Application of simulation learning models in improving motivation and learning outcomes of accounting information system subject

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ABSTRACT

The purpose of this study is to improve student motivation and learning outcomes in Accounting Information System subject through the application of simulation learning models. The type of research conducted is Classroom Action Research (CAR) which consists of two cycles and 6 meetings. The study was conducted in Even Semester 2020/2021 in the Accounting Department, Faculty of Economics and Business, Musamus University, Merauke. The research sample was 50 Accounting Department students. The results showed that the motivation of students in the first cycle reached 27.30% in the high category experienced an increase in the second cycle which reached 60.20% in the high category. Student learning outcomes also increased where in the pre-cycle the average student score reached 48.04, in the first cycle it reached 63.55, and in the second cycle it reached 74.16. In conclusion, the simulation learning model can increase motivation and learning outcomes of Accounting Information System subject at Musamus University.

Keywords: simulation learning model, motivation, learning outcomes, Accounting Information System

1. INTRODUCTION

An accounting information system is a component or sub-system of an organization that has responsibility for the preparation of financial information to assist management in making decisions. The accounting information system is designed to produce information in the form of financial information needed by external parties as well as inside institutions/agencies. Basically, accounting information systems can be operated without using a computer, but the involvement of computers in handling human tasks in a system has a very large role in supporting the smooth running of a system, so that information needed by management can be presented quickly and on time. (Tawaqal & Suparno, 2017).

The competence of human resources also affects the quality of financial reports. Financial statements are a product produced by the field or discipline of accounting. Therefore, it takes the competence of competent human resources to produce a quality financial report. This becomes a challenge for the lecturers of the Accounting Department to be able to increase student motivation in studying Accounting Information System concepts so that good learning outcomes are obtained.

Motivation and learning outcomes have a very important role in the world of education. Motivation and learning outcomes are closely related, with high learning motivation, students are expected to attend lectures well and actively participate in teaching and learning activities so that they can achieve success, in this case learning objectives.
Students who have high learning motivation will be very likely to obtain high learning outcomes, meaning that the higher the motivation of a student, the more intense the effort and effort made, the higher the learning outcomes that will be obtained. Students make various efforts to increase their success in learning activities, for example students will be persistent and diligent in carrying out the learning process to get good learning outcomes and in accordance with their expectations (Firando, 2020)

2. LITERATURE REVIEW

A. Simulation Learning Model
As a teaching method, simulation can be interpreted as an activity that describes the actual situation. The point is that students take part in a mock simulation to try to describe the actual event. So in simulation activities, participants or role holders perform an imitation environment of the actual event. Simulation learning method is a learning method that makes an imitation of something real, to the surrounding conditions (condition of affairis) or process.

According to Sanjaya (2011) The simulation steps consist of parts, namely the preparation of the simulation, the implementation of the simulation and the closing of the simulation. For more details, it is described as follows:

1) Simulation Preparation
   a) Define the topic or problem and the objectives to be achieved by the simulation
   b) The lecturer provides an overview of the problem in the situation to be simulated
   c) The lecturer determines the players who will be involved in the simulation, the roles that must be played by the actors, and the time allotted
   d) Lecturers provide opportunities for students to ask questions, especially to students who are involved in simulation actors

2) Simulation Execution
   a) The simulation starts to be played by the cast group
   b) The other students followed attentively
   c) Lecturers should provide assistance to actors who are having difficulties
   d) The simulation should be stopped at the peak. This is intended to encourage students to think in solving problems that are being simulated.

3) Simulation Cover
   a) Conduct discussions both about the course of the simulation and the story material that is simulated.
   b) Lecturers should encourage students to provide criticism and feedback on the process of implementing the simulation

B. Learning Motivation
One of the motivations is related to needs, which always encourage satisfaction. Related to this, in the teaching and learning process, some experts suggest using a needs approach. In general, people will only study attentively if there is a need, there is an intention, hope or goal to be achieved.

The importance of motivation in learning is so important that it can cause mental changes in students. Motivation is the main and most important need as the basis of all human actions so that it can guide human behavior.

Low learning motivation can cause students not to achieve the expected learning objectives. As a master, you must be able to inspire students' motivation to learn in order to achieve the desired results. It is suspected that the results of this study indicate that students who excel in learning motivation are higher than students with low achievement. Dimyati and Mudjiono stated that learning motivation is a "psychological aspect that is experiencing development, meaning that it is affected by the physiological conditions and psychological maturity of students". Dimyati and Mudjiono also said that learning motivation is a "mental force that drives the learning process".

Motivation not only filters what will be done, but also must filter how to do it. Therefore, in dealing with a problem, one must have a way or various efforts to overcome it (Embo, 2017).

C. Learning Achievements
Learning outcomes that become the object of class assessment are in the form of new abilities obtained by students after they follow the teaching and learning process about certain subjects. In the national education system, the formulation of educational objectives refers to the classification of learning outcomes from Sprout which in general are cognitive aspects, affective aspects and psychomotor aspects (Supratiknya, 2012).

Learning outcomes are abilities possessed by students after receiving their learning experiences. These abilities include cognitive, affective, and psychomotor aspects. Learning outcomes can be seen through evaluation activities that aim to obtain evidentiary information that will show the level of students' abilities in achieving learning objectives.

Learning outcomes as an indicator of the achievement of learning objectives in the classroom can not be separated from the factors that affect the learning outcomes themselves. (Sugiharto, 2007) mentions the factors that influence learning outcomes, as follows:

a. Inside factors are factors that exist within the individual who is learning. Inside factors include: physical factors and psychological factors.

b. External factors are factors that exist outside the individual. External factors include: family factors, school factors, and community factors.
C. Accounting Information System
An AIS is a set of resources, such as people and equipment, designed to turn financial and other resources into information. AIS can be carried out manually or computerized. SIA consists of five components:
1. People
2. Procedures
3. Information
4. Programming (software)
5. Information technology infrastructure.

These five components together enable an AIS to fulfill three important functions within the organization, namely:
1. Collect and store information about the activities and transactions carried out by the organization.
2. Turning information into useful information for management to make decisions in planning, implementing, and monitoring activities.
3. Provide adequate controls to safeguard the assets of the organization.

The purpose of studying Accounting Information Systems:
1. Understand concepts related to transaction cycles and interior control structures.
2. Describe the organizational structure of the AIS function in an organization.
3. Discusses information technology applications of an organization.
4. SIA development characterization

Therefore, it is not surprising that the accounting education change commission (bookkeeping training change commission) recommends that the accounting curriculum should emphasize that accounting is a process of identifying, developing, measuring, and communicating information. The Commission recommends that accounting curricula should be designed to provide students with a solid understanding of the following three basic concepts:
1. Use of information in decision making
2. Nature, design, use and implementation of AIS
3. Reporting financial information

3. METHOD

This type of research is Classroom Action Research (CAR) or in English it is called Homeroom Activity Exploration (Vehicle). CAR is action research to improve the quality of learning practices in the classroom, so it focuses on the teaching and learning process that occurs in the classroom (Suharsimi & Suhardjono, 2010). The research design used is the Kemmis and Taggart model which divides into four stages in one cycle, namely: planning (arranging), implementing (activity) and noticing (noticing), reflecting (reflecting).

In every cycle change in CAR, there needs to be revisions of learning, so that the next cycle is a better cycle than the previous cycle. So, it is unlikely that the CAR only goes through one cycle. The approach taken in this research is a descriptive research method. Qualitative research in education aims to describe a process of educational activities based on what is happening in the field as a further study. This research is also to analyze a fact, phenomenon and educational event that occurs in the field as it is in the context of space and time as well as the situation of the natural educational environment. In practice, the researcher is tasked with observing, recording (Widayanti, 2013).

This classroom action research was conducted at the Accounting Department, FEB, Musamus University, Merauke. The research was carried out in the odd semester of the 2020/2021 Academic Year, from October to November 2020. The subjects in this study were students who contracted Accounting Information Systems courses, totaling 50 students with a composition of 20 male students and 30 female students. is the subject of research.

4. RESULT AND DISCUSSION

At the pre-cycle stage, interviews were conducted with lecturers in Accounting Information Systems courses. From the results of interviews, it is known that students' motivation and learning outcomes tend to be low. This is probably because the learning methods applied by the lecturers are more centered on powerpoint. When the lecturer explains the material, the students just listen and take notes. This makes students passive and less motivated to learn.

In the first cycle, the lecturer delivered material with competency standards for Accounting Information Systems education and training. Lecturers apply simulation learning methods to teach. The first cycle activities were implemented by lecturers through several stages, namely planning, implementation, observation and reflection.

At the planning stage, the lecturer prepares unlatched materials, learning media, and SAP so that the simulation objectives can be achieved. At the implementation stage, the lecturer accompanies the learning process with the simulation method. After that, the lecturer provides feedback so that they can train students to think and behave in an accomplished, independent, creative, and innovative manner. The next stage is observation. Observations were carried out by the onlooker by filling out the observation sheet provided. The results of the observation of learning motivation are shown in table 1. The final stage in the first cycle is a reflection that assesses the success or failure of achieving learning objectives with this simulation method so that follow-up activities can be carried out on further learning activities After the learning process is complete. In the second cycle, the lecturer delivered material with competency standards for Accounting Information Systems education and training. Lecturers apply simulation learning methods to teach. The first cycle activities were implemented by lecturers through several stages, namely planning, implementation, observation and reflection.
At the planning stage, the lecturer prepares unlatched materials, learning media, and SAP so that the simulation objectives can be achieved. At the implementation stage, the lecturer accompanies the learning process with the simulation method. After that, the lecturer provides feedback so that they can train students to think and behave in an accomplished, independent, creative, and innovative manner. The next stage is observation. Observations were carried out by the onlooker by filling out the observation sheet provided. The results of the observation of learning motivation are shown in table 1. The final stage in the second cycle is a reflection that assesses the success or failure of achieving learning objectives with this simulation method so that follow-up actions can be carried out on further learning activities. After the learning process is complete.

### Table 1. Motivation to Learn Accounting Information Systems

<table>
<thead>
<tr>
<th>No</th>
<th>Observed aspects</th>
<th>Indicator</th>
<th>CYCLE 1</th>
<th>CYCLE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number of students included in the category</td>
<td>Total students</td>
<td>Number of students included in the category</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>Currently</td>
<td>Tall</td>
</tr>
<tr>
<td>1</td>
<td>Attention</td>
<td>Students pay attention when the lecturer explains</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students behave politely when the lecturer explains</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>Relevance</td>
<td>Students don't complain</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Confidence</td>
<td>Students dare to ask</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students dare to think</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students want to participate</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Satisfaction</td>
<td>Students feel happy</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total gain</td>
<td>129</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>Average percentage</td>
<td>36.86%</td>
<td>35.71%</td>
<td>27.43%</td>
</tr>
</tbody>
</table>

Table 1 shows the results of observations of student motivation in learning Accounting Information Systems. In cycle 1, the number of students with low motivation reached 36.86%, those with moderate motivation reached 35.71%, and those with high motivation reached 27.43%. This shows that students have low motivation to learn Accounting Information System concepts. Some groups have not done the simulation well and interestingly so that other students are not too motivated to learn. The lecturer finally returned to dominate learning and provided enrichment.

In cycle 2, the number of students with low motivation reached 11.14%, those with moderate motivation reached 32.86%, and those with high motivation reached 56.00%. This shows that there is an increase in student motivation in studying Accounting Information System material. Groups of students increasingly understand the simulation method and display a good simulation in accordance with the learning objectives. In conclusion, the simulation method is able to increase student learning motivation. This is supported by research Praditaliana, Nugroho, & Syaifulloh (2005) which concludes that the simulation learning model applied can increase the learning motivation of Class X students of SMK Negeri 7 Yogyakarta on Entrepreneurship subjects in cycle 1 in the high motivation category by 26%, increasing in cycle 2 in the high motivation category by 44%.
Table 2. Learning Outcomes of Accounting Information Systems

<table>
<thead>
<tr>
<th>Description</th>
<th>Pre Cycle</th>
<th>Cycle 1</th>
<th>Cycle 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average value</td>
<td>47.92</td>
<td>63.44</td>
<td>74.10</td>
</tr>
<tr>
<td>Completeness</td>
<td>0.00%</td>
<td>22.00%</td>
<td>72.00%</td>
</tr>
</tbody>
</table>

Table 2 shows an increase in student learning outcomes from pre-cycle by 0.00% to 23.21% in cycle 1 and increased again to 71.43% in cycle 2.

Purwanto (2006) argues that learning achievement is motivated by several factors which can basically be grouped into two parts, namely factors originating from within students (inside factors) and factors originating from outside students (external factors). Factors originating from within students (inside factors) include: interest, motivation, learning methods, maturity and readiness, and so on. While the factors that come from outside the students themselves (external factors) include: masters, school environment, family, community environment, and so on.

Study Mediawati (2010) shows that student learning motivation and lecturer competence have a positive and significant influence either partially or simultaneously on student learning achievement. By knowing the magnitude of the influence between learning motivation and lecturer competence with accounting learning achievement above, it can be determined policies to encourage lecturers to increase their competence in teaching and learning activities so as to improve student achievement ideally. Lecturers who have good competence will make an ideal and efficient learning process which in turn can improve learning achievement.

5. CONCLUSION

The results showed that the motivation of students in the first cycle reached 27.30% in the high category experienced an increase in the second cycle which reached 60.20% in the high category. Student learning outcomes also increased where in the pre-cycle the average student score was reached 48.04, in the first cycle it was reached 63.55, and in the second cycle it was reached 74.16. In conclusion, the simulation learning model can increase motivation and learning outcomes of Accounting Information System subject at Musamus University.

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