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IMPLEMENTING SIM-OVG MODEL IN LEARNING ECONOMICS AT SMA NEGERI 10 SAMARINDA

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ABSTRACT
The reason underlying the implementation of the present study was because there was a finding revealing that there were still several students from cross-economics class of XI MIPA having difficulties in understanding the lessons. In addition, the students also had a kind of thought that economics was just about memorizing things which was not interesting and challenging that resulted in their unsatisfied learning outcomes. Therefore, the SIM-OVG model needed to be implemented in the learning process. The instruments of the present study were observation and, students' learning reports and work method. The population of the study was the second grade students (4 classes) who enrolled economics subject at SMA Negeri 10 Samarinda, whereas the samples of the study were the students of XI MIPA-1 class (cross-economics class) at SMA Negeri 10 Samarinda. The number of the population and samples was 101 and 23 students respectively. The study lasted for one semester. The description of the classroom observation, the students' scores and the group presentation were obtained for the data analysis. After implementing the SIM-OVG model, the results showed that; 1) in the affective aspect, the students showed a better attitude, 2) in the cognitive aspect, there was an improvement on the students' learning outcomes (before the implementation of SIM-OVG model in XI MIPA-1 class, 52,17% of the students did not reach the passing-grade, but after the implementation, 100% of the students reached the passing-grade, and they also looked enthusiastic in doing their assignments, and 3) in the psychomotor aspect, the students became more skillful, creative, and be able to perform high level thinking. The researcher suggested that the dissemination should be done through MGMP forum and SIM-OVG model workshop. In addition, the researcher also suggested the integration of SIM-OVG model with other learning models and hoped that every school provided adequate facilities to support the implementation of SIM-OVG model.

Keywords: economics learning, SIM-OVG model, senior high school students

1. INTRODUCTION

From the classroom observation during the learning process in the cross-economics class of XI MIPA-1 class at SMA Negeri 10 Samarinda for Kompetensi Dasar (KD) 3.2. about "analyzing the concept of economic growth and development as well as its issues and the problem solving," on Indikator Pencapaian Kompetensi (IPK) 3.2.3. about "analyzing the theory of economic growth" from the book entitled Eksplorasi Nalar Siswa Ekonomi for the class XI on senior high school students by Rahardja, et al (2015), the researcher found that 12 students had

difficulties in understanding the lesson as shown by their scores that were below the passing-grade (KKM 75). After conducting an observation and interview intensively towards several students, the researcher found that there was a paradigm among the students of MIPA that the concepts of economics were just about memorizing things which was not interesting and challenging for them. They lacked of motivation which made them look slaggy and bored during the learning process.

As an economics teacher, the researcher tried to figure out the solution in order to deliver the lesson in more interesting, pleasing ways to make the students' behavior and mentality better. Klined as mentioned in Hernowo (2005) revealed that , "schools should be the center of all interesting activities in every city, and students will learn easily when guided to find out the learning principles on their own." It was also in line with Johnson as translated by Setiawan (2007) through his theory that "to make teaching-learning activities interesting and meaningful." To cope with this issue, the researcher made an innovation to teach the theory of economic growth by implementing a new model called SIM-OVG model. The model was inspired from the inquiry learning model that encourages students to actively figure out things and learn from it. It is in line with Sanjaya (2012) that "An inquiry learning strategy is a sequence of learning activities concerning on critical and analytical thinking process to figure out and solve a particular issue on their own."

SIM-OVG model is an acronym describing the inquiry learning model with social and constructive patterns. SIM stands for "***Stimulasi*** (stimulation), ***Identifikasi masalah*** (problem identification), and ***Mengumpulkan informasi*** (gathering information). This is the first step in which students obtain raw materials by digging up information from various resources. On the other hand, OVG stands for "***Olah informasi*** (information analysis), ***Verifikasi hasil*** (result verification), and ***Generalisasi*** (generalization)". In this step, the students are encouraged to have a high order thinking to prepare the presentation of the findings

2. METHOD

According to Miarso (2007), "a learning technique is one of the learning system components that is chosen and implemented by teachers by integrating six learning system components in forms of messages, people, materials, tools, techniques, and environments to reach the learning goals." Thus, teachers should be creative to integrate the six learning system components and be able to design the proper learning techniques in the lesson plans.

The implementation of SIM-OVG model on this study was conducted in economics class by assessing three aspects as stated on the lesson plans such as cognitive, affective, and

psychomotor. In shorts, all learning activities on economics subject had become the information source in this study.

The implementation of SIM-OVG model in this study was measured based on the result of the observation during the learning process of the economics class and the students' learning outcomes. Thus, all activities involved during the learning process in that subject were taken into account as the information resources in this study.

There were 23 students of XI MIPA-1 class (cross-economics class) at SMA Negeri 10 Samarinda employed as the subjects of this study. The total number of the second-grade students enrolling the economics subject was 101 students grouped in four classes. This study had been conducted for one semester. The data were obtained from the assessment of the three aspects. The data of affective assessment were obtained from an observation of the situation, activities, and students' motivation during the learning process that was recorded by using an observation sheet. The data of cognitive assessment was collected from written test, oral test, and class assignments by using a multiple choice test on the material lessons that the students had learnt before. On the other hand, the data of psychomotor assessment was recorded from a group presentation that was assessed by using an assessment sheet.

In order to keep the validity of the data, the researcher conducted; 1) an objective assessment, 2) a careful observation, and 3) inter-rater reliability.

3. FINDINGS AND DISCUSSION

Findings

1. **SIM-OVG Model**
   a. **The rationale behind SIM-OVG model**

SIM-OVG model is a new term that is inspired from a social inquiry learning model. The researcher implemented this model in this study because the researcher believed that the model could attract the students' attention which could affect their understanding about the lesson to become more optimal.

The concepts of the implementation of SIM-OVG model in the learning process are described through the following operational stages:

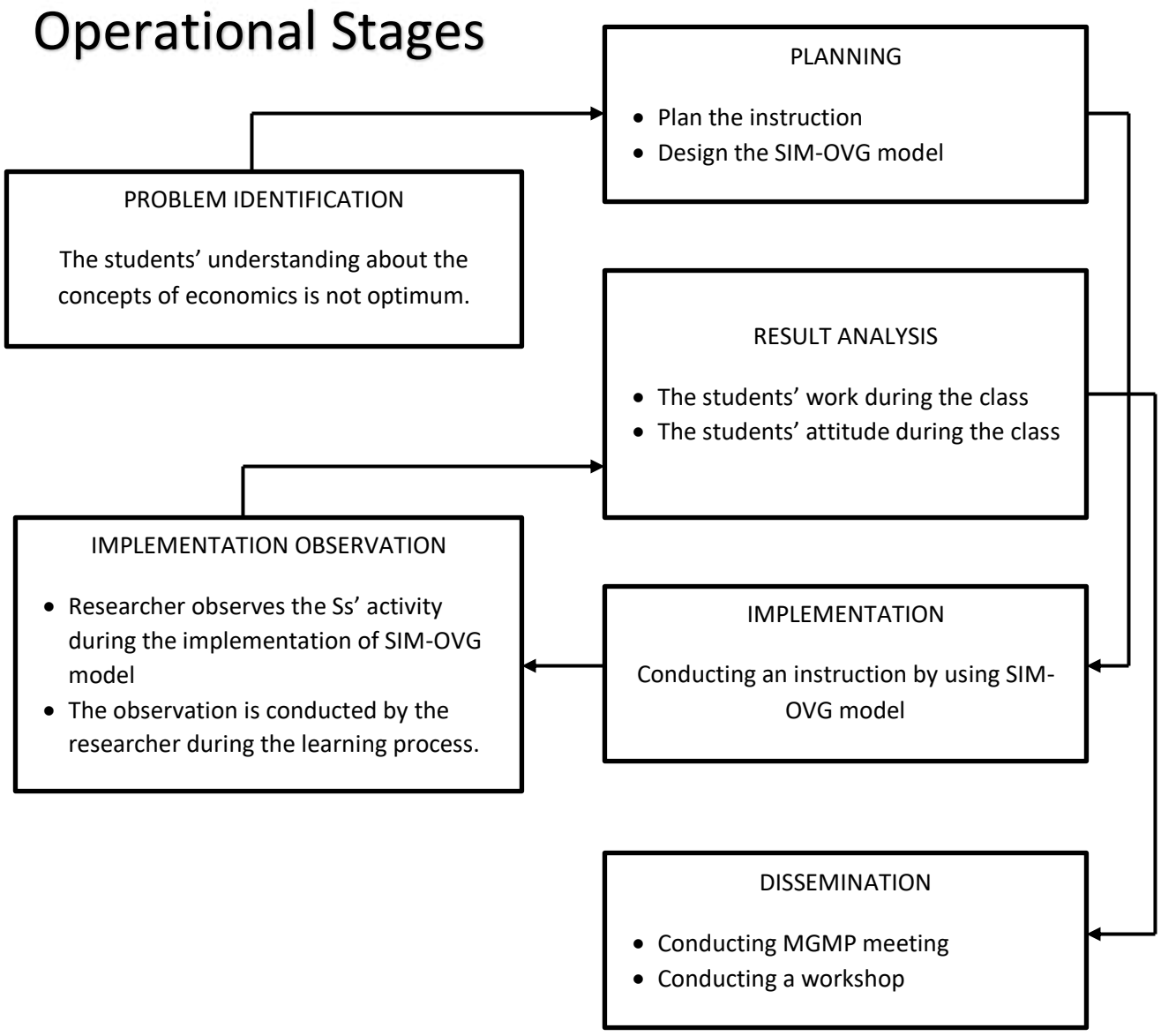

Figure 1.

Operational Stages of SIM-OVG Model

First, the researcher found some problems while teaching economics and came up with an idea to design SIM-OVG model. Second, the researcher planned an instruction and designed SIM-OVG model into the learning stages in a lesson plan. The lesson plan was made coherent in order to ease the students understand during the implementation in the class. Third, the researcher conducted an instruction by using SIM-OVG model from the first stage to the last one. Fourth, the researcher conducted a very careful observation on the students' activity during the learning process. The researcher also noticed the change of the students' attitude and behavior, including

their strengths and weaknesses during the learning process. Fifth, the researcher analyzed the students' work during the learning process to measure the effect of SIM-OVG model. Sixth, the researcher conducted a dissemination of the findings through MGMP forum and workshop in order to spread out the effect of the SIM-OVG model implementation to the other teachers, either for economics or other subjects.

b. SIM-OVG model in learning process

In the SIM stage, the researcher gave stimulation to the students through powerpoint slides by using a projector about the theory of economic growth. The students were asked to observe and analyze the concepts and then complete the information with other learning resources such as books, internet, or other relevant resources to obtain data as problem identification by asking some questions related to the lesson, and discuss it with their friends to figure out the answers.

In the OVG stage, the students analyzed the information that they collected about the questions to predict the best answers as the foundation to draw a conclusion and verified the findings by analyzing and comparing the discussion results to make a generalization or a conclusion. Next, the students presented their findings alternately in front of the class. As one group presented their findings, the other groups became the audiences who were responsible to give comments to the presenters during the question and answer session. At this stage, the students were encouraged to give feedbacks to one another.

During the learning process, the researcher also introduced a peer-tutor. The students with higher learning ability were given a role as the peer-tutor to help 12 other students with a lower learning ability. The class was divided into four groups in which three students with lower learning ability were involved in each group, so they were able to share their ideas and experiences to one another. While doing the presentation, the students who became the presenters were selected from those with lower learning ability. This aimed to give a challenge and motivation in order to make them more serious in preparing themselves for the best performance in front of their friends. On the other hand, the students with higher learning ability were appointed to be the moderator and secretary.

SIM-OVG model integrated two stages of competencies, namely; 1) SIM: the stage of collecting raw materials from various resources, and 2) OVG: the final stage of processing the raw materials to be a product for the presentation. The students were exposed to such activities in order to understand the lesson deeply and increase their insights from the various learning

resources to prepare the presentation. In this stage, they were required to have a high order thinking skill.

2. The Pre-activity of SIM-OVG Model for Economics Class

The pre-activity for the economic class aimed to distract the students' attention towards the materials that the researcher was about to deliver. This was to make the students become more focus on their learning. The pre-activity was conducted through some stages as follows:

a. Opening the class

The teacher greet the students, appointed one students to lead the pray, checked the attendance, and asked the students condition and readiness to learn.

b. Giving apperceptions about the material to learn

The teacher asked some questions as a pretest to the students to help them recall the previous lesson in relation to the current materials. This was to boost the students' learning motivation.

c. Explaining the subject matters that they were about to learn as well as the goal that they wanted to achieve

This activity aimed to make the students become more aware on their learning. The description about the materials that the students got from the teacher allowed them to track the path of their learning, so they were able to prepare the resources that they need.

d. Describing the indicators to measure

The indicator to measure on the first week meetings was the students' ability to explain some definitions of economic growth, identify factors influencing the economic growth, explaining the theory of economic growth, and calculating the economic growth.

e. Explaining SIM-OVG model to the students

The teacher explained the techniques of the implementation of SIM-OVG model that they were about to apply in the first week meetings. Next, the teacher divided the students into four groups.

3. The Core Activity of SIM-OVG Model for Economics Learning

In the core activity, SIM-OVG model was implemented in the learning process for economics subject on the second grade for KD 3.2., IPK 3.2.3. which aimed to optimize the students' understanding about the concepts of economics. During the learning process, the researcher observed the students' activities to conduct an objective assessment.

The implementation of SIM-OVG model in economics class was conducted by integrating two stages of competencies which were linked to one another. The first stage was called SIM. In this stage, the students were encouraged to get involved in a group work where they could observe, understand the issues, identify the problems, and gather the raw materials. While the second stage was called OVG. In this stage, the students processed the raw materials, conducted a verification and produced a final product for the presentation.

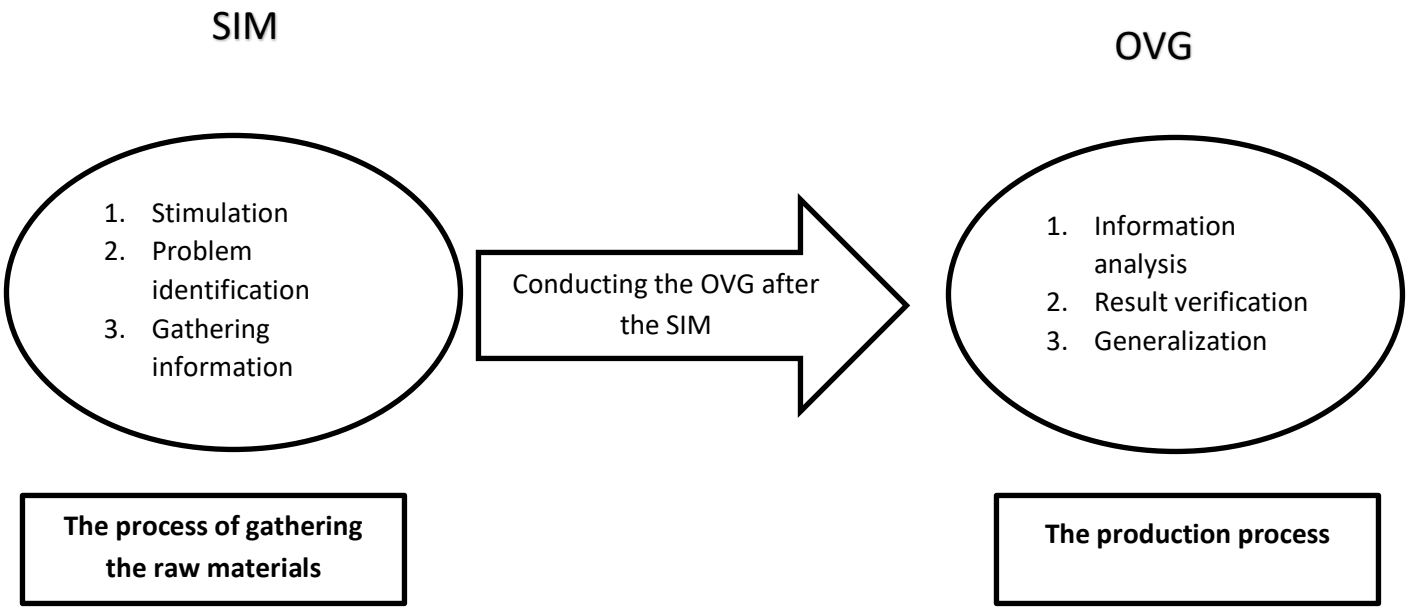

Figure 2.

The procedures of SIM-OVG

In the first stage, SIM, there were three steps as follows; 1) the researcher gave the students stimulations by displaying the core materials by using a projector. Then, the students were required to look, observe, understand the information, and prepare some questions related to the materials, 2) the students were encouraged to work in groups to discuss and identify the problems and to figure out the information from various learning resources such as books, internet, and other relevant resources. In addition, the students were allowed to use their electronic devices like mobile phone, laptop, etc. to help them get the possible answers, 3) the students were demanded to collect the information that they got from various learning resources in the group work and then typed the work on their laptop.

During the learning process in the first stage, the students with higher learning ability were assigned to be the peer-tutor for their friends who were still unclear about the lesson. For instance, in the learning process, the implementation was on the material of the concept of economic growth. This activity aimed to instill the character of caring and helping one another. In the second stage, OVG also consisted of three steps. Here, the teacher guided and asked the students to design and create the presentation materials about the theory of economic growth in the societies, either from domestics or internationals. 1) Each group worked on the assignment by using their laptop to solve the problems by analyzing the information from the obtained data related to the proposed questions in the previous stage to predict the proper answer as the foundation of solving the problems and drawing conclusions. 2) Each student in the group discussed the verification results, analyzed and compared the results of their discussion related to the problem that they got. 3) The students did the generalization process which was defined as the process of summarizing and analyzing information in which later they were able to present it by using powerpoint slides.

The students did the presentation in front of the class alternately by using their laptop and projector, while the other students acted as audiences. They were assigned to give feedbacks such as asking questions and giving suggestions during the question and answer session. They were also allowed to give comments and critics whether the presenters' findings were correct or not. The students with higher learning ability were appointed to be the moderator and secretary, whereas the students with lower learning ability were assigned to be the presenters. All members of the groups were involved in drawing the conclusion. The teacher just became the facilitator during the learning process.

4. The post-activity of SIM-OVG Model for Economics Learning

In the post activity for economics learning, five steps were conducted as follows:

1) The teacher and the students were involved in the process of drawing the conclusion about the learning materials of the economic growth that they had learnt before.
2) The teacher conducted a posttest to measure the students understanding towards the materials that they had learnt and discussed about.
3) The teacher gave an assignment and exercise outside the school hours, and the students submitted their answers via email.
4) The teacher motivated the students to learn the materials that they were going to learn in the following weeks.
5) The teacher closed the activity by greeting and praying.

5. Assessing the Students' Learning Outcome during the Economics Class

A theory related to the students' learning outcomes was stated by Dimyati & Mudjiono (2002) saying that, "students who learn something are meant to improve their cognitive, affective, and psychomotor ability." In addition, Djamarah (2005) stated that "learning outcome is the result of the interaction between learning and teaching activities, including the teaching impact and the accompaniment impact."

Teaching impact (direct impact) is the goal to achieve through an instruction program done by teachers after class teaching. The result can be obtained directly after the class because the value can be measured concretely and with certainty such as cognitive and psychomotor aspects as recorded in students' learning reports and academic transcripts. On the other hand, the accompaniment impact is a learning result that can be obtained from a long process because the students' behavior (affective aspect) cannot be measured concretely. Because of the students' improvement as a learning result, the will, the desire, and the attention towards their surroundings will improve as well. Thus, it can be concluded that learning outcomes is a proof of a successful learning or the ability that the students obtain after learning process as measured quantitatively. The learning outcome will be perfect if it consists of three aspects; cognitive, affective, and psychomotor. On the contrary, the learning outcome is considered unsuccessful if the three criteria are not accomplished. According to Tayibnapis (2008), "in order to measure whether someone has a successful learning, an evaluation has to be performed to figure out the achievement or learning outcomes that he/she gets after the learning process."

a. The results of the students' affective assessment on economics class after the implementation of SIM-OVG model

As described before, the results of the affective assessment needs a long process because the students' behavior cannot be measured concretely. However, in this case the researcher described the results of the observation, and the results showed that: 1) the students no longer used memorizing strategy in learning. they even tried to understand the concepts and actively involve themselves into the learning process, 2) learning economics became more interesting and fun, 3) SIM-OVG model developed characters to cooperate and respect others.

b. The results of the students' cognitive assessment on economics class after the implementation of SIM-OVG model

The results of the cognitive assessment could be obtained directly after the class because the score could be measured concretely and with certainty. The results are shown as follows:

1) The students' learning outcomes are increased
   a) The students' scores obtained in oral and written test

      Before the implementation of SIM-OVG model in XI MIPA-1 class (cross-economics class) at SMA Negeri 10 Samarinda, 12 out of 23 students got scores below 75 (52,17% of the students did not reached the passing-grade for the economics subject). After the treatment, the students became more enthusiastic in learning and were able to get scores above 75 (100% of the students reached the passing-grade).
   b) The students' scores obtained from the assignments

      Before the implementation of SIM-OVG model in XI MIPA-1 class (cross-economics class) at SMA Negeri 10 Samarinda, 12 out of 23 students did not do their assignments properly, even some of them did not do the assignments at all. After the treatment, all students were enthusiastic in doing their assignments.

c. The results of the students' psychomotor assessment on economics class after the implementation of SIM-OVG model

The results of the psychomotor assessment could be obtained right after the class because the score could be measured concretely and with certainty. The assessment was conducted through a group presentation, and the data were recorded on an assessment sheet during the class. The results showed that; 1) the students became more creative in preparing the

presentation materials, 2) the students felt happy to present their work in front of the class, 3) the students were confident to speak up in front of their friend and were able to develop their thinking skills creatively, 4) the students could perform a high order thinking skills, 5) the students' understanding about the concepts of economics on Basic Competency/*Kompetensi Dasar* (KD) 3.2. Competency achievement indicator/Indikator Pencapaian Kompetensi (IPK) 3.2.3. became more optimal.

Discussion

Curriculum 2013 which implements the activity-based expects the interaction and participation among the active students. Also, the learning process is expected to use a scientific approach and competence-based which was obtained from various learning resources and prioritizes the students' empowerment and cultivation as long-life learners. As an economics teacher, the researcher has tried to find innovations for the class instruction. Hence, the students are expected to be more excited and active in learning and understanding the lesson easily. SIM-OVG model was very helpful to provide aids for students to understand the concepts of economics.

First, the students looked enthusiastic and actively participated in the learning process even though at the beginning there were some of them withdrew themselves and hesitated to work in the groups. However, by working with the peer-tutor, these issues were finally solved. Earlier, the students who were not active felt alone and inferior. Soon after the learning process, they ended up to be more aroused. As a result, they no longer used the memorizing method. They understood the concepts better and participated actively in the learning process, so their high order thinking skill was improved.

Second, the students could learn more on how to prepare the presentation materials by looking for information in the discussion and sharing the results on the presentation. In addition, some students seemed to be nervous in doing the presentation because they rarely did it. In this case, peer-tutors play some important roles such as helping their friend practice, guide and motivate them to have courage and self-confidence to perform in front of the class. The more practice they had the more fluent the students presented the results. The students felt happy due to the opportunity given to them to be able to speak and develop their thinking skills. Consequently, they felt proud of themselves and were eager to perform their best in front of their classmates.

Third, the ability to cooperate and appreciate other people's work was also gained though discussion and presentation as the teacher had told in the beginning. Not only that the students were asked to help one another, but also it was a compulsory to show the appreciation for other groups during the presentation, especially in question and answer session. The main goal was to understand the lesson optimally no to compete to be the best.

Fourth, the students understood better on the concepts of economics on the second grade on KD 3.2., IPK 3.2.3. This happened because of some helps from the peer-tutors. Each student with higher learning ability was requested to help those who still had difficulties in learning by using SIM-OVG model. The teacher was the one who selected the group members. There were three students with higher learning ability who helped other three students with lower learning ability. Then, they had to try until they could assure them that they truly understood the lesson.

Fifth, most of the students said that they felt more motivated to learn the theory of economic growth by using SIM-OVG model. The learning process was fun, not boring, and sleepy because all of the students participated actively in the learning process. Therefore, students were able to explain the economic growth very well. This led to better learning outcomes. The students' scores on Basic Competency (KD) 3.2. with Competency achievement indicator (IPK) 3.2.3. showed an improvement. Before the implementation of SIM-OVG model, 12 out of 23 students did reach the passing-grade (scores below 75), but after the treatment all the students' scores were improved and exceeded the passing-grade.

The implementation of SIM-OVG model had positive effects on students. They felt happy in the learning process because the method was more interesting, therefore they did not need to use the memorizing method anymore. The students were able to understand the concepts and have higher order thinking skills. They became more interested in writing which guided them to be more critical. The students were accustomed to analyzing information, discussion, and presentation.

4. CONCLUSIONS

Based on the researcher's experience, results, and the implementation in the learning process in the class, it can be concluded that OVG could be done after SIM. Therefore, the process must be carried out in stages step by step.

The implementation of SIM-OVG model contributed to some positive effects on affective, cognitive, and psychomotor aspects. The students felt joyful and received great

experiences. Thus, it could be summarized that SIM-OVG model was first, changed the students' point of view on how to learn economics started from memorizing to be more understanding and more analytic. In terms of problem solving where at the end of the phase, the students might have a better constructive thinking skill. Hopefully, what they had learnt will always be remembered and beneficial for their future endeavors including after the graduation and in the work place either as the citizens or entrepreneurs. Second, the students became active readers because they were required to look for more information from many learning resources during the implementation of SIM-OVG. Third, SIM-OVG model might provide a place for the students to develop their thinking and public speaking skills. These could provide aids for students to have better presentations and thoughts in the discussion. They finally were able to identify their strengths and weaknesses in order to achieve their goals. Fourth, SIM-OVG model might help the students to build better characters including cooperating and appreciating others. Especially in terms of caring, team works, providing helps, appreciating strengths and weaknesses in each individual and group. Fifth, the higher learning motivation on the study of the economic lesson, the more optimal the learning outcome would be as proven in the findings of this study. Before the treatment, 12 out of 23 students did not reach the passing-grade because their scores were below 75. However, after the implementation of SIM-OVG model, 100% of the students were able to exceed the passing-grade.

By implementing SIM-OVG model, the researcher gave recommendations for future research. First, SIM-OVG model was implemented well in learning process in the second grade of SMA Negeri 10 Samarinda. Therefore, the dissemination should be carried towards MGMP forum and workshops. Second, the learning model should be conducted with other SIM-OVG models that were adjusted to KD and IPK. Third, the facilities should be provided to support the implementation of SIM-OVG model by all schools.

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