

## THE DEVELOPMENT PROBLEM BASED LEARNING COLLABORATIVE MODEL IN SOCIOLOGY LEARNING IN SENIOR HIGH SCHOOL

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### ABSTRACT

The purpose this research and development are : (1) to know overview implementation sociology teaching, (2) to product sociology studies instruction model based on Problem Based Learning Collaborative, (3) to know the effectiveness model instructional sociology In senior high school class XII Semester I (4) to know the effectiveness instructional model Problem Based Learning Collaborative in sociology values standart affective aspect or values affective (character values) and psychomotoric aspect, so cognitive aspect from student learning. Research methods and development are carried out through stages, namely Introduction studies, Model trial or product evaluation. Analysis data using a qualitative approach and a quantitative approach. A quantitative approach is used by the t-trial. The t- trial to know the difference between the Problem Based Learning Collaborative instruction model and the various speech instruction model.

The results can be concluded (1) the sociology studies instructions the senior high school students in Madiun are still various, limited to transfer knowledge and haven't referred to transfer value as well as the evaluation of instruction are still focused on cognitive aspect. While the claim sociology studies curriculum must be performed integrated and the objectives must touch cognitive, affective and psychomotoric as well as attitude. Therefore, it is developed the model of Problem Based Learning Collaborative instruction. (2) aspect problem based learning collaborative model include : (a) teacher activity aspect there are 10 phase, (b) Phase instruction are problem based learning collaborative aspect there are 3 include phase introduction, coreactive and closing. Coreactive include: eksplorasi, elaborasi and confirmation, (c) aspect student activity there are 10 phase. (3) Problem Based Learning Collaborative model efektif can be used to sociology instruction in senior high school class XII semester I, (4) model instruction Problem Based Learning Collaborative to sociology is proved giving a significant effect to the improvement learning and strength affective aspect, psychomotor aspect, and cognitive aspect student senior high school in Madiun Residency.

**KEYWORDS:** Sociology Studies Instruction, Instruction Model, Competency, Character Values, Problem Based Learning Collaborative Model

### INTRODUCTION

Basically, sociology learning activity is a learning activity which can stimulate the students to be active, creative, increase IQ, EQ, upgrade a positive attitude and be skillful in facing any problems. In the real condition, on the contrary, based on any survey or observation, interviews and documentation study analysis, the present sociology learning activity is a learning activity which makes the students passive because it uses lecturing model. The researcher has distributed

questionnaires to the 30 surveyed respondents consist of sociology teachers and education experts, and gets the data that in Madiun Recidency, 27 respondents or 90% respondents tend to use lecturing model in teaching sociology.

Sociology learning process using lecturing model makes the students passive. The students have less activity and creativity. The students tend to be reluctant to explore their both social skill and emotional quotient. They also have lack of sense of humanity and wisdom. Besides, they are a little bit unskillful in solving spontaneous problem appropriately.

**Table 1: Learning Model**

Indicator	Description	Percentage (%) Respondents
Learning model is abstract learning reality	Abstract learning	100%
	Reality instructional learning	100%
Learning model is implementation learning	Learning concept	90 %
	Learning design	100%
	Learning Implementation	100%
Learning model there are goals	There are goals	100%
	There are used performance objective	100%
Learning model there are competency	There are standard competency	100%
	There are basic competency	100%
Learning model there are media	There are media hard ware	100%
	There are media soft ware	100%
Learning model there are evaluation	There are pre test	100%
	There are post test	100%
Learning model there are procedure	Learning guide	100%
	Learning procedure	100%

**Table 2: Lecturing Model Learning and Average Value Sociology**

Year	Semester	Average Value	Percentage (%)
2010	1	73	88 %
2010	2	73	87%
2011	1	74	90%
2011	2	74	90%
2012	1	73	89%
2012	2	74	90%

In order that the students can be active, creative, increase IQ, EQ, gain a discovery nowadays needs an ideal learning model in sociology learning model. One of the proposed learning models and supposedly ideal for sociology learning activity at present is The Problem Based Learning Collaborative sociology learning model.

Curriculum 2004, Competence Based Curriculum (CBC) which is updated into curriculum 2006 implemented in every school nowadays requires to students to participate in an active learning activity. There are many learning models related with learning model which has a principle of active students. The learning model that requires the students to be more active is in line with Permendiknas No 22 Th 2006 (2012: 7) that, among others, stated that: the core idea of the current curriculum is leaning to build, discover, through a process of active, creative, effective and fun learning. Active learning model is in accordance with the principle of the implementation of the current curriculum.

On the contrary, in real condition, there are still few teachers who do not conduct learning activity using a learning model which has principle and indicator mentioned above that among others, not applying problem based, inquiry, and cooperative learning model. They tend to apply an old model in teaching sociology. They like to just lecture all the

time so that they do not activate the students. That is why the researcher is interested to research and develop a sociology learning model problem based, inquiry and cooperative

In order that the problem of the study is clear and concrete, the statement of the problem of the study is:

- How is the condition of the sociology learning activity at senior high school in Madiun Residency nowadays?
- How is the development problem based learning collaborative in sociology learning activity for the students of senior high school class XII semester I?
- What is the effectiveness learning model instructional sociology In senior high school class XII Semester I?
- Is problem based learning collaborative model effective to improve the senior high school students achievement in learning sociology at affective, psychomotor, and cognitive aspects in Madiun Residency?

## MATERIALS AND METHODS

A model is a system of propositions or interconnection between them. Proposition itself is a kind of interconnection between concepts that creates a statement about a characteristic of a phenomenon. Concept is a symbol to figure out a phenomenon. Concept is delivered in the form of definition (conceptual definition) especially to minimize an ambiguity. It can be stated also that proposition is an interconnection between two concepts or more based on a specific firm theory which is in the form of a statement about phenomenon characterization. J.O.I Ihalaauw (2008:16) explains that a model is as same as a theory, namely, a system of propositions or interconnection between them. In this case, a model has the same meaning with a theory. Snelbecker (2005 : 424) added Model is method and be called as implementation of principles or implementation of theories.

According to Iskandar (2009: 126) a model is as same as a theory and learning model is a theory related with learning model which can be implemented in learning process. The learning model, surely, can be used as a guideline in conducting a learning process.

A learning model an also be meant as a concept to conduct a learning process by undergoing certain steps and the steps applied is to reach the learning goal. There are several learning models can be applied in learning activity, among them is Problem Based Learning Collaborative learning model.

The following are the elements of Problem Based Learning Collaborative Model: Problem Based Learning, Inquiry, and Cooperative. Draft product model Problem Based Learning Collaborative, LKS prent out, power point, action line, validated by expert or specialist. They are specialist sociology, education technology, and education science.

The following is the steps of problem based learning collaborative based on Bruce Joice: 1). Phase 1 – 3, is the cooperative steps' when phase 1 is receiving teacher explanation, phase 2 is understanding teacher explanation and thinking creatively as well as critically, phase 3 is organizing into group in order to appreciate other opinion, appreciate a process of discussion and thinking creatively. 2). Phase 4 which is problem based learning, is when the students appreciating, organizing, actualizing, thinking creatively and analyzing. 3). Phase 5 – 10, is the inquiry steps when phase 5 is responding, accepting, actualizing critical thinking and analysis, interpreting research actualization, phase 6 is responding, accepting, interpreting research actualization, phase 7 is responding, accepting, research actualization, phase 8

actualizing personal, social, intellectual competence, phase 9 is responding, interpreting, actualizing competence and research, phase 10 is responding, accepting competence, activity and creativity actualization.

The research method used in this study is Research and Development method. It is conducted through some stages; they are preliminary research, development design, product evaluation. The data collecting technique used is interview, questionnaires, observation, documentation and test. The data analysis in preliminary research is using qualitative approach while product evaluation is using experimental qualitative approach. T-test is used by the researcher to determine the difference between Problem Based Learning Collaborative and Varied Lecturing learning model.

## RESULTS AND DISCUSSIONS

This research is a development research. The description of preliminary study in this research is as follows: before conducting a learning process, teacher makes a lesson plan using a syllabus. Syllabus is derived from a more comprehensive curriculum that covers the foundation and development principles, structures and distribution of lesson, courses, level, subject and so on. Particularly, syllabus consists of standard competence, basic competence, indicators, material development competence, time allotted, and assessment. In Madiun residency, sociology teachers have had a syllabus in teaching learning activity but not problem based learning collaborative one.

Talking about lesson plan, namely: RPP, before teaching, a teacher needs to have both written and unwritten preparation. Written preparation is outlining lesson plan. It starts with preparing the previous syllabus. The previous syllabus can be used to make a lesson plan. The sociology teacher I meet always outline a lesson plan started with arranging syllabus. Syllabus and lesson plan arrangement is conducted on meeting and discussing teacher, namely: MGMP. In conducting sociology teaching learning activity, besides arranging a lesson plan, he must also make an annual program and a semester one, and determine success limit namely : KKM as well.

Through an interview, sociology teaching learning implementation in Madiun residency can be classified as follows: 1). Integrated approach. It includes: (a). Integrated with the aim and the material of economy, (b). Integrated with the aim and the material of geography, (c). Integrated with the aim and the material of history. (2). Correlated approach includes: (a). Correlation between teachers, purpose and material of economy, (b). Correlation between teachers, purpose, and material of geography, (c). Correlation between teachers, purpose and material of history. (3). Separated approach.

Sociology learning approach, there are several sociology learning model in senior high school nowadays. From interviews and observation, the teachers in Madiun do master in the model of lecturing model, question and answer model, and task giving model. Most of the teachers tend to apply lecturing model or varied one in teaching sociology in senior high school. The other teachers, on the other hand, like to apply question and answer model and task giving.

Sociology teaching learning activity using lecturing model, the teacher lectures the students, they are asked to listen to the teacher and note the important things.

Sociology learning methods, teaching method is an item consisted in the learning model. There are several sociology teaching methods in Madiun: lecturing, varied lecturing, questions and answers, and task giving. Most of the teachers tend to apply lecturing or varied lecturing model in teaching sociology in senior high school in Madiun.

From the interview, teaching sociology in senior high school within 2 lesson hour or 90 minutes using lecturing model and task giving. The teacher using lecturing method and after being taught using lecturing method, the students are ask to do some tasks. After that, the students have to submit the work to the teacher to get their marks.

For some cases, there are several teachers using question and answer method and task giving. The students are taught while having some questions. The students are given the selected questions to answer. Then the teachers directly correct the answer given by the students. At the end of the meeting, the teacher asks he students to do the exercises in the worksheet as their homework.

Learning evaluation, the process of evaluation for sociology in senior high school in Madiun is generally focused on cognitive aspects whereas the affective ones is rarely mentioned. The teachers argue that they have lack of time to measure the mastery of sociology material. Meanwhile, they can measure the affective aspects while conducting teaching learning activity. They observe the students from their obedience in doing tasks to measure the affective aspects. Sociology teachers of senior high schools tend to use essay test and objective one to evaluate cognitive aspect while to evaluate the affective aspects they just use the obedience in doing the task as the parameter.

The description of model development, based on the result of interviews, there is not a sociology teacher in Madiun applying problem based learning collaborative learning model. On the other hand, the teachers want a new learning model in sociology learning that can increase the student's activity, creativity, learning enthusiasm, and their enjoyment in learning the lesson. They also hope that the students will get a new discovery from their learning process. One of the ways to reach the hope is by applying Problem Based Learning Collaborative Model.

Problem based learning collaborative learning model is a learning model combination between cooperative learning model, problem based learning model, and inquiry learning model. Therefore, the implementation of sociology learning model using problem based learning collaborative learning model needs a good and systematic teaching learning process preparation and try to motivate the students to be active, creative and able to obtain a discovery. The teacher also must understand the steps in conducting problem based learning collaborative learning model in order that he can execute the process well.

In accordance with Permendiknas No 41 Th 2007 and the modification of Bruce Joice, learning activity includes : (1). Introduction (2).Core Activity, including (a). Exploration (b).Elaboration (c).Confirmation, and (3).Closing. Phase 1, outlining the learning objectives and motivating the students (teachers' activity), understanding the learning objectives and responding teachers' motivation (students' activity) are included in the introduction. Phase 2, giving information, question and answer (teachers' activity), paying attention, asking to the teachers things they don't understand yet ( students' activity). Phase 3, organizing the students into group (teachers' activity), make a group (students' activity). This activity shows a cooperative model, included core activity, (a) exploration. Phase 4, formulating a problem and guiding the students to solve the problem in their group through a research (teachers' activity), solving the problem through a research in a group to obtain a discovery. This activity shows a problem based learning model, included core activity (b) elaboration. Phase 5, teachers as facilitators and moderators in a result of research presentation, students present and conclude the result of their groups' research. Phase 6, giving reinforcement or reward to students for a motivation (teachers' activity), students get reinforcement and motivation (students' activity). Phase 7, teachers conclude, students listen and note. Phase 8, teachers evaluate, students do the test and record the mark. This activity shows inquiry model, included core activity,

confirmation. Phase 9, teachers ask students to submit the work, questionnaires and the result of the research of their group. Phase 10, teachers give enrichment and students write down it, it is closing activity.

The description of the experiment of Problem Based Learning Collaborative Model shows the effectiveness of Problem Based Learning Collaborative Model. Research and development find and effect product. Spesifikasi product, there are namely: Draft model, LKS print out, PowerPoint, action line.

Evaluasi specialist content / matery can be saw it;

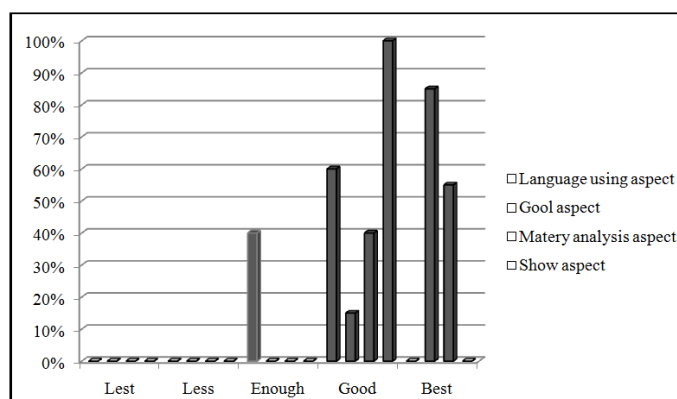
**Table 3: Evaluation Effects are Specialist Content / Matery**

Aspect	Value
Language using	3.8
Gools	4.8
Matery analysis	4.5
Show	4.1
<b>Average</b>	<b>4.3</b>

**Table 4: Persentase Evaluations are Specialist Content / Matery**

Aspect	Lest	Less	Enough	Good	Best
Language using	0%	0%	40%	60%	0%
Gools	0%	0%	0%	17%	83%
Matery Analysis	0%	0 %	0%	41%	59%
Show	0%	0%	0%	100%	0%
<b>Average</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>54%</b>	<b>36%</b>

Persentase evaluasi specialist content / matery so can be saw on the figure ;



**Figure 1: Persentase Evaluations are Specialist Content / Matery**

Evaluasi from specialist design and media instructional can be saw it :

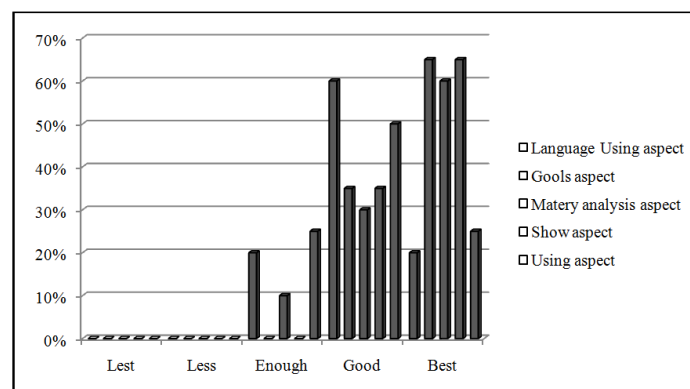
**Table 5: Evaluation Effects are Specialist Design and Media Instructional**

Aspect	Value
Language using	3.8
Gools	4.7
Matery analysis	4.3
Show	4.5
Using	4.0
<b>Average</b>	<b>4.3</b>

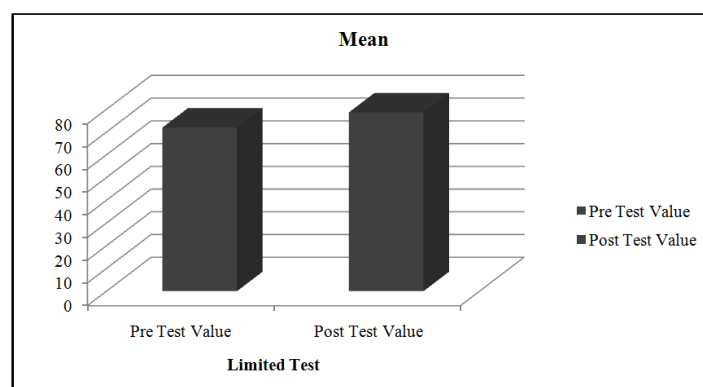
**Table 6: Persentase Evaluations are Specialist Design and Media Instructional**

Aspect	Lest	Less	Enough	Good	Best
Language using	0%	0%	20%	60%	20%
Gools	0%	0%	0%	33%	67%
Matery analysis	0%	0%	10%	30%	60%
Show	0%	0%	0%	34%	66%
Using	0%	0%	25%	50%	25%
Average	0%	0%	11%	41%	48%

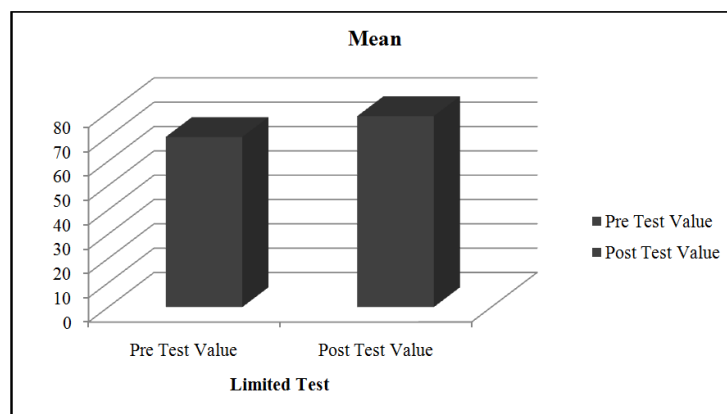
Evaluation specialist design and media instructional can be saw on the figure:

**Figure 2: Persentase Evaluation is Specialist Design and Media Instructional**

Through some stages of the model experiment both qualitatively and quantitatively shows the effectiveness of Problem Based Learning Collaborative learning model. It is proven that problem based learning collaborative model effects significantly on increasing the students' marks both on character ( on affective and skill ) and learning achievement ( cognitive aspects ) compared with varied lecture learning model. The result of limited test shows that the average mark of post test or the experimental group on affective aspects is 78,67. It is higher than the average affective mark of the group using varied lecture model or pre test which is 72,00. So, from the average mark above, it can be concluded that the group using Problem Based Learning Model has a better affective mark than that using varied lecturing model.

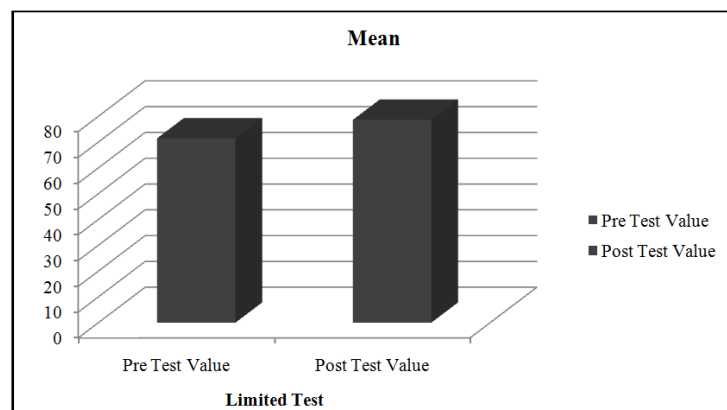
**Figure 3: Value Effect Limited Test Aspect Affective**

The result of limited test, the average of cognitive mark of the group using Problem Based Learning Collaborative or post tes is 78, 53. It is higher than the average of students' achievement of the group using varied lecture or pre test which is 69, 95.



**Figure 4 Value Effect Limited Test Aspect Cognitive**

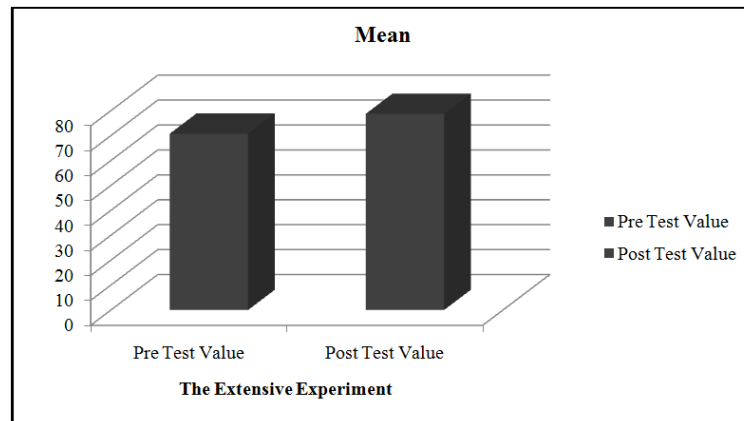
The result of limited test, the average of psikomotor mark of the group using Problem Based Learning Collaborative is 78,67 It is higher than the average of students' achievement of the group using varied lecture which is 71.49. So, from the average mark above, it can be concluded that the group using Problem Based Learning Model has a better learning achievement than that using varied lecturing model.



**Figure 5: Value Effect Limited Test Aspect Psikomotor**

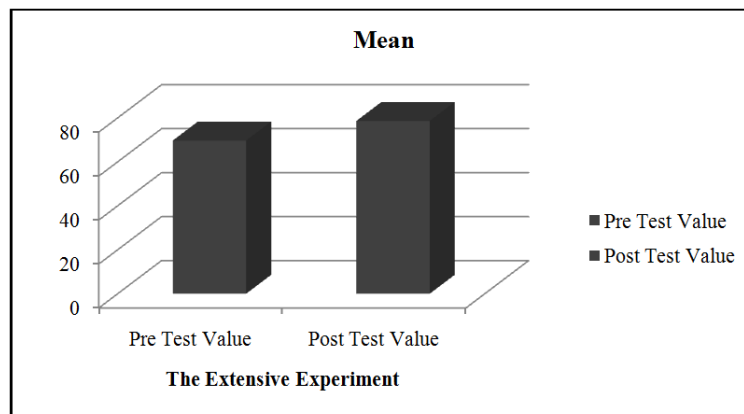
From the extensive experiment, it also gets a good result in improving learning quality. It shows that the average of affective and skill aspects of post test or experimental group is 78, 72, and pre test or control group is 70,75.





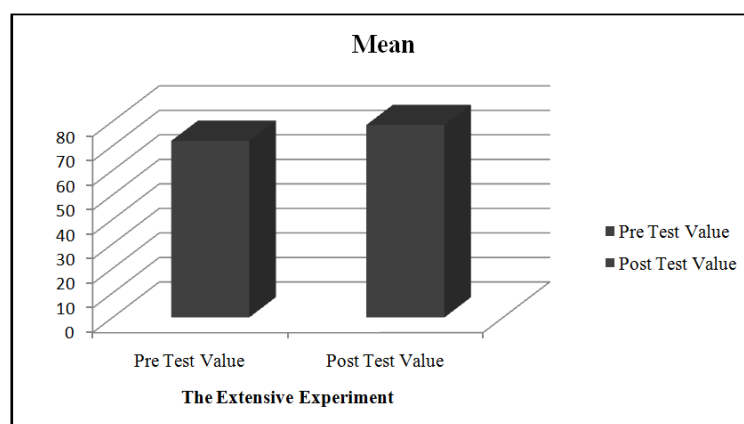
**Figure 6: Value Effect the Extensive Experiment Aspect Affective**

On cognitive aspects, post test or the experimental group gets 78.59, and pre test or the control group gets 69, 68.



**Figure 7: Value Effect the Extensive Experiment Aspect Cognitive**

Psikomotor aspects, post test or the experimental group gets 78.52, and pre test or the control group gets 72.00. It shows a significant difference. Thus, as the developed model, the implementation of Problem Based Learning Collaborative conducted in senior high schoolone Parang and senior high school two Magetan has been run as what it is developed and effects in improving both affective and cognitive so psikomotor marks.



**Figure 8: Value Effect the Extensive Experiment Aspect Psikomotor**

Quantitative calculation shows that the affective mark of the experimental group is upper than the control one, namely  $78.72 > 70.75$ . Likewise, the cognitive mark of the group using the Problem Based Learning Collaborative Model =  $78.59 > 69.68$  average mean of students achievement of the group using varied lecturing model. The psikomotor mark of the group using the Problem Based Learning Collaborative Model =  $78.52 > 72.00$ . Thus, it can be concluded that the group using Problem Based Learning Collaborative Model has a stronger values of character, cognitive achievement and a better psikomotor compared with group using Varied Lecturing Model.

## CONCLUSIONS

Preliminary study reveals that sociology teachers in Madiun residency have used syllabus and lesson plan created by discussing sociology teacher, namely: MGMP in Madiun residency but none uses problem based learning collaborative syllabus in teaching sociology. Recognizing the content, the learning steps have referred to Permendiknas No 41 Th 2007 which includes introduction, core activity (Exploration, Elaboration, and Confirmation), and closing. Anyway, because of the availability of syllabus and lesson plan by MGMP, sociology teachers becomes less creative and innovative in developing material and teaching models. Teachers still dominate the learning process so that the learners tend to be passive.

The development of Problem Based Learning Collaborative Model, related with the development of Problem Based Learning Collaborative Model, after the draft is outlined, then it is validated by education experts, educational technology experts, sociology experts, practitioners namely sociology teachers in Madiun residency. By the advice and input from the experts and practitioners the researchers revise the model draft. After being revised, it is tested.

The implementation of the learning process model Problem Based Learning Collaborative that combines aspect cooperative learning, problem based and inquiry. Model Problem Based Learning Collaborative so there are aspects namely: (1) introduction, (2) core activity which includes (a) exploration, (b) elaboration, (c) confirmation, and (3) closing

The effectiveness of learning model Problem Based Learning Collaborative, through the stages of model testing both qualitatively and quantitatively, and of limited testing and extensive trials, it is proven that learning model Problem Based Learning Collaborative is effective. From the average marks, it can be concluded that the group using Problem Based Learning Model has a better affective marks than that using varied lecturing model.

Thus, we can conclude that the group using the model Problem Based Learning Collaborative has a stronger character against the values of attitude and have a better learning achievement than the group using the varied lecturing model. Evaluasi from specialist content / matery include :Draft model Problem Based Learning Collaborative, LKS prent out, power point, action line good can be used to instructional learning sociology. So evaluasi from specialist design and media instructional: Draft model Problem Based Learning Collaborative, LKS prent out, power point, action line good can be used to instructional learning sociology.

The significance of the study for the sociology teaching learning in Madiun residency can be stated as follows: (a). For the sociology teachers : it needs to change the paradigm in teaching sociology, not only transferring the knowledge but transferring the values is more important. (b). For the students: Making group in learning process, the students becomes more active and creative and doing inquiry in the group. (c). For the learning models: one of the ways to improve sociology learning quality is by applying the innovative learning models, such as Problem Based Learning Collaborative

learning model. Quantitative calculation shows that the affective mark of the experimental group is upper than the control one, namely  $78.72 > 70.75$ . Likewise, the cognitive mark of the group using the Problem Based Learning Collaboration Model =  $78.59 > 69.68$  average mean of students achievement of the group using varied lecturing model. The psikomotor mark of the group using the Problem Based Learning Collaborative Model =  $78.52 > 72.00$ . Thus, it can be concluded that the group using Problem Based Learning Collaborative Model has a stronger values of character, cognitive achievement and a better psikomotor compared with group using Varied Lecturing Model.

## RECOMMENDATIONS

- For Sociology Teachers: Sociology teachers can use this research to improve the process and learning outcomes.
- For the Headmaster: in running innovation, and improving the learning quality, together with the teachers, directing, encouraging, assisting, and facilitating them.
- For the Education Department : The Curriculum Development courses at postgraduate level is a representative institution to conduct any research related with the innovative learning models for any learning objectives to make delivering scientific information to public society easier.
- For the next researcher: this study is related with sociology learning activity in senior high schoolclass XII using Problem Based Learning Collaborative, focus on attitude or character (affective aspects) strengthening development and knowledge marked with learning achievement (cognitive aspects), and skills also behavior. The study finds out that the learning model which is suitable and effective enough to develop the values of attitude or character and improve the students' learning achievement for the students of senior high schoolclass XII is Problem Based Learning Collaborative learning model.

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