Model united nations (MUN): Learning method to enhance critical thinking skill and communication skill for high school students

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Article Info

ABSTRACT

This research was Analysis Design Development Implementation Evaluation (ADDIE) development model with data collection that is student need analysis, product validation, implementation validation, and audience validation. Data collection from 59 high school students found 60% of students needed the development of a fun learning method and 92% wanted MUN to be applied to learning. The results of the product validation gained a score of 97.58% and the results of the validation of the implementation got 95% and the results of the validation of the audience based on the critical thinking skills assessment got an average score of 82.58 and communication skills assessment got an average score of 84.45 with 31 students. Based on the results of the validation of the product development is considered very appropriate without revision. Model United Nations as a learning method is able to train and measure students' critical thinking skills and communication skills.

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1. INTRODUCTION

Today, the 21st-century curriculum paradigm shift requires educators and students to be able to keep abreast of the times in terms of competencies, skills, attitudes, and learning tools. Changes that occur in the 21st Century are very fast and difficult to predict from all aspects of life. Even this change can be an opportunity for his generation, it can even be a big problem if there are no anticipatory steps to regulate or overcome it. Efforts to anticipate and manage 21st-century change through education, education plays an important role in directing the ability and controlling the direction of the younger generation, so they have special skills in facing the 21st century. The 4C's skills in question are, 1) critical thinking and problem-solving skills, 2) creativity and innovation, 3), communication, and 4) collaboration. Especially in the main subjects of geography that need to understand academic content at a higher level, namely to meet the interdisciplinary theme in the 21st century, namely, global awareness, civic literacy, health literacy, and environmental literacy [1].

Over time, teachers are required to provide innovative breakthroughs to achieve educational goals. The innovative breakthrough that is meant is, updating the implementation of learning such as strategies, methods, and learning techniques to assist students in welcoming 21st-century skills [2, 3]. However, teachers often experience failures in education reform both in planning, learning processes, and evaluation

because of errors in identifying technical problems [4, 5]. Furthermore, teacher primarily try to develop their students' critical thinking skills by integrating them into their subjects; not teaching them separately, so it occuring worst educational practice [6]. Renewals given in geography subjects are field learning techniques or experiential learning and outdoor study [7, 8]. Learning methods that are appropriate for the 21st-century curriculum in the context of communication and critical thinking such as role-play and debate, but based on their characteristics do not meet the interdisciplinary themes of global awareness, civic literacy, health literacy, and environmental literacy. Thus, there needs to be innovations in experiential learning-based learning methods as well as fulfilling students' critical communication and thinking skills with the themes of global awareness, civic literacy, health literacy, and environmental literacy.

The simulation of the United Nations meeting Model United Nations (MUN) is a simulation of the United Nations meeting which is participated by participants whose task is to represent certain countries or regions by negotiating as a solution to global issues through debate and diplomacy. This simulation can be classified as competition even though the award is different from the competition in general. One of the awards is the best speaker or (best speaker), best position paper, and other awards. MUN is the best way to build an understanding of complex issues by developing public speaking skills in debates, increasing knowledge, negotiation skills, and critical thinking. This ability will support participants in expressing their aspirations and research at the conference [9].

Based on study about enhancing critical thinking skill is depend on learning method that influenced by learning style [10], therefore the MUN learning method can enhance critical thinking skill, The MUN learning method adopts the Model United Nations implementation flow which aims to make students able to make resolutions to a global problem. Main focus in MUN is case study about states' problem and it can enhance students' critical thinking capabilities [11]. This method also trains students to be ready to become Indonesian delegates to the UN Assembly in the future and to show the existence of youth on a global scale. Although it is only a simulation, students are expected to be able to demonstrate the diplomacy skills of the regions/countries they represent. The MUN method deals with developing writing, negotiation, communication, attitude, knowledge, critical thinking, and linguistic skills [12-16].

The MUN learning method becomes a learning method that is very compatible with the 21st-century curriculum which requires students to have communication, critical thinking, collaboration, creativity and innovation skills in the realm of social studies [17]. Indicators of student skills are measured through the teacher's assessment rubric in classroom observations. In this method, the teacher acts as a corrector (information validity), observer and regulator of the method as a whole. This method can also be modified according to student circumstances and the school environment. Also, this MUN Method can be integrated with learning models according to Sumarsono and Mubarokah [18] namely, problem-based learning, project-based learning, inquiry, and discovery learning. To achieve the success of 21st-century learning, it is necessary to develop geography learning methods in senior high schools by showing global awareness. The purpose of developing this MUN method is to produce MUN learning methods to improve students' critical thinking skills and communication skills and test the accuracy, efficiency, and effectiveness of MUN learning methods in improving critical thinking skills and student communication skills with experiential learning

2.   RESEARCH METHOD

The development research procedure used refers to the ADDIE development model which consists of five stages namely, analysis, design, development, implementation, and evaluation [19]. The reason for using the ADDIE development model is that this development model is by development research for education and provide linkages between the research components included in the development stage. This research was conducted at SMA Negeri 1 Batu, East Java Province, Indonesia. The object of this research was the learning and teaching process especially the learning method with the research subjects namely, teachers and students in the learning process. it focuses on making products in the form of learning methods that are used to measure and improve communication skills and the ability to think critically through geography in high school according to 21st-century learning.

Data collection techniques used were, observation, questionnaire, and interview with the instruments used were observation sheets, questionnaires, and interview guidelines. Questionnaire analysis uses a Likert scale that is 1-4 consisting of inappropriate, less appropriate, appropriate, and very appropriate. Validation is divided into three according to objectives, namely 1) expert validation, addressed to geography learning method experts as validators, 2) user validation, addressed to geography teachers as implementers of learning methods, and 3) audience validation, the target of which is students by measuring communication and thinking skills critical to find out the effectiveness of the learning method. Validation is based on research instruments to test learning methods through the responses and opinions of experts (expert judgment). Analysis of the data used is qualitative data analysis by reducing data and drawing conclusions, and

quantitative data analysis through descriptive statistical analysis. Descriptive statistical analysis uses a scale of 5 with intervals of values 1 to 5. The steps of data analysis are 1) tabulating all data obtained from the validator, 2) calculating the total score of each component, 3) converting the total score in the five categories that are categorized into very feasible, feasible, quite feasible, less feasible, and not feasible with the formula according to Table 1.

Table 1. Converted value

Formula	Criteria
X>Xi+1.8Sbi	Very Feasible
Xi+0.6 Sbi<X=Xi+1.8Sbi	Feasible
Xi-0.6 Sbi<X=Xi+0.6Sbi	Quite Feasible
Xi-1.8 Sbi<X=Xi-0.6Sbi	Less Feasible
X=Xi-1.8Sbi	Not Feasible

With the information that is, Xi = Average ideal score (1/2 (maximum score + ideal minimum score)), Sbi: Ideal Standard Deviation (1/6 (maximum maximum-score score) and X: Score obtained.

3. RESULTS AND DISCUSSION

3.1. Analysis

The first step in this development study is the initial data analysis. Analysis of preliminary data to obtain curriculum needs, student needs, and teacher needs.

3.1.1. Need analysis

The analysis conducted is divided into three analyzes namely curriculum analysis, analysis of student needs, and analysis of teacher needs. Curriculum analysis obtained at SMAN 1 Batu using the 2013 curriculum, that is, the need for the use of learning methods that can support 21st Century learning that is more specific in measuring critical thinking skills and communication skills in students because of the difficulty of growing these abilities, especially in geography subjects.

Based on the results of data mining in the form of a questionnaire to 59 students obtained data in the form of 30% of students strongly agree that learning geography is boring and 42% of students agree that learning geography is memorizing. Based on the characteristics of high school students majoring in social studies in current geography subjects, 42% of students like and 41% really like communicative learning methods such as role-playing, debate, discussion, and presentation, but 53% of these respondents also agreed that the method was carried out with limited time and difficulty in developing and deepening geographic material, even 46% of respondents also experienced difficulties in conveying arguments, ideas, and information. In this case, 66% of students strongly agree on the development of learning geography to be fun. Although only 56% of students know the simulation of the UN session, 92% of students want the UN session simulation to be applied in geography learning.

Analysis of the needs of teachers that is, the need for methods based on global insights accompanied by increased communication skills and critical thinking. The problems experienced by teachers to students namely, lack of knowledge about the concept of geography, lack of global insight, lack of motivation in communicating opinions, arguments, and enthusiasm for learning. Thus, the teacher's needs show deficiencies in inappropriate learning methods to increase motivation with global awareness and development needs related to the UN session simulation so that it can be implemented in high school. Based on the results of the overall analysis obtained is very supportive of the development of learning methods with the United Nations Model to obtain critical thinking skills and communication skills.

3.2. Design

At the design stage, an initial product draft planning is carried out with the title "Guidelines for Implementing Learning Methods for the UN Session or Model United Nations (MUN) Geography Subjects for High School Students". The drafting process is based on an analysis of curriculum needs, teachers and students. The development design is based on basic competencies in the curriculum that has global or regional studies such as flora and fauna material, food security, maritime, regional and regional, developed and developing countries, culture, natural resources, and other materials that are related to global studies. In compiling the learning method in the MUN learning method implementation guide consisting of the introduction, the stages of the method, the role of the teacher in the implementation of the method, the flow of the plan, classroom arrangement plans, rules and regulations, the rubric of communication skills

assessment rubric, the rubric of critical thinking skills assessment, and examples of lesson plans with flora and fauna material.

3.3. Development

At this stage, product development is ready for testing. Based on the results of the validation on product development obtained 121 values from a total score of 124 or has a percentage of 97.58% which can be categorized as very feasible according to Akbar [20]. Also, validation carried out by practitioners or teachers as implementers of learning methods obtained a value of 57 from a total score of 60 or got a percentage of 95% which can be categorized as very feasible which according to Akbar [20] is very good to be used without revision. Products that have been developed with the stages of implementing the MUN learning method are:

a.   Introduction to MUN & problem orientation

The initial activity of the MUN learning method is to introduce MUN to students through direct socialization and through watching technical videos on the implementation of MUN. Whereas, problem orientation is carried out by determining topics such as in KD 3.2 material (the distribution of flora and fauna) and can choose a topic that is, efforts and problems of conservation of flora and fauna in the world. With this initial activity, students are expected to be able to understand the basis of the implementation of the MUN learning method and understand the issues that will be raised.

b.   Role selection

Role selection is a student activity in choosing a position in the MUN learning method. There are two choices of roles, namely, chair of the session (Chair) and delegation of countries/regions. The chair's role in this session is to set the course of the session and submit a resolution. The task of the state or territory delegation at this session is as a session participant who submits data, news, research on the state/territory in writing and verbally, as well as a reconciliation of other states/region problems, even supporting and rejecting the state/region proposal. Participants of the session or country/region delegation conduct verbal communication in Indonesian by PUEBI. The role selection technique is carried out maximally on the day before the session and is carried out individually by filling out the online and offline role forms so that each student in the class has their respective roles and no country is represented by more than 1 student. The composition of the number of chairs and countries/regions is 1:10.

Also, determining the role of this activity is based on several UN committees such as UNESCO, UNHCR, and the European Union. The use of a region or country is based on the issues raised. If the problem orientation is globally based then it uses the UN member system and if it is based locally then the division is adjusted to Indonesian territory. Furthermore, the determination of regions/countries is also considered based on the complexity of the country/region or relationship problems/topics of the session. The division of Chair or chairperson is a regional system such as Asia and Australia, Africa, America, and Europe, if using a global system.

c.   Position paper preparation

The position paper is a country/territory delegation document that describes the conditions and position of the region or country according to the topic of the session. The position paper is prepared after the participants know their role as the country/region chosen [21]. The Position Paper prepared by the participants consisted of 1) Abstracts, 2) Current and Past Situations and Actions taken by the organization (UN / Government of Indonesia), and 3) Conclusions and Proposals for Action. Collection of Position Paper no later than H-1 before the trial. All delegations are required to prepare a position paper to facilitate delivery to the chair of the session and other delegations. The session leader will receive a position paper from the teacher according to country/region representation which is used as a basis to see the direction of the session and predict resolution. At this stage begin to construct students' critical thinking skills, so that teachers can assess the level of critical thinking students after receiving the results of the student position paper.

d.   Moderated Caucus

Moderated Caucus is a debate in a trial that is governed by the chair of the session. Previously, each delegation made placards according to the names of their representatives [22]. During the session, the delegation who wishes to deliver must first raise the placard. Then, the chairperson will choose randomly and invite the delegation to submit the position paper and/or submit suggestions or arguments to the country/region concerned. Each delegate can only deliver for 1-2 minutes without limiting the number of times it is submitted. This stage influence on students' perception about conflict and cooperation among each

country is unexpected. In contrast with our expectations and with what one might have assumed about MUN and possible reason could be that students feel obliged to compete to gain awards [23].

In the Moderated Caucus stage, students are required to be able to convey position papers well and show their regional representation by being able to use their linguistic accent to position themselves as actual delegates so that they know in detail the conditions of the chosen country. Also, a delegation from one country/region can also refute another country if it is proven that there is an error, but this can also backfire for the delegate who refutes if the delegated one can prove it. If in the session no one raises the placard, the chairperson can appoint a delegate who has not submitted or is related to the previous argument. The end of a moderated caucus is when all delegates have submitted and built resolutions on the problem abstractly. At this stage, students demonstrate communication skills and learn to develop them. The teacher can assess students' communication skills by making observations.

e.　Un-moderated Caucus

Un-moderated Caucus is an informal debate outside the session that aims to build collaboration between delegates on the debates conducted [22]. Delegates who approve or side with a camp will gather to offer a resolution by making a worksheet. There are no group members' limits, but they are focused on drawing up relevant resolutions. The Un-moderated Caucus stage is carried out for 10-15 minutes by producing worksheets containing resolutions that are then collected to the chair of the session.

f.　Resolution

The resolution stage is the hearing of the resolution by the chair of the session to all delegates and submitting a vote for the resolution of the session to be accepted [24]. The resolution must be approved by at least 50% + 1 of the countries/regions present. This stage becomes the peak of the session where a new resolution will be born and becomes a joint agreement of all participants of the session. At this stage, communication skills and students' final critical thinking skills are demonstrated so that the teacher can conduct a thorough evaluation.

g.　Evaluation and awarding

The final stage of the trial is evaluation and appreciation, the teacher's activities to conclude learning with students and provide comments on the implementation of the trial, as well as providing suggestions and solutions to students for further learning. Giving awards to students in categories namely, Best Speaker, Best Position Paper, Most Outstanding Delegates, and Best Adjudicators. The award recipient is judged based on the teacher's observations to students according to the realm of awards, namely, 1) Best Speaker is given to students who have good communication language and can give effect to the trial and the highest quality of deliverers, 2) Best Position Paper is given to delegates who have the best writing quality in terms of language, content, and conclusions, as well as originality, 3) Most Outstanding Delegates are given to delegates who have the best position and speaking paper values, and 4) Best Adjudicators are given to the most professional session leaders and understand the trial from the delegation position paper.

3.4. Implementation

Based on the development stage, the implementation stage was carried out in the Geography subject matter of World Flora and Fauna Conservation at SMAN 1 Batu. Experiments carried out with classical planning by the Learning Implementation Plan. This method is carried out in two meetings with each meeting lasting 80 minutes. All stages have been carried out correctly. The first meeting students carry out the stage of MUN introduction and problem orientation, role selection, and position paper development. Most students are enthusiastic about the method being taught. Students train themselves in developing critical thinking skills through the directions and exercises given by the teacher at the initial meeting. Until before the implementation of the next meeting, students must collect Position paper as a requirement to attend the trial.

At the next meeting, students carry out the moderated caucus, un-moderated caucus, resolution, evaluation and awarding stages. At this stage, students are very enthusiastic about the learning method. Students are very active in raising placards to give their arguments for the problems being discussed. All stages were carried out well and the measurement of communication skills and critical thinking skills had also been carried out. Thus, the implementation process is smooth and unhindered.

3.5. Evaluation

At the evaluation stage, the practitioners and audience validate. Validation conducted by practitioners yields a value of 57 out of 60 so that it is very appropriate and accurate without revision according to Akbar [20]. Audience validation is assessed according to assessment instruments for the ability to think critically and communicate skills. The results measured in 31 students on critical thinking skills

scored an average of 82.58 out of 100 and communication skills scored an average of 83.45. Based on the results of practical validation and validation of the audience obtained the feasibility category that is very feasible so that it is in accordance with without revision. Learning outcomes in this research and development is depends on teacher being given the academic freedom needed to formulate and interpret it, so it would taking the responsibility [25].

4. CONCLUSION

The development of learning methods with the United Nations Model can measure critical thinking skills and student communication skills and this learning method can be used as a variation of the teacher in training and measuring the level of students' critical thinking and communication skills. The results of this development still have shortcomings in the evaluation stage of the ADDIE Development model procedure.

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