

# Problem Based Learning Model Development of Civic Education to Improve the Motivation and Learning Outcomes

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#### **ABSTRACT**

This study aimed to obtain pictures in learning about Citizenship Education (Civics) in STISIP Muhammadiyah Sinjai and obtain the Valid PBL-Civics model, practical and effective way to improve motivation and learning outcomes of students who programmed the Civics course. This type of research is the study of education with the approach of Research and Development which refers to the development of learning model as proposed by Sugiono (2011). This study was analyzed quantitatively to determine whether the model developed already meet the criteria for effective learning to improve student learning motivation. Products developed comprising: a model of books, textbooks, lesson plans, MFI. The learning model is implemented as a whole and has met the criteria effectively to improve student learning motivation. Mastery learning is very good as well as the management of learning very well that this model is considered effective.

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## Introduction

Based on the Decree of Director General of Higher Education No. 43 / DIKTI / Kep / 2006, Citizenship Education goal is formulated in the vision, namely, a source of values and guidelines for the development and implementation of programs of study, in order to deliver the student in alleviating his personality as a whole person.

Citizenship Education Mission in college is to help students establish his personality, in order to consistently be able to comprehend the basic values of

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Pancasila, to master a sense of nationalism and patriotism, apply and develop science, technology and art with a sense of responsibility and morality.

A Successful Citizenship Education will produce intelligent mental attitude, a sense of responsibility of the learner, this attitude is accompanied by behavior: (1) Faith and fear of God Almighty and appreciate the values of the nation philosophy; (2) virtuous noble character, discipline in the society, nation and state; (3) Rational, dynamic, and aware of their rights and obligations as citizens; (4) professional Characteristically, animated by the State Defense awareness; (5) Active in harnessing science and technology and the arts to benefit the humanity, the nation and the State. (Kaelan, 2007).

Sumarsono, at.al. (2006), through the Citizenship Education, Indonesian citizen is expected to: "Understand, analyze, and address the problems faced by the community, state and nation with sustainably and consistently with the ideals and national goals as outlined in the preamble of the 1945 Constitution".

Based on observations at STISIP Muhammadiyah Sinjai shows that students' low motivation, because students do not participate in the Civics learning process, that makes student results not optimal. Student academic year 2015 - 2016 as many as nine rooms were programmed Civics subjects, an average class filled with  $\pm$  40 students, only 4 to 6 people are seen as active students, the rest almost no learning interaction. Learning by lecture method, the students looked apathetic and do not have the spirit in learning, because there is no motivation grow from inside the students, that makes students are not active in learning session.

The main focus of the student in the Civics learning are the passing grade and not on the learning quality. Looking at the conditions above, indicated that the lecturing method applied by civics lecturers are ineffective. This is very worrying, because in order to develop the knowledge, values, attitudes and skills in teaching civics is indeed very difficult to achieve.

Based on the problems above, the authors are motivated to do the research and development of problem-based learning model for the Civics learning process that can cause learning motivation for students who are enlisting the Civics class at STISIP Muhammadiyah Sinjai that aimed for the students study results can be increased.

This problem is very interesting to study in order to know the cause of the situation and Civics learning conditions as where described above, and also can be used as a reference in order to find a solution so that the learning model in the civics subject can be effective in the end it can improve motivation and learning outcomes.

According to Smith in Amir (2009), the benefits of Problem Based Learning (PBL), is the learners will: improve troubleshooting skills, easier to remember, increase in understanding, increasing knowledge relevant to the world practice, encourage them thoughtful, build leadership skills and cooperation, learning skills, and motivate learners.

In Uno (2006), The term motivation comes from the word motive which can be interpreted as the power contained within the individual, which causes the individual act or acts. The motive cannot be observed directly, but can be

interpreted in behavior, a stimulus, encouragement, or a power plant the appearance of a certain behavior.

In the context of the study of psychology, in Majid (2013), suggests that in order to understand the motivation of individuals can be seen from several indicators, including: 1) the duration of the activity; 2) the frequency of the activity; 3) the persistence of the activity; 4) fortitude, tenacity and ability in the face of obstacles and difficulties; 5) devotion and sacrifice to achieve goals; 6) the level of aspirations to be achieved by the activities carried out; 7) the level of achievement or product qualification is achieved from the activities carried out; 8) directions attitudes toward the goals and activities.

Motivation and Learning are the two things that affect each other. Learning is a change in behavior of a relatively permanent and potentially occur as a result of a practice or reinforcement that is based on the aim to achieve certain goals.

Aliah (2012), one of the factors within that determine success or failure in the learning process is the motivation to learn.

Joyce & Weil (2010), argues that the learning model is a plan or pattern that can be used to shape the curriculum, designing learning materials, and guiding learning clearly.

In the component model learning PBL-Civic Education to improve motivation and learning outcomes, referring to the components mentioned Joyce & Weil (2009), includes: (1) syntax, which is a sequence of activities, (2) social system, namely the role of lecturers and students and types of rules required, (3) reaction principle, which gives an idea to the teachers about how to view or respond to the questions students, (4) support system, the means or materials are required by the model, and (5) the impact of instructional, that is learning outcomes are achieved directly by directing students to the desired objectives and impact Bridesmaids / followers are other learning outcomes produced by a process of learning, as a result of the creation of a learning atmosphere that is experienced directly the student without direct guidance of lecturer.

Development of a PBL-Civics model consists of 11 phases in the syntax, namely: (1) student orientation to the problem, (2) Organize the students in learning, (3) Identification of the problem, (4) Conducting investigations, (5) Formulate the problem, (6) develop a hypothesis, (7) discussions to develop to produce the work, (8) to analyze and evaluate the problem-solving process that has been synthesized, (9) Make a report of the discussion, (10) Evaluation, (11) Giving Award.

### Instructional Impact and Companion Impact

Implementation of any learning activity, according to Joyce & Weil (1986), will produce two kinds of impact of learning, namely instructional impact and accompanist impact. Impact instructional learning outcomes are achieved directly by directing students to the learning objectives expected. Instructional impact a specific behavior or competencies expected of students is directly related to a given subject on a subject.

PBL-based model development Civics described above, are summarized in the form of framework in Figure 1:

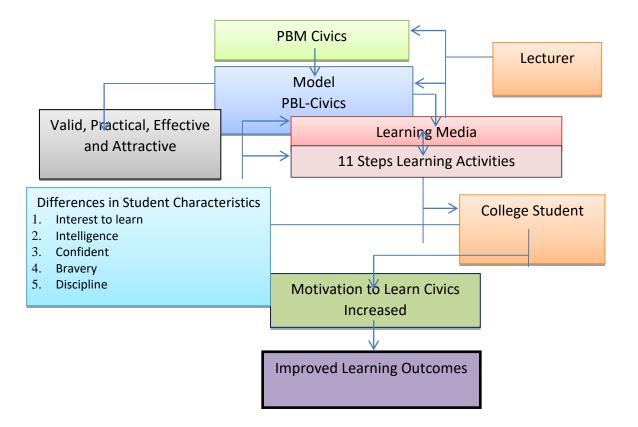


Figure 1. Conceptual framework

Based on the background of the problem, observations in the field, the study of theory and relevant research results, then developed hypothetical model and its components as summarized in Figure 2 below:

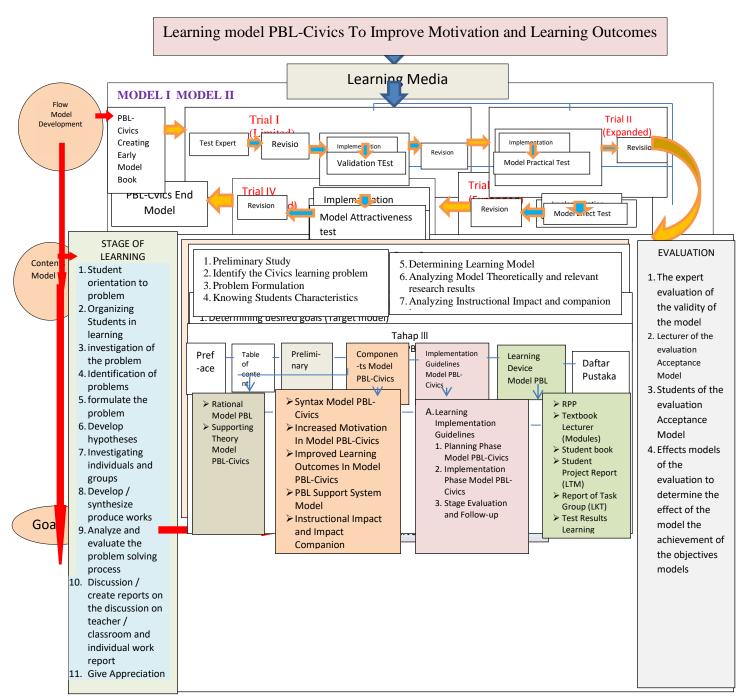


Figure 2. Hipotetik

The result of a development model that consists of: book models, textbook / student, the Implementation Plan Lectures, Worksheet Students, Report of Task Group, and the test results Learning that have been tested on students of the program as the study of Public Administration Space 1 and 2 STISIP

Muhammadiyah Sinjai contains programs Civics courses. Furthermore, for the collection of data is obtained through: (1) the data validation results Model PBL-Civics by experts and practitioners, (2) the activity data of students, (3) the data adherence to learning, (4) a data application of the model, (5) Data motivation to learn , (6) learning outcomes data. Then for the data analysis done by the effectiveness of data analysis.

#### Research Instruments

The instruments were developed to get the data in the development of the model PBL-Civic Education to improve learning motivation and learning outcomes, namely: (1) Sheet model assessment PBL-Civics, (2) observation sheets adherence to learning, (3) observation sheets student activities, (4) copies of the questionnaire responses lecturers, (5) sheet questionnaire responses of students, (6) the observation sheet lecturer in learning activities of students in the group, (7) pieces of learning motivation questionnaire, (8) achievement test sheet.

The reliability instrument was calculated using the formula.

$$R = \frac{Agreements(A)}{Disagreements(D) + Agreements(A)} \times 100\%$$

Information:

R = the coefficient (degrees) reliability instrument

A = the magnitude of the frequency matches between the two data analysts

D = the amount of frequency that does not match the data between the two observers

Formula  $Percentage\ of\ Agreements$  above is modified into the formula of reliability:

$$R = \frac{d(A)}{d(A) + d(D)}$$

Information:

R = the coefficient of reliabilities,

A = Average Degree of Agreement of assessors,

D = the mean degree of disagreement from the assessors. (Hacker, Richard, 1999)

#### Results and Discussion

Preliminary observations provide that information on student learning implementation Civics Study of Public Administration program as STISIP Muhammadiyah Sinjai is programmed Civics courses, Academic Year 2015-2016 are still using the old model of learning is by lecture method. The learning process is dominated by lecturers and less directly involve students in learning, so that students look apathetic and not eager to be boring in learning.

### Results of Trial Model PBL-Civics

#### Trial I Practicality

The main purpose of data analysis adherence to the model PBL-Civics trial I results is to look at the practical level or absence of PBL Model-Civics after trials conducted in the field. Assessment tool that is used to look at the level of practicality Model PBL-Civics using observation sheet adherence to Model PBL-Civics. Based on the results of expert validation has met the reliabilities as has been done on the trial I. However, if the results of the study conclude that the instrument is not reliable, then the data obtained Trial results I have not feasible to use to make decisions about the practicality of the model PBL-Civics.

#### a) Syntax Components

The Observations on the enforceability of the syntax components during testing I. turns agreement number two observers 30 and disagreement as much as 0, meaning two observers agree that Syntax Component Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.95) of four meetings. Those results if confirmed by adherence to the criteria, it is concluded Syntax Component Model PBL-Civics done entirely  $(1.5 \le x \le 2.0)$ .

At the initial meeting they last phase in syntax are implemented partly because the lecturers are considered poorly implemented or less perfect, but after reflecting discussions between lecturer and researcher, then at the next meeting all the phases in the syntax done perfectly.

#### b) Social System Components

The observation on the enforceability of the Social System Components turns agreement two observers by 24 and disagreement 0, meaning two observers agree that the Social System Components Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.93) of four meetings. Those results if confirmed by adherence to the criteria, it is concluded Social System Components Model PBL-Civics done entirely (1.5  $\leq$  x  $\leq$  2.0). At the initial meeting they last phase in the social system which is implemented partly because the lecturers are considered not yet accustomed to managing social system Model PBL-Civics, but after reflecting discussions between lecturer and researcher, then at the next meeting all the phases in the social system implemented perfectly.

## c) Principle Component Reaction

The Observations on the enforceability of the principle components of the reaction during the trial I. Based on the data turned out to be the number two observer agreement of 32 and disagreement as much as 0, meaning two observers agree that Syntax Component Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.95) of four meetings. Those results if confirmed by adherence to the criteria, it is concluded Component Model PBL-reaction principle implemented entirely Civics (1.5  $\leq$  x  $\leq$  2.0). At the initial meeting they last phase in the reaction principle is implemented partly because the lecturers are considered poorly implemented or less perfect, but after reflection discussions between lecturer and researcher, then at the next meeting all the phases in reaction principle perfectly executed.

### d) Component Support System

The Observations on the enforceability of a system component support during the trial I. Based on the data turned out to be the number two observer agreement of 20 and disagreement as much as 0, meaning two observers agree that supporting System Components Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.93) of four meetings. Those results if confirmed by adherence to the criteria, it is concluded System Components Model PBL-Civics done entirely  $(1.5 \le x \le 2.0)$ .

At the initial meeting they last phase in the support system implemented partly because the lecturers are considered poorly implemented or less perfect, but after reflection discussions between lecturer and researcher, then at the next meeting of all the phases in the support system implemented perfectly.

Observations on Trial I, it appears that all aspects of the PBL-Civics Model components can be implemented in full, however, continued Test II on the basis that they found implementation constraints as yet unfamiliar students and lecturers use Model PBL-Civics. Thus, all of the components contained in the enforceability of PBL Model-Civics, both a learning tool and technical implementation of learning there are no revisions.

## Trial II Practicality

The main purpose of data analysis adherence to the model PBL-Civics test results is to look at the level of practicality Model PBL-Civics. However, to further emphasize that the observation sheet adherence to Model PBL-Civics used meet reliability empirically, first performed calculations based on the data of instrument reliabilities test results 1. If the calculation results suggest that the reliability of the instrument is not reliable, then the data 1 trial results is not feasible model used to assess the practicality.

The results of the analysis for each component Model PBL-Civics described below.

#### a) Syntax components

The Observations on the enforceability of the Component syntax for Trial II. Based on the data turned out to be the number two observers' agreement by 36 and disagreement of 0, meaning two observers agree that Syntax Component Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.93). Those results if confirmed by adherence to the criteria, it is concluded Syntax Component Model PBL-Civics done entirely  $(1.5 \le x \le 2.0)$ .

At the initial meeting there were aspects of the syntax implemented imperfectly, but after reflection held together lecturers and researchers, then at the next meeting all the phases done perfectly because lecturers have already explained and hold it well or perfectly  $(1.5 \le x \le 2.0)$ .

#### b) Social System Components

The observation of the enforceability of the Social System Components for Trial II. Based on the data turned out to be the number two observers agreement by 24 and disagreement of 0, meaning two observers agree that the Social System Components Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.90). Those results if confirmed by adherence to the criteria, it is concluded Social System Components Model PBL-Civics done entirely  $(1.5 \le x \le 2.0)$ .

At the first meeting until the fourth meeting all aspects of the Social Systems perfectly executed score (2.0), because the lecturer had explained and hold it well and perfect  $(1.5 \le x \le 2.0)$ .

#### c) Principle Component Reaction

The Observations on the enforceability of the principle components of the reaction during the trial II. Based on the data turned out to be the number two observer agreement of 32 and disagreement of 0, meaning two observers agree that the Social System Components Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.95). Those results if confirmed by adherence to the criteria, it is concluded Reaction Principle Component Model PBL-Civics done entirely  $(1.5 \le x \le 2.0)$ .

At the first meeting until the fourth meeting all aspects of the Social Systems implemented perfectly, because the lecturer had explained and hold it well or perfectly  $(1.5 \le x \le 2.0)$ .

- d) Component Support System
- e) The observation of the enforceability of the system components Support for Trial II.

Based on the data turned out to be the number two observer agreement of 20 and disagreement of 0, meaning two observers agree that Component Support System Model PBL-Civics accomplished with *Reliability Percentage of Agreement* = 100% and the average observations (M = 1.95). Those results if confirmed by adherence to the criteria, it is concluded Component Support System Model PBL-Civics done entirely  $(1.5 \le x \le 2.0)$ .

At the first meeting until the fourth meeting all aspects of the Social Systems implemented perfectly, because the lecturer had explained and hold it well or perfectly  $(1.5 \le x \le 2.0)$ .

Based on the analysis of the observed data of the individual components of PBL Model-Civics can be concluded that the model PBL-Civics very successfully (1,  $5 \le x \le 2.0$ ). Thus, according to the criteria of practicality, Model PBL-Civics otherwise be practical after two trials.

## Test Effectiveness Model PBL-Civics

In the previous phases have been raised about the validity of the test results, the results of the analysis of the practicality of Model PBL-Civics together with learning devices and instruments. At this stage, will be presented the results of trials effectiveness of PBL Model-Civics later confirmed on the requirements of effective learning.

## Results of Trial I Effectiveness of Student Activities

Student activity observed by two observers to (5) students selected by the observer directly as a representative of a group learning.

The procedure is the observation of the observer by the observation sheet and list of study groups as a guide to observe the activities of the students. The assessment process carried out three (3) stages: in early learning, mid-learning took place, and at the end of learning. After Observer observed, then the next minute observer to code / number in the column category in accordance with the student activities undertaken.

Observations on activities outside the classroom, observer judging by readiness of students to participate in the learning process that is based on the report and the tasks that have been done at home. While the observations made in the classroom, the observers did direct assessments of students who have been in the process of learning takes place. Based on observations of student activities at the trials I had not yet met. Student Activities unfulfilled will be repaired before the test phase II.

## Student Response

Aspects that are used in the student response is the response of students to the application of the model PBL-Civics as well as the interest of students towards learning by Model PBL-Civics. Based on the results of the analysis of student response to the application of the Model PBL-Civics showed that 100% of students responded positively to the learning model PBL-Civics. Thus, according to the response criteria have responded positively to student learning PBL-Civics.

## **Analysis of Student Learning Motivation**

The results of the analysis of N-Gain Test Trial I showed a big increase student motivation to learn. From the calculation results showed that the average N-Gain of 40 students are in a category is 0.47. It showed that 34 students (80.05%) have increased motivation and 6 students (19.95%) who did not experience an increase in motivation. Based on analysis of data showed that the classical increase student learning motivation after being taught through PBL Model-Civics middle category with N-Gain of 0.47.

Based on the analysis of N-Gain mentioned above, indicates that no student who obtained the N-Gain at 0, but there are 6 students who obtained N-Gain <0.3 includes a lower category, while 34 students obtained N-Gain  $0.3 \le g \le 0.7$  medium category, and no student who obtained N-gain> 0.7.

After following study based Civics PBL-Civics there was a 80.05% increase student motivation to learn and only 19.95% of the students did not have increased motivation to learn.

#### **Analysis of Student Learning Outcomes**

The results of the analysis of N-Gain Test Trial I showed a large increase in student results. From the calculation results showed that the average N-Gain of 40 students is 0.45 to be in the low category. Based on the analysis trial I data showed that in classical learning outcomes of students after being taught through PBL Model-Civics that are in the low category with N-Gain of 0.45.

After following study based Civics PBL-Civics there was a 80.05% increase student motivation to learn and only 19.95% of the students did not have increased motivation to learn.

## Results of Trial II Effectiveness

Student Activity

Student activity observed by two observers to (5) students selected by the observer directly as a representative of a group learning.

Based on the results of data analysis student activity on Trial II has met all of them. Thus, according to the criteria applied to the student activity Trial II has been reached.

#### Student Response

Aspects that are used in the student response is the response of students to the application of the model PBL-Civics as well as the interest of students towards learning by Model PBL-Civics. Based on the results of the analysis of student response to the application of the Model PBL-Civics showed that 100% of students responded positively to the learning model PBL-Civics.

## **Analysis of Student Learning Motivation**

The results of the analysis of N-Gain Test Trial II showed a big increase student motivation to learn. From the calculation results showed that the average N-Gain of 40 students was 0.81 are in the high category. It showed that 33 students (76.70%) have increased motivation of motivation being to high motivation and just 7 students (23.30%) who did not experience an increase in motivation, the result for the classical increase student learning motivation after being taught by Model PBL- Civics at high category with N-Gain 0,81 (very high).

Based on the analysis of N-Gain mentioned above, indicates that no student who obtained the N-Gain at 0, or N-Gain <0.3 (low category), but there are 7 students who obtained N-Gain  $\leq 0.3$  g  $\leq 0.7$  (medium category) medium category, and 33 students who obtained N-Gain> 0.7 (high category).

This indicates that the student after following based Civics PBL-Civics there was a 80.05% increase student motivation to learn from the moderate category into the high category and only 19.95% of the students who have increased motivation to learn from the category of lower middle category.

## Results of Analysis Test Results Learning

The results of the analysis of N-Gain Test Trial showed a large increase in student results. From the calculation results showed that the average N-Gain of 40 students is 0.86 to be in the high category. In classical learning outcome of students after being taught by Model PBL-Civics at high category with N-Gain of 0.86.

This indicates that the student after attending learning based Civics PBL-Civics increased learning outcomes of the lower categories into the high category.

Thus it can be concluded that learning-based Civics Model PBL-Civics and supported by adequate learning device turned out valid criteria, practical, and effective in order to increase motivation and learning outcomes.

#### Conclusions

The conclusions that can be drawn from this study are as follows: (1) Students are programmed STISIP Muhammadiyah Sinjai civics courses after following study with Model PBL-Civics increased motivation and learning outcomes. (2) Model PBL-Civic Education to improve motivation and results of student learning valid criteria based on aspects of components Model PBL-Civics

and learning tools that have been validated by experts and practitioners as well as meet the criteria effective for student activities implemented in full, in response to the positive model, increase student learning motivation, as well as increased student achievement test. (3) Model PBL-Civics based solutions to enhance learning motivation and learning outcomes meet practical criteria for all components of the model PBL-Civics fully implemented and faculty response to the application of the model PBL-Civics positive. (4) Learning model PBL-Civic Education to improve student motivation and learning outcomes meet the criteria effective for increasing student learning motivation, as well as increased student learning outcomes. Advice can be given is as follows: (1) Suggested to the lecturers / teachers Civic Education to implement the Model PBL-PKn widely. (2) Aspects of learning in each of the components can be modified by professors who are interested in using the Model PBL-Civics. (3) Suggested to the lecturers / teachers to be able to reward / praise to the student / students who have attempted to show the action.

#### Disclosure statement

No potential conflict of interest was reported by the authors.

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