

## **The Development Problem Based Learning Collaborative Model in Sociology Learning in Senior High School**

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**Abstract:** *This reseach in based on the real condition Senior High School Sociology learning activity in Madiun regency which is still far from what we wish, still focus on cognitive aspect. Affective aspect and skill need a little touch, if it is impossible to say they are still untouched. Even, we are obliged to implement the attitude or character values in the activity of learning.*

**The purpose of the research is:** *(1) to recognize the recent condition of sociology learning activity, (2) to create a sociology learning model, Problem Based Learning Collaborative, (3) to identify the effectiveness of the model in improving student achievement.*

*The method of the research and the model development is carried out through these stages : Preliminary research, development design, model testing or product evaluation. Collecting the data is using observation, interviews, questionnaires, and documentation technique. Data analysis in the preliminary research is using qualitative approach while model testing or product evaluation is using quantitative approach experiment. T-test is used to determine the differences between Problem Based Learning Collaborative model and varied lecturing model.*

**The result of the study is concluded as follows:** *(1) Sociology learning activity in Madiun Regency is still varied in delivering the knowledge, not yet focus on delivering of the value. Also the process of learning evaluation is still focus on cognitive aspect ( knowledge ). Where as according to curriculum, sociology must be conducted as an integral subject. The aim must also touch all aspect, include : cognitive, affective, skill, and attitude. That is why, it is needed to conduct Problem Based Learning Collaborative model. (2) After being validated by a team of experts and practitioners, the draft of Problem Based Learning Collaborative Model is experimented in, among others, SMAN 1 Parang. The result of the model can be understood and implemented by both teachers and students. After the trial, the model is applied as a restricted quasi-experimental test in SMAN Bungkal Ponorogo and SMAN Badegan Ponorogo. The results show that the experimental groups have a better average than the control group both in the cognitive aspect and the affective one. When the model is applied extensively in SMAN 1 Parang, SMAN 2 MAGETAN, SMAN Sukomoro, SMAN Sampung, the results remains the same. It shows that the experimental groups have a better average than the control ones, both in the cognitive aspect and the affective one. Applying the model, it shows that the model effects the students significantly in increasing the achievement ( cognitive aspect ) and strengthen the character and attitude ( affective aspect and skill ) compared with the varied lecturing model. Thus, it can be concluded that the groups using Problem Based Learning Collaborative Model has a better achievement and effort in implementing the characters values more than that of using varied lecturing model.*

**Keywords:** *Sociology Learning Citivity, Learning Model, Competency, Values of attitude or character*

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### **I. Introduction**

Ideally, sociology learning activity is a learning activity that can stimulate the students to be active, creative ; to increase intelligence Quotient and Emosional Quotient ; to be able to behave positively and to solve all problems they face skillfully. However, based on the observation, interview and study analysis documentation, the recent sociology learning activity is a learning activity that makes the students passive, because it uses a lecturing model. After distributing the questionnaire to 30 respondents who are sociology teachers and education experts in Madiun Regency, 27 respondents or 90% of them said, that there was a tendency in using a lectury model in sociology learning activity.

The research has observed and documented 30 sociology teachers in Madiun 26 teachers among them or about 87% still use lecturing model which leads the students to be passive. It is important to develop ideal learning programs model in learning sociology recently to make the students active and creative so that they can increase both IQ and EQ. Additionally, the proposed model, namely Problem Based Learning Collaborative model is one of the supposed models that ideal to lead the students to get a new discovery in learning sociology today.

Sociology is one of the obliged subject the students must have in national final examination. As stated in National Education Law, UU Sisdiknas No.20 chapter 57, 58, 59 about educational evaluation, among those is in the form of national examination. PP No 19, 2005 regulate the national examination. National Examination

is an obliged examination held nationally by the end of the education year, for all social department students of senior high school.

It is known from the observation, the average marks of 30 state senior high school from 55 ones in Madiun Regency is just 7,4. The minimum criterion is not yet obtained by the value of the mark. This means, it is important to develop a new learning model to increase student achievement, especially sociology final score. Competence Based Curriculum which is updated with curriculum 2006 ( KTSP ) which is now implemented in every schools requires the students to participate in an active learning activity.

There are many learning models that can be implemented in schools. The learning models that requires the students to be more active is in line with Permendiknas No. 22,2006 ( 2012 : 7 ) that, among others, sated that : the core idea of the implementation of the current curriculum is learning 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.

Problem Based Learning Collaborative model is also appropriate with Permendiknas No. 22, 2006 ( 2012 : 8 ), which among others, stated that : learning activity is centered on the potency, growth, need and environment of the students, regarding that the students is the core subject to increase their competence to become religious, noble, healthy, smart, skillfull, capable, creative students and also democratic and responsible citizen. The goals can be reached by developing the student's competence that is matched with the potency, growth, need and interest of the students and also demands of the environment. From the description above, the writer is interest in investigating and developing a sociology learning model : Problem Based Learning Collaborative. The statements of the problems in this study : (1) how is the condition of sociology learning activity in Madiun regency today ? (2) what is the procedure of Problem Based Learning Collaborative model for the first semester, third year students of Senior High School ? (3) is the Problem Based Learning Collaborative Model effective to improve the Senior High School students achievement in Madiun Regency ?

## **II. The Problem Based Learning Collaborate Model**

The element of Problem Based Learning Collaborative Model: (1) Problem Based Learning Model, includes : (a) Formulating the problem, (b) Solving the problem, (c) Reporting the problem solving. (2) Inquiry model includes : (a) Formulating the problem, (b) Solving the problem using a research, (c) Presenting the results of the research, (d) Repoting the results of the research. (3) Cooperative model, includes : (a) Organizing the students into groups, (b) Defermining the problem to be solved grouply, (c) Presenting the result of the group discussion, (d) Evaluating, (e) Submitting the work to the teacher. Here are the steps, accordingly : (1) Problem Based Learning Model : (a) Formulating the problem, (b) Solving the problem using research to get a discovery under teacher assistance. (2) Inquiry Learning Model : (a) Presenting the result of the problem solving or the results of a research grouply, (b) Evaluating, (c) Reporting the result of the research to the teacher. (3) Cooperative Model : (a) Delivering the purpose and motivating the students, (b) Conveying the information and having prologue, (c) Organizing the students into groups.

Thus, according to the description above, the steps of Problem Based Learning Collaborative are : (a) delivering the purpose and motivating the students, (b) conveying the information and having a prologue, (c) organizing the students into group, (d) formulating the problem and assisting the students to solve the problem in their group through a research, (e) the students present the result of the research in their groups, (f) encouraging and motivating the students, (g) teacher makes a conclusion, (h) evaluatuion, (i) submitting the result of evaluation to the teacher, (j) writing down the assesment of an enrichment from the teacher.

Problem Based Learning Collaborative Model, as a learning model, can train the students to solve the problem, get a discovery and stimulate the students to think critically and democratically, the model can also create a fun and comfortable atmosphere.

Problem Based Learning Collaborative Model is a learning model based on the problem that could train and develop the students to solve the problem in a group. It can stimulate the logical thinking ability of the students in analysing, interpretating, identifying, exploring, synthesizing, generalizing, inquiring, and developing their emotional quotient.

Problem Based Learning Collaborative Model as learning model involves both a teachers and students. The teacher project a particular problem to solve in order that students could solve it. They are also forced to think critically in analyzing while doing inquiryprocess. So that eventually they can draw a conclusion during the process under teacher guidance.

Thus it can be concluded that Problem Based Learning Collaborative Model is a Collaborative Learning Model between Problem Based Learning Model, Inquiry LearningModel, and Cooperative Learning Model.

Method the research, this study is using development research method. The procedure of the development research refers to that from Dick and Carey that modified.

### **III. Results and Discussion**

The description of the preliminary study, the syllabus used by most of the sociology teachers in Madiun Regency is still in the form of KTSP Curriculum. They don't use the syllabus recommended for Problem Based Learning Collaborative Model yet.

In education year 2013/2014, there are 18 schools from 55 Senior High School in Madiun Regency implementing curriculum 2013. That curriculum is only implemented in class X in 2013. It means, only 33% Senior of High School in Madiun Regency applies curriculum 2013 and it is only valid in class X. In the education year 2014/2015, both class X and XI apply curriculum 2013. Class XII still apply the old one. This condition, that class XII is still applying KTSP curriculum makes the teachers tend to use varied lecturing model.

Lesson Plan ( RPP ), in the beginning of the semester, the sociology teachers in Madiun Regency create syllabus and RPP in MGMP gathering. They also make annual program and semester program. They determine KKM too. In arranging RPP, based on curriculum 2006, they insert additional characteristic, namely exploration, elaboration., and confirmation. Sociology syllabus and lesson plan based on Problem Based Learning Collaborative which is successfully arranged then is proposed to 5 experts namely expert of education, expert of educational technology, expert of sociology to be reviewed. It is also shown to 25 sociology teachers for a review. The result of the process is that it needs to revise, than be revised.

Implementation of learning, through the process of interview and observation, the implementation of learning sociology in Madiun Regency use integrated and or correlated approach. (1) Integrated approach 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 with the aim, material, and teacher of economy, (b) correlation with the aim, material, and teacher of geography, (c) correlation with the aim, material, and teacher of history.

Sociology Learning Model, nowadays there are several sociology learning model in senior high schools. From interviews and observation, the teacher in madiun do master in the model of lecturing model, question, and answer model and giving tasks. Most of the teachers tend to apply lecturing model and varied lecturing model whereas the others tend to apply the rest. Likewise the teaching methods, most of them tend to apply lecturing methods or varied lecturing methods.

Sociology learning methods, teaching methods is an item consisted in the learning model. There are several sociology teaching methods in Madiun : lecturing, varied lecturing, questions and answer and giving tasks. Most of teachers tend to apply lecturing method and giving tasks. The teachers teach using lecturing method after that the tasks are given to the students and they are asked to submit the task. On the other hand, for those who apply questions and answer method, the teacher asks the students the questions taken from a bank of questions which is directly discussed. After finishing the lesson, the teacher gives the students an assignment to do the tasks on the students worksheet. They must do the tasks as their homework.

The barriers in sociology learning using integrated approach are : (1) lack of mastery about different field, i.e less mastery in the material of economy, geography, and history, (2) less understanding in integrated sociology learning model, (3) difficulty in applying the integrated sociology learning concept, (4) pessimistic attitude towards the success of the integrated sociology

lack of support from other sociology teachers, (5) lack of books and students worksheet whose contents is integrated sociology

Learning evaluation, the process of evaluation for sociology in senior high school in madiun is generally focus 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 aspect while conducting teaching learning activity. They observe the students from their obedience in doing tasks to measure the affective aspect. Sociology teachers of senior high schools tend to use essay test to evaluate cognitive aspect while to evaluate the affective aspect they just use the students obedience in doing the task as the parameter. There are only few teachers preparing rubric for evaluation.

The description of model development, based on the field observation, attitude scale, questionnaire, sociology teachers interviews, there still no one applying Problem Based Learning Collaborative Model. On the other hand, the teacher 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 way to reach the hope is by applying Problem Based Learning Collaborative Model.

From the data on effective marks of limited test is known that average affective mark of experimental group is significantly different from that of control one. From the data, it is known that the mean of the affective mark of the group using varied lecturing model = 73.00. So it can be concluded that the group using Problem Based Learning Collaborative Model has a better affective mark than the control group, namely  $87.59 > 73.00$ . We can also say, Problem Based Learning Collaborative can also improve the students character. With the

improvement of the affective values of the students, it is hoped, the students bear them in their mind, so that it will be embedded as a national character towards a developed, though and characterized country.

The result of the limited test on cognitive aspect shows that the experimental group is significantly different from that of the control one. It means, the mark of the experimental group is better than the control one. The mean of the students achievement of the group using Problem Based Learning Collaborative Model is 75.64 > the mean of students achievement of the group using Varied Lecturing Model = 68.74. So, from the result above, it can be concluded that the group using Problem Based Learning Collaborative Model has a better achievement than that using Varied Lecturing Model.

The result of extensive test on affective aspect shows that the affective mark of the experimental group is significantly different from the control one. From the data, it is known that the mean of the affective mark of the experimental group is = 87.65 > the mean of the affective mark of the group using Varied Lecturing Model = 73.88. Thus, we can conclude that the group using Problem Based Learning Collaborative Model has better affective marks compared with the group using Varied Lecturing Model. Thus, it can be stated that the affective mark of the experimental group is upper than be control group, namely 87.65 > 73.88. So, Problem Based Learning Collaborative Model can also increase the value of the students behaviour . With the improvement of the affective values of the students, it is hoped, the students bear them in their mind, so that it will be embedded as a national character towards a developed, though and characterized country.

The result of extensive experiment test cognitive aspect shows that the mark of the experimental group is significantly different from the control group. It means that the experimental group is better than the control one because the mean of students achievement of the groups using Problem Based Learning Collaborative Model 75.56 > the mean of the students achievement of the group using Varied Lecturing Model = 65.57. So it can be concluded that the group using Problem Based Learning Collaborative Model is better than the group using Varied Lecturing Model.

The findings of the research and development : 1) the basic findings of the preliminary research are : (a) the syllabus must use correct and understandable language, (b) the steps of the learning model in RPP needs to clarify, (c) the content of the research needs to be integrated into students worksheets, 2) the basic findings of the model development : (a) Problem Based Learning Collaborative Model is developed in the form of steps, (b) Problem Based Learning Collaborative Model applies three steps in learning activity : 1) introduction, 2) core activity: (a) exploration, (b) elaboration, (c) confirmation, 3) Closing. The basic findings of the model test : (a) the mean of the affective mark of the group using Problem Based Learning Collaborative Model is upper, (b) the mean of the cognitive mark of the group using Problem Based Learning Collaborative Model is upper, (c) Problem Based Learning Collaborative Model can increase both the mark of affective aspect and cognitive one, (d) Problem Based Learning Collaborative Model is effective applied in learning activity

#### **IV. Conclusion**

##### **Sociology learning activity in SMA in Madiun Regency**

Sociology learning activity in SMA in Madiun Regency is conducted separately and integratedly. Separately means that Sociology teachers only teach Sociology without incorporating other lessons such as Economy, Geography, and History. Integrated means that the learning activity integrate and correlate with Economy, Geography, and History aims and materials. Sociology learning activity is stil limited on delivering knowledge and not yet delivering value. The impacts is lack of students motivation to learn sociology. The learning goals not yet thoroughly develop students knowledge, attitude, skill, and behaviour. Likewise, the learning evaluation still focus on cognitive aspect.

Preliminary study revealed that so far sociology teachers in Madiun Regency use syllabus and RPP created by MGMP whose content refers to Permendiknas no 41, 2007 that consist of introduction, core activity ( exploration, Elaboration, Confirmation ) and Closing. However, the condition that MGMP provide syllabus and lesson plans makes the teacher not creative and innovative in developing both materials and learning model. Teachers still dominate the learning activity so that 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 model is drafted, then it is propose to validate to education expert, education technology expert, sociology expert and sociology practitioners in this case in this case sociology teachers in Madiun Regency. They provide some advice and suggestion that is used by the writer to revise the draft model. After being revised, the draft model is tested.

The implementation of learning activity that combines cooperative learning, problem based an inquiry refers to Permendiknas no 41, 2007, that consist of three steps, they are : 1) Introduction, 2) Core Activity ( Exploration, Elaboration, Confirmation ), and 3) Closing

After being experimented in a limited experiment, the steps of Problem Based Learning Collaborative Model has been understood and implemented. It continue on the extensive experiment. Both limited and extensive experiment through quasi-experiment can increase the quality of learning, marked with the reach of both affective and skill aspects.

### **The Effectiveness of Problem Base Learning Collaborative Model**

Through the stages of tested model both qualitatively and quantitatively, the effektivness of the model has been both proved. It is proved that Problem Based Learning Collaborative has significantly increased both the caracer values ( affective aspect ) and students achievements ( cognitive aspect ) compared with Varied Lecturing Model. From the extensive experiment it is proved that Problem Based Learning Collaboration is able to increase the learning quality. Quantitative calculation results show that the mean of affective and skill marks of the experimental group is 87.65 and the average mark of the control group is 73.88 ; the average mark of cognitive aspect is 76.56 for the experimental group ang 65.67 for the control one. That results show significant difference. Thus, the implementtation of Problem Based Learning Collaborative Model in SMAN 1 Parang and in SMAN 2 MAGETAN has been conducted as the developed model and has an impact in increasing both affective and cognitive score

Quantitative calculation shows that the affective mark of the experimental group is upper than the cotrol group, namely  $87.65 > 73.88$ . Likewise, the cognitive mark of the group using Problem Based Learning Collaboration Model =  $75.56 > 65.57$  average mean of students achievement of the group using varied lecturing model. Thus, it can be concluded that the group using Problem Based Learning Collaborative model has a stronger values of character and a better achievement compared with group using Varied Lecturing Model.

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