

## Improving Students' Critical Thinking Skills in Controlling Social Problems Through the Development of the Emancipatory Learning Model for Junior High School Social Studies in Manggarai

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### Abstract

Efforts to solve and control social problems are the responsibility of social studies teaching and learning in junior high school. One way to support such efforts is by empowering students' critical thinking skills. For effective empowerment of critical thinking skills, emancipatory learning was developed. The goal is to enable students to understand the material thoroughly, have critical thinking attitudes and skills and act critically when dealing with various forms of social problems. After conducting the Research & Development method at two junior high schools in Ruteng City, the effectiveness of this model was analysed. Qualitatively and quantitatively, the teachers performed well in carrying out the teaching and learning activities. The teachers saw this model as a good and creative innovation in social studies learning. Similarly, students gained a significant increase in terms of knowledge, attitudes and skills related to the teaching materials, both individually and collectively. They experienced meaningful learning, which has helped them connect teaching materials to the social reality around them. This research has an impact on the emergence of a critical attitude in the daily life of the students and an increase in the teachers' motivation to develop learning models to empower critical thinking skills.

**Key words:** *Critical Thinking, Social Problems, Emancipatory Learning, Social Studies*

### Introduction

The increasingly widespread social problems experienced by the local community of Ruteng Manggarai, such as environmental destruction, poverty, unemployment, promiscuity, drug abuse among young people, corruption among state officials, etc., indirectly call for education take responsibility to control these problems. In this case, educational activities become the front guard, in an effort to raise learners' awareness about the dangers of the social problems if they are not immediately prevented and addressed: this aids in the sustainability of community life and social movement (Tarman, 2016).

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One subject that can be exploited to raise learners' awareness about the dangers of social problems is social studies in junior high school level (Banks, 1990). This is so because nationally, the substance and structural content of social studies curriculum in junior high school are concerned with the theme of human social relations and how to develop a relationship to aid the nation's welfare (Sulaiman, 2007; Fuad, 2017). This theme is then studied specifically in the learning materials of the social studies subject for first semester eight grade students, on the topic of social issues and efforts to control them (Bahr, 2010; Karabut, 2012). Thus, one way to raise students' awareness to prevent and overcome local social problems is to make the most of social studies teaching and learning activity, especially in discussing the topic of "Social Problems and Efforts to Control Them."

However, to achieve students' maximum competence in the said topic, it is vital to empower critical thinking skills (Zevin, 2007; Savage, 1996). This becomes highly relevant and urgent when discussing issues of social problems and how to control them (Azizmalayer, 2012). Critical thinking components such as "scrutinising", "analysing the effects and causes of problems", "making interpretations of influencing factors", "creating solutions", "reflecting on the meanings and values for present and future life" and "thinking to take practical actions" are fundamental activities in exploring social problems and controlling them.

In order to effectively integrate these components into learning, the author has developed an emancipatory learning model adapted from Juergen Habermas' critical thinking (Edward, 2017; Morrison, 1996). In the practical application of classroom teaching and learning, this developed model integrates the "scrutinising" component into the technical phase. Meanwhile, "analysing the impacts and causes of problems", "making interpretations of influencing factors" and "making solutions" become part of the practical-interpretative phase. Finally, the activities of "reflecting on the meaning and value for the present and future life" and "thinking for taking practical actions" become part of the emancipatory phase.

### **Method**

The method used in this research is R & D (Research and Development) (Borg & Gall, 2003), with a focus on the social studies teaching and learning activities of the first-semester eighth-grade students in Ruteng City, Manggarai Regency, East Nusa Tenggara Province.

### **Research Design**

The R & D method began with a preliminary study, followed by modelling, creating learning media, validating the model and learning media, carrying out a limited model testing, and revising the model. In developing this model, researchers compiled it in Collaborative Action Research activities. Collaborative Action Research in the context of R & D is research involving research partners such as model teachers, IPS teachers in Ruteng City, principals, subject supervisors, IPS Teaching Consultants and education experts.

### **Population and Sample/ Study Group/Participants**

The method, ended with conducting extensive model trials in two schools, SMP Negeri (State Junior High School) I Ruteng and MTs (Madrasah Tsanawiyah/Islamic equivalent of junior high school) Amanah Ruteng. After the extensive trials, the model was disseminated in the meeting of the Social Studies Subject Teacher Deliberation Forum (Indonesian, MGMP). Meanwhile, the two junior high schools were selected with the purposive sampling technique, with the following considerations: (1) Socio-geographically, the schools were adjacent so as to facilitate the researcher to conduct research activities; (2) The characteristics of social problems found in the communities surrounding the schools were relatively the same so as to facilitate the researcher to explore the problems intensively and easily; and (3) Academically, these schools have been accredited and met the national standards.

### **Data Collection Tools**

The data collection in this research is done qualitatively and quantitatively. Qualitative data collection is done through interviews of teachers and students. Qualitative data are also taken through observation of student and teacher learning activities in the activities before, during and after the learning process. While the quantitative data is taken through tests on the assessment of student learning outcomes and assessment of teacher performance in the classroom. The taking is done from the preliminary study stage, model validation, classroom learning practice, assessment of learning outcomes and evaluation after learning practice activities.

### **Data Collection**

Qualitative data and quantitative data are collected using prepared instruments. Once the data is collected, the next activity is tabulated to ensure that the data collected is genuine and representative. In the tabulation activity will be classified data from all classes tested. Based on these tabulations and classifications, then the data are analysed for the purposes of further studies.

### **Data Analysis**

The tabulated and classified data were then analysed. For the qualitative data, the analysis is done through triangulation and joint discussion. While quantitative data analysis is done through inferential statistics, among others through *one sample pretest-posttest test*, *t test* and *z test*. All of these statistical tests are preceded by a prerequisite test. Meanwhile, hypothesis testing uses the *Wilcoxon* test for nonparametric statistics.

## **Findings**

### **a). Pre-Development and Implementation of Emancipatory Learning Model**

The researcher made some important preparations before developing the Emancipatory Learning model on the social studies subject of SMP/MTs. The first thing to prepare was the conceptual-hypothetical design of the Emancipatory Learning model in the form of a model script. The model script is based on the study of the model relevance, referencing some thoughts and literature on Emancipatory Learning and critical thinking skills. Based on the model script, the syntax of the developed Emancipatory Learning model in the social studies lesson was created. In order for the teaching and learning to run effectively, the researcher prepared syllabi, lesson plans and teaching materials about the topic of social problems and efforts to control them.

To measure the effectiveness of the implementation of the learning process, the researcher made an instrument of observation Emancipatory Learning model of implementation. This instrument serves to see all the activities of teachers and students in teaching and learning, in preliminary activities, core activities and closing activities. The aspects assessed are teamwork, expressing opinions and questions, answering questions and generating ideas for concrete action. Meanwhile, to measure the improvement of critical thinking skills of students in groups, the researcher made an instrument of observation of problem-management skills. The instrument stands to assess students' critical thinking skills in groups when thinking critically. The observation

sheet consists of six points of assessment: observing problems, analysing problems, providing solutions, interpreting factors that influence the emergence of the problems, reflecting their meaning to life and thinking about concrete actions. Meanwhile, to measure the improvement of individual students' critical thinking skills, the researcher constructed the problem-management skills test. This test was given before and after the learning activities. This skills test is based on six questions concerning: a) social problems, b) types of social problems, c) causes of problems, d) impacts, e) solutions offered to solve the problems and f) students' critical attitude when dealing with social problems.

The conceptual-hypothetical design of Emancipatory Learning model, learning materials, learning tools/media, learning implementation observation instruments, group work observation instruments and critical thinking skills appraisal tools was assessed and validated for its feasibility. Assessment and validation were carried out by learning experts, supervisors of the social studies subject, school principals and social studies teachers. The results of the assessment and validation show that the design of the Emancipatory Learning model development concept, learning tools and learning appraisal tools are in "good" category and "eligible" for use in discussing the social problems and their management/controlling efforts in the first eighth grade semester of junior high school.

### **b). The Implementation of Emancipatory Learning Model**

After the Emancipatory Learning model concept, the learning media, and assessment instruments were validated, they were then implemented in two schools, SMPN 1 Ruteng with 36 students and MTs Amanah Ruteng with 34 students. Each of the implementations involved a model teacher, teacher-observer, principal, subject supervisor and education expert.

The implementation at SMPN 1 Ruteng took place from August 22-24, 2017. In general, the learning process from the first to the third meeting went quite well. However, the model teacher could not control and manage the class well and did not master the stages as provided in the lesson plans. Similarly, students were not really active because they were less familiar with the presence of a model teacher, observer and education expert in the classroom. After implementation in SMPN 1 Ruteng, an evaluation was carried out, emphasising the following things: 1) The teacher needs to make better preparation in terms of mastery of teaching materials, mastery of learning syntax with the development of EL model and a good understanding of the critical thinking skills

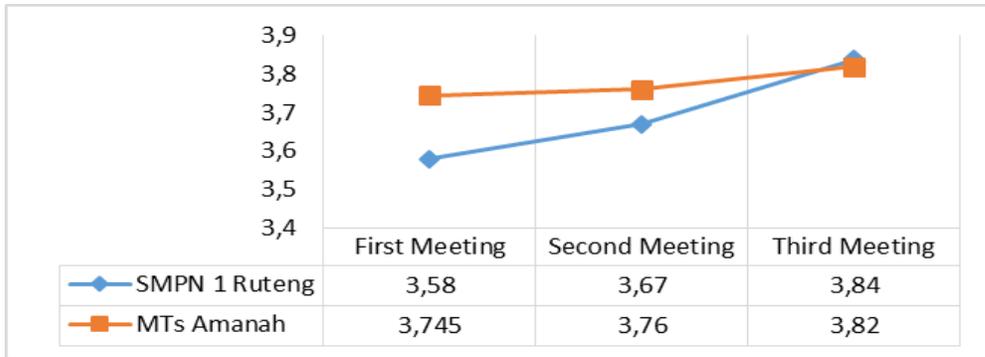
assessment; and (2) The teacher needs to try to stimulate students' active participation, both in listening to teaching materials and during discussions and presentations.

Meanwhile, the second implementation was conducted at MTs Amanah Ruteng from September 11-13, 2017. The implementation involved a model teacher, teacher-observer, principal, subject supervisor and education expert. The preparation of the implementation in MTs Amanah Ruteng was well-made. The model teacher showed the better understanding of the syntax of the Emancipatory Learning model. The model teacher also had a good control of the class and the students were well-directed to follow the learning process. At the time of the discussion, the students were confident to express their opinions critically and intelligently, and their peers responded intelligently as well.

In general, the second implementation went well. The students actively participated and were confident to express their opinions, thoughts and ideas. Although the assessment of critical thinking skills in the development of Emancipatory Learning model was difficult to establish, the model teacher had already begun to master the assessment techniques to measure students' skills. Using the existing assessment formats, the model teacher undertook some forms of assessment, such as individual pre-test, post-test and group assessment, when students discussed and created campaign activities.

#### c). The Effectiveness of Emancipatory Learning Model Development and Implementation

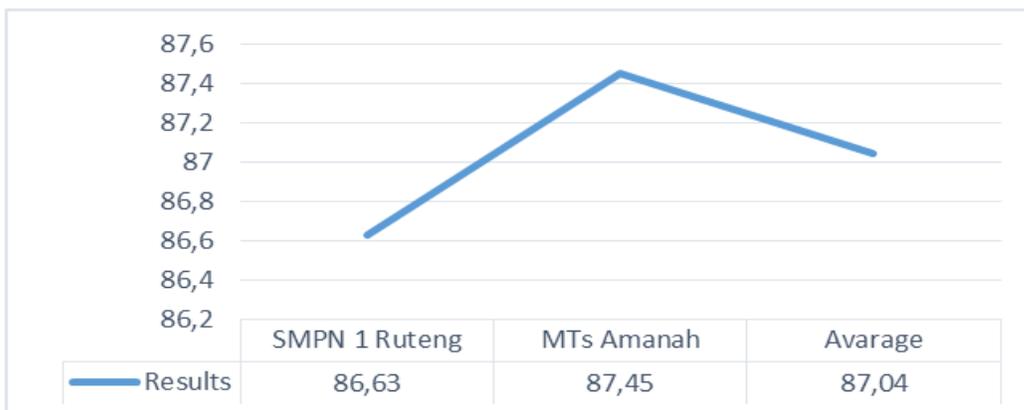
The first and primary data to find the effectiveness of the Emancipatory Learning model implementation are related to teacher performance and student active participation in the teaching and learning process. In general, the results of the observations of teachers' performance in the two schools show the performance of the teachers is in the "good" category. A comparison of teacher performance observation results in two schools is presented in the following figure 1:



**Figure 1: A comparison of teacher performance observation results in two schools**

As illustrated in the figure below, the average scores of teacher performance increased from the first meeting to the third meeting. This increase illustrates that both teachers gain a better understanding of the Emancipatory Learning model syntax and its implementation in the classroom. This increase is also confirmed by the result of interviews with the two teachers. They considered the Emancipatory Learning model very interesting and one that supports the active participation of students and the empowerment of critical thinking skills in managing social problems. According to them, students are trained to see a problem and ask critically about what happened, where and when it happened, who was involved, how and why it happened and what to do to control or overcome the problem.

Similarly, the result of observation of student activity in SMPN 1 Ruteng shows that the average participation of students is 86.63%, whereas that of students in MTs Amanah Ruteng is 87.45%. The scores mean that the students from these two schools are very active in teamwork, expressing opinions and questions, answering questions and generating ideas for real action. A comparison of student activity based on observation results from both schools is presented in the following figure 2:



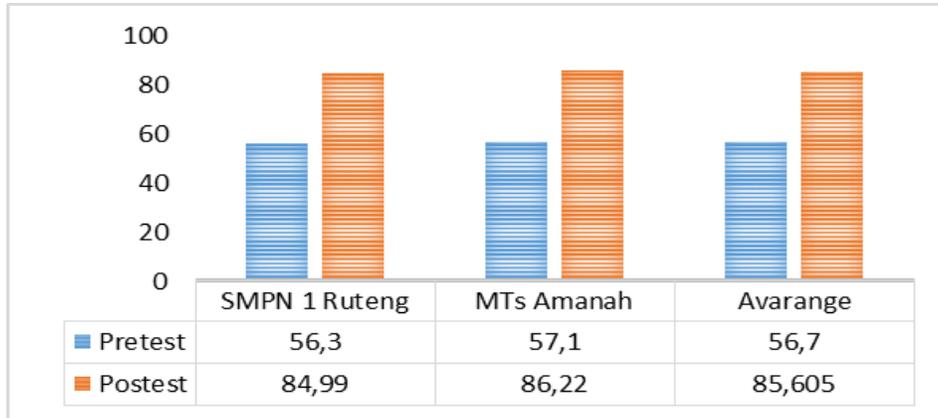
**Figure 2: A comparison of student activity based on observation results from both schools**

During an interview, students from both schools express that they are pleased to attend social studies lessons in which the teaching and learning are connected to social problems that occur around their environment. In their opinion, if social studies teaching and learning are based on social issues around them, it is no longer monotonous and boring; instead, it is fun and empowers their critical thinking skills.

Meanwhile, to see the improvement of critical thinking skills in social studies teaching and learning with the development of the Emancipatory Learning model, the researcher utilised qualitative and quantitative measurement (Cresswell, 2005). Qualitatively, the measurement was done through the observation instrument of critical thinking skills. This instrument was filled out by observers by observing students' behaviour in terms of "seeing problems", "analysing", "making interpretations", "giving solutions", "making reflections" and "thinking of concrete actions". Quantitatively, the measurement of the effectiveness of the Emancipatory Learning model was based on the results of critical thinking skills tests given at the beginning (pre-test) and the end (post-test) of teaching and learning activities.

The qualitative assessment shows that the implementation of the Emancipatory Learning model in both schools is very effective in improving critical thinking skills in controlling social problems. This is characterised by an increasing number of students involved in expressing opinions, analysing problems, providing solutions and thinking about concrete actions. The quality of the questions asked and the ideas proposed by the students are also getting better. This condition shows that students are motivated to think critically about the developed Emancipatory Learning model.

Meanwhile, the quantitative analysis of the effectiveness of the implementation of the Emancipatory Learning model implementation was done to the results of critical thinking skills tests in controlling social problems. The tests were given at the beginning and end of the teaching and learning activity and the results were analysed quantitatively using inferential statistics. The pre-test and post-test results of the students of both schools are described in the following figure 3:



**Figure 3: The pre-test and post-test results of the students of both schools**

The bar chart below illustrates that the average score of critical thinking skills pre-test of the students of SMP Negeri 1 Ruteng is 56.30. After the teaching and learning activities with the developed Emancipatory Learning Model, there was an increase in the score of critical thinking skills by 28.69 points to 84.99. This increase is included under the "moderate" category with an n-gain value of 0.53033. Based on this finding, it can be concluded descriptively that the learning of social studies with the developed Emancipatory Learning model can significantly improve critical thinking skills. Meanwhile, the critical thinking skills pre-test of students of MTs Amanah Ruteng resulted in an average score of 57.10. After teaching and learning activities with the developed Emancipatory Learning model, there was an increase in the score of critical thinking skills by 28.505 points to 85.605. The increase in the critical thinking skills score is in the "moderate" category with an n-gain value of 0.68855. Based on this finding, it can be concluded that descriptively, social studies learning with the developed Emancipatory Learning Model can significantly improve critical thinking skills.

### **Discussion, Conclusion and Implications**

Based on the processes and procedures undertaken, the development of the Emancipatory Learning model to improve students' critical thinking skills has met several indicators of a learning process. According to Degeng (2004), there are three indicators of a successful learning process, namely: (1) Conditions. In applying the Emancipatory Learning, the researcher conditioned the implementation process by preparing hypotheses and validating the model framework, learning media, and assessment tools. Conditioning was also done by preparing model teachers, briefing them about the Emancipatory Learning model development concepts, implementation processes, learning steps and assessment techniques; (2) Method or model of learning. After conditioning, the implementation of the Emancipatory Learning model was carried out. The effectiveness of the implementation of the model is measured based on the analysis of the observation results of teacher performance, teachers' and students' responses after doing the teaching and learning activity, observation of students' critical thinking skills in solving social problem and results of students' pre-test and post test of critical thinking skills in solving social problem (Ennis, 2013). From the results of quantitative and qualitative analyses, it is found that the implementation of the Emancipatory Learning model is included in the "good" category; and (3) Learning outcomes. The implementation of the model that falls into the category of "good" is significantly correlated with achievement of learning outcomes, level of understanding of the materials, and students' active participation. From the results of quantitative and qualitative analyses, it is discovered that the learning outcomes, the level of understanding of the materials and students' active participation increase significantly; teacher performance also experiences a good improvement. Likewise, teachers and students respond positively to the development of this model because it connects the learning materials to daily facts.

Based on the above explanations and interpretation of data, it is concluded that the Emancipatory Learning model is very imperative and strategic in improving the critical thinking skills of junior high school students. However, in the author's opinion, there is a fundamental point underlying the development of this model, namely the Emancipatory Learning model is part of the reconstruction of critical education ideas, or more precisely a contextualisation of the idea of critical education. In the context of Indonesia, the effort to reconstruct the idea of critical thinking-based education becomes very actual and relevant because of the need to solve various social

problems (Leong, 2013; Hasan, 1996). The situation of the Indonesian nation with a high level of social problems requires a vehicle to manage the problems.

According to the author, in the history of human civilisation, educational activities have become a very strategic vehicle to answer human's urgent needs. Therefore, the effort to reconstruct the idea of education on the basis of critical thinking becomes urgent, in addition to studying the literature that contains ideas on education based on critical thinking, as well as conducting empirical-factual studies such as the development of the Emancipatory Learning model. The conceptual and empirical reconstruction of critical education aims to educate the community of learners (students, teachers, etc.), stakeholders and the general public to be increasingly aware of the importance of critical thinking-based education being integrated into curriculum structure and learning content (Tarman, 2016; 1995; Freire, 2004). In terms of the psychology of learning age, curriculum and learning materials in Indonesia, the junior high school level is an important and relevant period to integrate this critical thinking-based education, especially when it is associated with the many problems that arise as a negative impact of technology developments.

The Emancipatory Learning model asserts that critical thinking is an integral part of education. Critical thinking itself is one of the four characteristics (communication, collaboration, critical thinking, and creativity) that learners must have in the 21st century (Zevin, 2007). Critical thinking is also necessary, as the world community in the 21st century is facing great challenges. According to Hunt (1999) and Kincheloe (2008), these social problems factually have a systemic effect on faltering and destructing social order. Poverty, unemployment, crime, natural disasters, population explosions, natural destruction and the like are social problems that arise as a result of the rapid flow of globalisation. In this case, there is no way to get rid of these problems, unless the nation's stakeholders conduct studies and take practical actions (Leong, 2013). To anticipate and address these issues, the government, communities, community agencies, non-governmental organisations, including education actors, need to work in synergy.

According to May Hung (2017) and McKay (2004), a nation with a strong social order is inseparable from educational efforts in building a critical character in its citizens, carried out as early as in school age. Students will grow as rational and critical human beings to discuss various things for the interests of the State's development, including how to control and manage its social problems. Habermas (1987) revealed part of the cause of the emergence of various social

problems; the difficulty in getting out of these problems is the irrationality of the citizens. Newmann (1990) added that a critical-rational society must be built to overcome the irrationality, with education and critical learning in schools. Students' critical knowledge and attitudes are shaped in such a way that they will be at the forefront of transformation (Wilson, 1989). Therefore, it is necessary to develop an emancipatory learning that gives space for the growth and development of critical thinking.

The research and development of the Emancipatory Learning Model have demonstrated an effective and efficient implementation of teaching and learning, and the achievement of desired student learning outcomes. The data show improvement in teacher performance and the general average of student active participation. The Emancipatory Learning model has supported the growth of active student participation and increased critical thinking skills of students in discussing social issues and efforts of managing them. This improvement is proved by the results of qualitative and quantitative analyses, which show that the average pre-test and pos-test scores of students' critical thinking skills have significantly improved.

For teachers, this model is an innovation that supports the growing motivation of teachers in teaching and increases students' active participation in learning. Students enthusiastically follow social studies teaching and learning when the materials are associated with social facts occurring around them. In addition, the Emancipatory Learning model has been effective in improving critical thinking skills and has also contributed to the development of students' social, spatial, interpersonal and linguistic intelligences. Moreover, students and teachers gain a new awareness in respecting and loving the social environment and trying to free their school environment from various social problems.

The author is of the opinion that the great importance of the improvement of critical thinking skills necessitates the development of learning models aimed to improve the skills. The development of such learning models can be started from elementary school through to university level. With this development, it is expected that the education system and the school environment will create a critical thinking culture. Teachers and students will be accustomed to dealing with problems in schools and communities with critical thinking skills. Of course, this development needs to be supported by the strengthening of critical literacy education. In the context of formal education, incorporating a literacy education program into classroom planning and praxis is a matter to be taken seriously. With the support of critical literacy education, the learning process

that aims to empower students' critical thinking skills can be done more meaningfully and efficiently.

The present research and development are still far from perfect, both in terms of methods and procedures of the implementation and analysis of the data. The limited ability of the researcher in conducting this research and development has limited the validity of the results and holistic information. On the other hand, the researcher is aware that the research scope is still limited to the classroom and the school environment. Hence, other variables such as the influences of parents and society have not been significantly investigated in this study. Meanwhile, these variables are very influential on the effectiveness of the implementation of the Emancipatory Learning model. The author hopes future researchers will focus on the relationship of these variables so as to produce a more valid, model which can be accounted for scientifically.

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