidelines that will be used in the learning process. Learning devices are all tools used by teachers to carry out learning. Learning planning is designed in the form of syllabus and lesson plans that refer to content standards. In addition, in the planning of learning, there are also preparation of learning resources such as student textbooks and student activity sheets, and assessment tools (Permendikbud No. 22 2016).

The tool developed in this study is a learning oriented model *cooperative learning* of type *Think Pair Share* to improve students' problem solving abilities in PPKn subjects on social and cultural diversity subclasses in class V SDN Belitung Selatan 5 Banjarmasin which include: (1) Syllabus; (2) Learning Implementation Plan (RPP); (3) Student Learning Materials (BAPD); (4) Student Worksheets (LKPD); and (5) Problem Solving Ability Test (TKPM).

- Syllabus is a learning plan on one and / or group of subjects or specific themes that includes competency standards, basic competencies, learning materials, learning activities, indicators of achievement of competencies, assessments, time allocation, and learning resources (Akbar, 2013: 7). The syllabus used in this study is to use the syllabus in the 2013 curriculum with the development needed by researchers.
- The lesson plan (RPP) is a preparation that must be done by the teacher before teaching. Preparation here can be interpreted written preparation and mental preparation, emotional situations that want to be built, productive learning environment, including convincing learners to want to be fully involved. Every educator in the education unit is obliged to prepare a complete and

systematic lesson plan so that learning takes place interactively, inspiratively, fun, challenging, efficient, motivating students to participate actively, as well as providing sufficient space for initiative, creativity and independence in accordance with their talents, interests and physical and psychological development of students.

- Teaching material is an important part of the learning process. Mulyasa (2006: 96) states that teaching materials are one part of teaching resources that can be interpreted as something that contains learning messages, both specific and general in nature that can be utilized for the benefit of learning.
- Student activity sheets (LKPD) are tasks arranged on the sheet and in the form of questions that must be answered / done by students (Daryanto, 2014 and Dwicahyono, 2019). Assignments given can be in the form of theory or practice and must be adjusted to the competencies to be achieved. LKPD will facilitate students in completing assignments because in LKPD has been equipped with instructions for the implementation of structured learning tasks.
- Learning outcomes test is a test used to measure students' abilities (Daryanto, 2014 and Dewi, 2019). The ability of students measured in this test is problem solving ability, so this test is named the Problem Solving Ability Test (TKPM). This test is made by referring to the basic competencies that you want to achieve, to find out the success of students or not then given the test.

The learning model is "*an instructional model is a step-by-step procedure that leads to specific learning outcomes*". (meaning: "The learning model is a step-by-step procedure that leads to specific learning outcomes"). (Gunter, et al., 1990: 67).

Joyce, et al (1992) suggested the understanding of the learning model "*A model of teaching is a plan or pattern that we can use to design face-to-face teaching in class rooms or tutorial settings and to shape instructional materials-including books, films, tapes, computer-mediated programs, and curricula (long term courses of study). Each model guides us as we design instructional to help students achieve various objectives.*

Slavin stated: "*In cooperative learning methods, students work together in the four members of the team to master material initially presented by the teacher*" (Isjoni, 2013: 22). *Cooperative learning* or cooperative learning is a learning model using a grouping / small team system, which is between four to six people who have different academic abilities, sexes, races, or ethnic groups (heterogeneous) (Suriansyah, et al, 2014: 256) .

The cooperative learning model is one of the learning models that supports contextual learning. Cooperative learning teaching systems can be defined as a work system / structured group learning. Included in this structure are the five main elements put forward by Johnson & Johnson, namely positive interdependence, individual responsibility,

personal interaction, collaboration skills, and group processes. *Cooperative learning* is different from ordinary group learning. According to Slavin (2005); Kagan (1989) "*cooperative learning is more than*" *working together*". *It has been described as "structuring positive interdependence"*.

The benefits of *cooperative learning* developed in social work education are students having the opportunity to learn or practice the following skills (1) *relationship building*; (2) *small-group skills*; (3) *effective communication and interpersonal skills*; (4) *problem solving and creativity*; (5) *critical thinking*; (6) *empowerment*; (7) *interdependence*; (8) *diversity*.

Barragato (2015: 2) explains that the model *Think Pair Share* (TPS) is an effective way of overcoming student difficulties and giving students the opportunity to work together in building their knowledge. model *Cooperative learning type Think Pair Share* (TPS) helps the teacher to check his understanding before moving on to other material.

Think Pair Share according to Trianto (2013: 81) is "*Think Pair Share* (TPS) or sharing paired thinking is a type of cooperative learning designed to influence student interaction". Meanwhile, according to Suyatno (2009: 54) said that: "*TPS is a cooperative learning model that has procedures explicitly determined to give students more time to think deeply about what is explained or experienced (thinking, answering, and helping each other)*".

Model *Cooperative learning type Think Pair Share* (TPS) is a learning model that is carried out to enhance collaborative learning and encourage the interests and benefits of synergy from learning. Therefore, Silberman (2009: 161) mentions the term "two heads are certainly better than one."

According to Warsono (2012: 203) the syntax or the workings of the learning model *Think Pair Share* (TPS) are:

- Students sitting in pairs or groups;
- The teacher gives direction to students and asks a question,
- At first, students are given the opportunity to think independently,
- Students then share (share) exchange ideas with partners or groups to answer the teacher's questions or from the question sheets provided, the
- Teacher guides the small plenary discussion, where each group presents the results of the discussion, the
- Teacher provides reinforcement about what should be discussed, adding knowledge or concepts that escape students' attention when discussing with their partners or groups,
- Conclusions and reflections.

Bransford & Stein defines "*Problem is stated as situations which the individual cannot solve with present information when there are barriers preventing reaching the requested aims of the individual*" (Karabacak et al., 2015, p. 3063).

Charles & Lester further said that: *a problem entails (1) a desire to know something, (2) the lack of an obvious way to find a solution, and (3) an effort to find the solution* (Baroody, 1993, p 2-5).

Sanjaya (2008: 214) states that the problem-solving method, subject matter is not limited to books but also sourced from certain events in accordance with the applicable curriculum. So that later on student textbooks, especially PPKn subjects not adrift only in student books and teachers, but the teaching material used in the form of several sources relating to the material or social cultural diversity sub-theme.

Specifically, David Johnson & Johnson put forward the five steps of problem solving activities as follows:

- Defining the problem, namely formulating the problem of a particular event that contains the issue of conflict. In this activity the teacher asks for opinions and explanations of students about hot issues or interesting problems to be solved.
- Diagnose problems, namely determining the causes of the problem, as well as analyzing various factors that support and hinder problem solving.
- Formulate alternative strategies, namely finding actions that can be done as a way to solve problems. In this activity, students can express their opinions in the discussion so that it can be discussed about the possibilities that occur from each proposed alternative.
- Determine and implement a choice strategy, i.e. make decisions about the strategy that is best done.
- Finding evaluation, which is doing both the process and the results of actions taken based on the chosen strategy (Sanjaya, 2008: 217-218).

Based on the description above, the problem-solving ability referred to in this study is the ability of students to solve the problems that are shown from the student's score in solving these problems, especially the fifth grade students of SDN Belitung Selatan 5 Banjarmasin. In learning PPKn, the problem contained in the questions given to students is the original situation of problem solving so students must bring all the informal knowledge and strategies they have especially on the sub-theme of the socio-cultural diversity of the community. This new situation is not to transfer the understanding of routine methods or strategies that have been used but these realistic problems must be resolved in a context where students can use their common sense.

II. RESEARCH OBJECTIVES

- To describe the validity of the PPKn learning tool by using a cooperative learning model of the Think Pair Share (TPS) type towards problem solving abilities.
- To describe the use of learning tools oriented to cooperative learning model Think Pair Share (TPS) types in PPKn subjects to improve students' problem solving abilities.

III. METHODS AND MATERIALS

This research is classified into research *True Experimental Design*, because of this design, the researcher can control all external variables that affect the course of the experiment. The main characteristic of *true-experimental design* is that, samples used for experiments as well as control groups are taken randomly from certain populations. So its characteristic is the control group and the sample is chosen randomly (Sugiyono, 2011: 112). According to Keppel (1991) this procedure can eliminate the possibility of systematic differences between the characteristics of each participant that affect the results of the study, so that any differences arising in the research results can be attributed to *treatment* experimental (Creswell, 2017: 232).

Learning development in this study refers to the 4-D model according to Thiagarajan. This model consists of four development models, namely the definition phase (*define*), stage design (*design*), stage of development (*develop*) and deployment phase (*disseminate*). However, this research was only carried out until the 3-D stage because after the development phase (*develop*) had been obtained a device that met the specified criteria (Arifin, 2011: 128).

The results of the use of learning tools are carried out using the research design "*Posttest Only Control Group Design*" in table 1 as follows:

| Group | Treatment | Posttest |
|-------|-----------|----------------|
| AR | X | O ₂ |
| BR | - | O ₄ |

Table 1:- Posttest Only Control Group Design
Source: Creswell (2017)

- Note:
- AR : Randomly selected Experiment Group Randomly selected
 - BR : Control Group
 - X : Treatment using model *cooperative learning* type *Think Pair Share* (TPS)
 - O₂ : results *Posttest* of experimental group
 - O₄ : Results of *posttest* This the control group

Design *posttest* is one of the experimental designs that is quite popular and is applied because the pre-test gives the effects that are less expected. At the participants categorized or placed randomly (*random assignment*) in the two groups. Researchers together conducted a *post-test* on

both groups, and only group (A) provided *treatment* (Creswell, 2017: 243). In this design, Sugiyono stated "that there are two groups, each chosen *randomly*."

The reliability coefficient of the results of the test instrument on the learning device oriented model *cooperative learning* type *Think Pair Share* (TPS) to improve the ability of problem solving can be stated that the questions made coefficient is 0.890. Based on the classification of the reliability coefficient that the test instrument has a very high reliability (very good) and can be used in fifth grade elementary school students.

The effect of the treatment is symbolized by (O₂: O₄) and then to see the effect of the treatment based on its significance is the analysis of different tests using the t-test formula or the test *Mann-Whitney*. If there is a significant difference between the experimental group and the control group, the treatment given has a significant effect.

IV. RESULT AND ANALYSIS

Device is learning-oriented model of *cooperative learning* type of *Think Pair Share* (TPS) to enhance the problem solving abilities of students on subjects PPKn developed in this study consists of a syllabus, lesson plan (RPP), Instructional Materials Students (BAPD), Student Worksheet (LKPD), and Problem Solving Ability Test (TKPM).

Before use, the device is validated beforehand by 2 expert validators in their fields. The results of the validation provide recommendations that the learning device is feasible to use. Next, the researcher conducted the reliability test of the learning achievement test instrument assisted by the application *SPSS* using the formula *Cronbach's Alpha*. According to Sujarweni (2014: 199) the criteria in a reliable calculation that is using a limit of 0.6 with the calculation criteria is if the value of *Cronbach Alpha* is greater than 0.6 then the instrument is reliable. The results of the analysis of the reliability of the instrument by the formula *Cronbach's Alpha* shown in the table below:

(Reliability Statistics)

| <i>Cronbach's Alpha</i> | <i>N of Items</i> |
|-------------------------|-------------------|
| 0.890 | 5 |

Table 2:- Results of Test Reliability Instruments
Source: Data that has been processed using *SPSS* version 25.00

Test problem solving abilities do for one times in class V which amounted to 44 students and divided into two groups namely, the control group numbered 22 students and the experimental group numbered 22 students, in the control group students were given learning as usual and at the end of learning given only *post-test questions*.

In the experimental group learning is given by using model oriented *cooperative learning* type *Think Pair Share* (TPS) to improve problem-solving abilities and at the end

of learning students are given a *post-test problem*, this is done to determine the students' problem solving abilities towards sub-subjects PPKn subjects social and cultural diversity in class V SDN Belitung Selatan 5 Banjarmasin.

Average Results *posttest* the control group and the experimental group can be seen in the following table 3.

| No. | Group | Posttest | Criteria |
|-----|------------|----------|----------|
| 1. | Control | 78.05 | T |
| 2. | Experiment | 92.50 | T |

Table 3:- Students' Problem Solving Abilities

Remarks:

T: Completed

TT: Not Completed

Based on the above calculation, it can be made as a decision that the development of models *cooperative learning* of *Think Pair Share* (TPS) type can improve students' problem solving skills in PPKn subjects in class V SDN Belitung Selatan 5 Banjarmasin. Next analyzed using the Hypothesis Test include the normality test, non-parametric normality test, and the test *Mann-Whitney* described as follows.

To find out the normal distribution of data if it is significant > 0.05, then the data will be declared accepted if the data is significant <0.05, then the data will not be accepted. Below is the data normality test results in the *posttest* control group and *posttest* the experimental group by using the formulas *Kolmogorov-Smirnov* and *Shapiro-Wilk* in the control group and the experimental group, as in the following 4 table:

| Class | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|-----------------------|---------------------------------|----|------|--------------|----|------|
| | Statistics | df | Sig. | Statistics | Df | Sig. |
| Posttest control | .000 | 22 | | .259 | 22 | .101 |
| | .867 | | | | | |
| Posttest Experimental | .926007 | 22 | .113 | | 22 | .167 |

Table 4:- Results of the

Source: the data that has been processed using SPSS Version 25.00

Based on table 4 above, obtained statistical data *posttest* in the control group of 0.259 and 0.867 while in the experimental group statistical values *posttest* of 0.167 and 0.926, for *Kolmogorov-Smirnov* Sig. or in the control group p-value = 0.101 > 0.05 and 0.000 <0.05, In the experimental group with Sig. is p-value = 0.113 > 0.05 and 0.007 <0.05 then the distribution of the two groups is said to be abnormal.

Based on the results of the normality test that has been stated that the research data is not normally distributed, so for the statistical tests using non-parametric statistical tests and the test *Mann Whitney*.

To test whether the index *gains* students in the experimental group and the control group are the same or not, non-parametric statistical tests are used with the *Mann-Whitney test*, the results of data distribution and the results of the test *Mann-Whitney* can be seen in the following table:

| Ranks | | | | |
|-------------------|-----------------------|----|-----------|--------------|
| | Class | N | Mean Rank | Sum of Ranks |
| ResultsStudy PPKn | Posttest Experimental | 22 | 33.50 | 737.00 |
| | Posttest Control | 22 | 11:50 | 253.00 |
| | Total | 44 | | |

Table 5:- Results of Data Distribution

| Test Statistics ^{Results} | |
|------------------------------------|-----------------|
| | Learning Civics |
| Mann-Whitney U | .000, |
| Wilcoxon W | 253,000. |
| Z | -5711 |
| Asymp Sig. (2-tailed) | .000 |

a. Grouping Variable: Class

Table 6:- Results of *Mann-Whitney*

Source: data that has been processed using SPSS version 25.00

Base on Table 5 and Table 6 show that the results of the analysis using the formula *Mann-Whitney* above results count control groups totaling 22 students with average score of 11.50, while the group experiment with a total of 22 students averaging 33.50. Asymp count results. Sig. (2-tailed), that is 0,000. Terms H_0 accepted or rejected based on Sig. as follows if Sig. > 0.05 then H_0 is accepted, if Sig. <0.05 then H_0 is rejected. From the calculation results it can be seen that the value of Sig. <0.05 is 0.000 then H_0 is rejected and H_a accepted or in other words that there is a difference in the two groups: control group and the experimental group on problem solving ability of students in the subjects in class V SDN PPKn South Pacific Islands 5 Banjarmasin.

V. DISCUSSION

Learning that uses model oriented learning tools *Think Pair Share* (TPS) towards problem solving abilities and who acts as a teacher is a researcher. Learning is carried out in two students divided into two groups namely 22 students as a control group and 22 other students as an experimental group. The control group was given a question *posttest* at the end of the lesson. In the experimental group was given about *posttest* at the end of learning by using a *cooperative learning* model-type *Think Pair Share* (TPS) to determine the students' problem solving abilities in the social and cultural diversity subtema class society PPKn V in particular subjects.

Step learning in the experimental group, the teacher invites students to orient the problems associated with the sub-theme of social diversity and cultural community to students. The teacher explains things that are related to the problem and helps students group discussion. Then students complete the LKPD that has been prepared and present the results of group work. Next the teacher evaluates and provides reinforcement of the concept of the results made by students. At the end of the lesson, the teacher together with the students concludes the subject matter and the teacher invites all students to pray.

The effectiveness of the development of learning tools with a Think Pair Share (TPS) type cooperative learning model towards problem solving skills in PPKn subjects, is the level of success of the application of learning tools that is based on aspects of RPP implementation, student activities during the learning process, teacher activities while teaching, and problem-solving ability tests to improve students' abilities. PPKn learning activities refer to several stages of the Think Pair Share (TPS) model, namely: (1) the teacher asks questions, (2) students think individually, (3) each student discusses the results of each thought with a partner, (4) students share answers with the whole class, (5) analyze and evaluate the results of problem solving.

The implementation of PPKn learning in the fifth grade of SDN Belitung Selatan 5 Banjarmasin using the Think Pair Share (TPS) model, there are several aspects of activities including introduction, core activities, and closing activities. At the first meeting the students got an average score of 4.29 in the category of good learning. At the second meeting, the average score was 4.88 with the category of very good learning. This happened because the teacher could attract the attention of students and students were more enthusiastic in starting the lesson from the previous meeting and presented with a Think Pair Share (TPS) model in their eyes. PPKn lessons. Supporting factors in the implementation of learning based on observations that the teacher is able to invite students to play an active role in orienting the problem to students well, the teacher is able to provide explanations, guidance, and respond to the results of group discussions that students have presented well.

The thing that was done by the researcher in developing a learning tool oriented towards cooperative learning model type of Think Pair Share (TPS) in line with the opinion of Nieveen (1999) states that a model is of good quality if it meets the validity criteria, which is developed based on a solid theoretical rational state of the art and the components developed must be internally consistent.

Based on the data obtained in class V which numbered 44 students which were divided into two groups namely 22 students in the control group and 22 students in the experimental group. Observations were made by two people namely the guardian of class V as an observer Mrs. Rahmawati, S.Pd and the second observer was Muhammad

Awaluddin Fitri, S.Pd. This assessment includes student activities during the learning process.

The results of the assessment process of the discussion activities in class V at the second meeting are better at the discussion activities of the first meeting. Through the Think Pair Share (TPS) model begins with the presentation of the problem. Students are required to be able to find solutions to these problems by collaborating with other students in their groups. So that requires students in groups to discuss to find problems, then find various solutions for problem solving. Students at the first meeting look active during discussion activities. Many students ask questions according to the discussion material. Other groups are also active in answering questions according to their aims and objectives.

The teacher's role as a facilitator who guides and coordinates student learning activities is already good. The teacher manages the class as a team that works together to find something new for students. For teaching and learning activities more emphasis on student centered than teacher centered.

In the activities of student activities in class V the first meeting the posttest score in the control group was α averaging 78.05 with an active category and at the second meeting the posttest value in the experimental group was an average value of 92.50 with a very active category. In the presentation activities the results of group discussions took the form of student worksheets (LKPD). At the second meeting, students have been able to present concepts with clear start, organized content and clear closure. Students are well adapted to learning activities to solve problems. Students also have the courage and confidence in the presentation.

According to David Ausubel that meaningful learning is creating new information that is connected with the structure of understanding that is already owned by someone who is learning. Meaningful learning is closely related to problem-based learning, because in this learning knowledge is not given in the form but rather students find themselves (Abdullah and Ridwan, 2008: 2). J. Dewey (2014) reinforces that schools must reflect the larger society and the class is a laboratory for solving problems that exist in real life. The teacher is advised to encourage students to be involved in their group assignments.

Bruner (2006) also suggests the concept of scaffolding which is similar to the concept of the closest development zone by Vygotsky. In Vygotsky's theory the cooperative learning model Think Pair Share (TPS) type is applied in learning groups. Group learning is carried out through random and heterogeneous group division of objectives so that students can develop the knowledge they have.

In theoretical terms this means students work in the Zone of proximal development and the teacher provides scaffolding for students in need (Winataputra, 2008: 18). Scaffolding is an activity where the teacher provides a

number of assistance to students during the initial stages of learning and then reduces the assistance and provides an opportunity for students to take over responsibility after they are able to do it themselves.

According to Slavin (2009: 38), if information is to be retained in memory and is related to information that is already in memory.

Furthermore, Piaget suggested that young children have a curiosity that is constantly trying to understand the world around them. This curiosity motivates them to actively develop about the environment they live in (Ibrahim, et al., 2005: 7-9).

Problem solving ability tests in meetings are used to determine the success of the learning process using PPKn learning tools with cooperative learning models Think Pair Share (TPS) type, using a Post-test Only Control Group Design research design. Participants were categorized or placed randomly (random assignment) in two groups. Researchers both conducted post-tests in both groups, and only the experimental group provided treatment (Creswell, 2017: 243).

The results of the posttest in the control group and the experiment in problem solving ability showed that there were differences that were given the learning of TPS models with conventional models, seen from the results of the two groups in the posttest problem solving abilities, Normality Test, Non Parametric Normality Test and Mann-Whitney Test.

Based on the explanation above it can be seen that the cooperative learning model Think Pair Share (TPS) type can improve the problem solving ability of elementary school students. This, in line with the opinion of Adam Barragato (2015: 2) which explains that TPS is an effective way to overcome student difficulties and provide opportunities for students to work together in building their knowledge. Kantowski also confirmed that a situation is said to be a problem when one must combine new information into new ways to solve the problem (Pehkonen et al., 2013: 11). Nieveen (1999) states that a device that is of good quality if it meets the effectiveness criteria, the effectiveness aspect relates to two things, namely (1) according to expert judgment and the practical model developed meets the effective requirements (intended experimental) and (2) operationally in the field, the model is developed in accordance with the intended effectiveness (intended attained).

VI. CONCLUSION

The results of the study showed that the PPKn learning tools had met very valid criteria and the use of devices that were oriented to Think Pair Share (TPS) models could improve students' ability to solve problems in groups and increase student collaboration in learning, especially PPKn.

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