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# ENHANCING ELEMENTARY SCHOOL STUDENT LEARNING MOTIVATION AND OUTPUT USING THE JIGSAW LEARNING MODEL

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**ABSTRACT:**

**This research focuses on (1) escalating elementary school student learning motivation using the jigsaw learning model and (2) improving elementary school student learning output using the jigsaw learning model. It used primary data collected through questionnaire distribution, a learning output test to students, and observation sheets filled by the teacher. This was descriptive research with a classroom action research model. The result exhibited that (1) the teacher could increase elementary school student learning motivation using the jigsaw learning model. Student learning motivation, which was 55.07% in the preliminary observation, increased by 75.87 in cycle 1 and then 85.69% in cycle 2, and (2) the teacher could increase elementary school student learning output using the jigsaw learning model. Only 13 students (43.33% of the total number of students) fulfilled the Minimum Completeness Criteria in the preliminary observation. And yet, in cycle 1, there were 21 students (70.00% of the total number of students) who successfully fulfilled the Minimum Completeness Criteria in cycle 1, and in cycle 2, the number of students increased by 29 (96.67% of the total number of students).**

**Keywords: Learning Output, Learning Motivation, Jigsaw.**

**INTRODUCTION:**

Learning output, at large, depends on student abilities to learn learning materials and factors affecting the learning process. Thus, teachers should pay attention to and choose models which are congruent with learning materials to elicit the learning output expected. The use of suitable models can induce student learning spirit and thereby motivating them to achieve better.

In learning activities, learning motivation greatly contributes to learning output for prompting ones to perform what they put interests in. As confirmed by Uno (2012:28), motivated children will learn well and more persistently and expect a better result. Considering the low social science learning output and motivation, we undertook learning using the jigsaw learning model.

Based on the observation on October 12th, 2020, several elementary school students got social science scores below the expected target based on the Minimum Completeness Criteria, i.e., 70.00. It indicated low student learning motivation and output, especially in the social science subject with the material of the position and area of Indonesia. Also, it was indicative of poorly designed lesson plans and student examination results which did not meet the completeness criteria. The students found the teacher-centered lecturing methods used by the teacher unattractive, making them passive in the discussion, go outside the classroom even when learning, and talking with friends.

However, we are optimistic about increasing the student learning output. We made a review of the student learning motivation using the jigsaw cooperative model and formulated the research title "**Enhancing Elementary Student Learning Motivation and Output Using the Jigsaw Learning Model**."

**RESEARCH METHODOLOGY:**

This classroom action research was carried out to fifth-graders using three variables, which were input, process, and output, and an action design and procedures consistent with the classroom action research type.

**RESULT:**

**A. Preliminary Result**

**a. Teacher Activities Using Conventional Learning Models**

The result of the observation of teacher performance is pointed out in Table 1.

Table 1: Teacher Performance in Learning Activities (Preliminary Observation)

| Achievement | Frquency | Score | Percentage (%) | Maximum Score | Statement of the Percentage |
|---|---|---|---|---|---|
| TB | 0 | 0 | 0.00 | 68.00% | Poor |
| KB | 0 | 0 | 0.00 | | |
| CB | 12 | 36 | 38.71 | | |
| B | 8 | 32 | 25.81 | | |
| SB | 0 | 0 | 0.00 | | |
| Total | 20 | 68 | 64.52 | | |

Source: Data Processed, 2021

Table 1 manifests poor score achievement for learning activity stages conducted by the teacher in the preliminary observation. The score achieved was 68.00%, considered ineffective.

**b. Observation of Students:**

**1) Low Student Learning Motivation:**

The result of preliminary observation is pointed out in Table 2.

Table 2: Student Learning Motivation (Preliminary Observation)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | High | 1 | 3.3 | 3.3 | 3.3 |
| | Medium | 2 | 6.7 | 6.7 | 10.0 |
| | Low | 7 | 23.3 | 23.3 | 33.3 |
| | Very low | 20 | 66.7 | 66.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Source: Data Processed, 2021

Building on Table 2, of 24 students observed, two showed a high motivation (3.30% of the total number of students). Meanwhile, two others showcased a medium motivation (6.70% of the total number of students). Seven students showed a low motivation (23.30% of the total number of students), and 20 students demonstrated a very low one (66.67% of the total number of students).

**2) Student Learning Output with Unfulfilled Miminum Completeness Criteria:**

Table 3 demonstrates the result of the student learning output test.

Table 3: Student Learning Output (Preliminary Observation)

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Minimum Completeness Criteria fulfilled | 13 | 43.3 | 43.3 | 43.3 |
| | Minimum Completeness Criteria unfulfilled | 17 | 56.7 | 56.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Source: Data Processed, 2021

Predicated on Table 3, of 24 students observed, 13 had fulfilled the Minimum Completeness Criteria for the social science subject (43.30% of the total number of students), whereas 17 others did not (56.70% of the total number of students). The percentages attested to that the number of elementary school students

with the Minimum Completeness Criteria unfulfilled was higher than that of elementary school students with the Minimum Completeness Criteria fulfilled. Accordingly, using the jigsaw learning model is the best to increase student learning output.

Various issues in learning motivation and output were obvious when we were observing the students participating in the teaching-learning activity. Some elementary school students required a more contextual learning model which propelled them to learn more actively. The students were found to have a lack of learning motivation and annoying other students, resulting in poor learning output.

## B. Implementation of Cycle 1:

### 1) Cycle 1 Observation of Teacher:

Table 4 exhibits the result of the cycle 1 observation of teacher performance.

Table 4: Teacher Performance in Learning Activities (Cycle 1 Observation)

| Achievement | Frquency | Score | Percentage (%) | Maximum Score | Statement of the Percentage |
|---|---|---|---|---|---|
| TB | 0 | 0 | 0.00 | 88.00% | Good |
| KB | 0 | 0 | 0.00 | | |
| CB | 1 | 3 | 3.23 | | |
| B | 10 | 40 | 32.26 | | |
| SB | 9 | 45 | 29.03 | | |
| Total | 20 | 88 | 64.52 | | |

Source: Data Processed, 2021

Based on Table 4, the achieved score of teacher performance in cycle 1 observation was 88.00%, which was considered good in criteria. The score was indicative of the better use of the jigsaw learning model by the teacher delivering learning materials to elementary school students. The teacher was more active and students were more motivated. As the result, students would be able to engender learning output corresponding with the Minimum Completeness Criteria.

### 2) Cycle 1 Observation of Students

The following descriptions are the results of the observation of students. We distributed questionnaires to identify student learning motivation and carried out a test to investigate student learning output.

#### a) Student Learning Motivation

Student learning motivation in cycle 1 is indicated in Table 5.

Table 5:Student Learning Motivation in Cycle 1

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Very high | 2 | 6.7 | 6.7 | 6.7 |
| | High | 4 | 13.3 | 13.3 | 20.0 |
| | Medium | 22 | 73.3 | 73.3 | 93.3 |
| | Low | 2 | 6.7 | 6.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Source: Data Processed, 2021

Building on Table 5, of 24 students observed, two showed a very high motivation (6.70% of the total number of students). Meanwhile, four others showcased a high motivation (13.30% of the total number of students). 22 students showed a medium motivation (73.30% of the total number of students), and two students demonstrated a low one (6.70% of the total number of students). The jigsaw learning model allowed the teacher to build a better interaction with students, making the students apprehend the concept and context of social science learning materials well.

#### b) Student Learning Output

The result of the test of student learning output test is indicated in Table 6.

Table 6: Student Learning Output in Cycle 1

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Minimum Completeness Criteria fulfilled | 21 | 70.0 | 70.0 | 70.0 |
| | Minimum Completeness Criteria unfulfilled | 9 | 30.0 | 30.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Source: Data Processed, 2021

Predicated on Table 6, of 24 students observed, 21 had fulfilled the Minimum Completeness Criteria for the social science subject (70.00% of the total number of students), whereas nine others did not (30.00% of the total number of students). The percentages pointed out an increase in elementary school student learning output after the jigsaw learning model was applied. The increase happened as the model made students able to comprehend the material concept and context which called for students to create a material-based synthesis based on the material delivered.

### 3) Reflection Analysis of Action in Cycle 1:

After the learning process finished, we discussed the result of action implementation with the teacher to observe the drawbacks and determine if the next cycle was called for. As the drawbacks were found, we took remedial actions. The drawbacks found in cycle 1 were:

1. In group, the teacher asked the students to observe a picture of natural scenery and discussed objects they were familiarized with on the picture. The teacher grouped the students again by similar topics. In the new group, students were directed to discuss their findings. Students were instructed to return to their origin group to elucidate what they had found in the new group discussion. Each group member was given a chance to explain or present his/her findings.
2. Students demonstrated a lack of responsiveness to the materials delivered by the teacher at the beginning of the lesson, a lack of cooperation when discussing with the new group, and a lack of ability to draw conclusions.

These drawbacks boosted us to conduct cycle 2 as a remedial action to acquire an optimum result.

## C. Implementation of Cycle 2

### 1) Cycle 2 Observation of Teacher

Table 7 exhibits the result of the cycle 2 observation of teacher performance.

Table 7: Teacher Performance in Learning Activities (Cycle 2 Observation)

| Achievement | Frquency | Score | Percentage (%) | Maximum Score | Statement of the Percentage |
|---|---|---|---|---|---|
| TB | 0 | 0 | 0.00 | 98.00% | Very good |
| KB | 0 | 0 | 0.00 | | |
| CB | 0 | 0 | 0.00 | | |
| B | 2 | 8 | 6.45 | | |
| SB | 18 | 90 | 58.06 | | |
| Total | 20 | 98 | 64.52 | | |

Source: Data Processed, 2021

Based on Table 7, the achieved score of teacher performance in cycle 2 observation was 98.00%, which was considered effective by criteria. The score exhibited that in cycle 2, the teacher had explored the jigsaw learning model more and encouraged students to learn, augmenting student learning motivation and output for the social science subject with the material of position and area of Indonesia.

### 2) Cycle 2 Observation of Students:

### a) Student Learning Motivation:

Student learning motivation in cycle 2 is indicated in Table 8.

Table 8: Student Learning Motivation in Cycle 2

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Very high | 9 | 30.0 | 30.0 | 30.0 |
| | High | 15 | 50.0 | 50.0 | 80.0 |
| | Medium | 6 | 20.0 | 20.0 | 100.0 |
| | Low | 30 | 100.0 | 100.0 | |
| | Total | 9 | 30.0 | 30.0 | 30.0 |

Source: Data Processed, 2021

Building on Table 8, of 24 students observed, nine showed a very high motivation (30.00% of the total number of students). Meanwhile, 15 showcased a high motivation

(50.00% of the total number of students), and six students demonstrated a medium one (20.00% of the total number of students).

**b) Student Learning Output**

The result of the test of student learning output is indicated in Table 9.

Table 9: Student Learning Output in Cycle 2

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Minimum Completeness Criteria fulfilled | 29 | 96.7 | 96.7 | 96.7 |
| | Minimum Completeness Criteria unfulfilled | 1 | 3.3 | 3.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Source: Data Processed, 2021

Predicated on Table 9, of 24 students observed, 29 had fulfilled the Minimum Completeness Criteria for the social science subject (96.70% of the total number of students), whereas one other did not (3.30% of the total number of students). The percentages pointed out an increase in elementary school student learning output after the jigsaw learning model was applied. One student did not fulfill the Minimum Completeness Criteria because s/he preferred individual learning where other student engagement was not of need.

**3) Reflection Analysis of Action in Cycle 2:**

Reflection was made at the end of cycle 2 to derive a description of actions needed to elevate learning motivation and output. We carried out this activity with the teacher. In cycle 2, both teacher and students exhibited an increase from cycle 1, and students had achieved all criteria defined. And yet, the teacher still had to foster student enthusiasm in learning and afforded them more opportunities to share information with others.

**DISCUSSION:**

**1. Enhancing Student Learning Motivation Using the Jigsaw Learning Model:**

Based on the result, the teacher could escalate elementary school student motivation for learning social sciences using the jigsaw learning model. It was attested to by student learning motivation score, i.e., 55.07% in the preliminary observation, increasing by 75.87% in cycle 1 and then 85.69% in cycle 2. Accordingly, the jigsaw learning model induced students to be more enthusiastic in engaging in learning activities.

The result, theoretically, was in accordance with Hasanah (2016), that the learning motivation of students using the jigsaw cooperative learning model was better than that of students using the lecturing learning model. Additionally, students conferred a better response to the jigsaw method than to the lecturing one. Hence, the jigsaw method delivered a better effect on learning motivation than the lecturing one. When the jigsaw method was implemented, students were more active and willing to cooperate with others as the method allowed them to make a discussion with the origin and expert groups.

**2. Improving Student Learning Output Using the Jigsaw Learning Model:**

Based on the result, the teacher could escalate elementary school student motivation for learning social sciences using the jigsaw learning model. It was attested to by an increase in the number of students who fulfilled the Minimum Completeness Criteria for the social science subject. In the preliminary observation, 13 students (43.33% of the total number of students) had fulfilled the Minimum Completeness Criteria. Meanwhile, in cycle 1, 21 students (70.00% of the total number of students) had fulfilled the Minimum Completeness Criteria. The number increased in cycle 2, where 29 students (96.67% of the total

number of students) had fulfilled the Minimum Completeness Criteria. That being so, the jigsaw learning model enabled students to increase their learning abilities and thereby achieving better.

The result was in conforming with Rusman (2014), that students would easily understand meanings of the message delivered if directly participating with the learning process. Therefore, the teacher should opt for learning models which could make students active in learning and self-identify the information through interaction with the environment. Also, the teacher should design an activity which physically, socially, or mentally motivated students for learning actively and comprehending the learning concept and process. Students would be likely more able to understand the meaning contained if directly partaking in the learning process. The jigsaw learning model delivering students chances to not only learning but also sharing information with others. Likewise, through the process, students would develop their social skills, appreciate differences, promote learning motivation and positive attitudes, and decrease anxiety and thereby augmenting their learning output.

**CONCLUSION:**

Building on the result and discussion, we drew conclusions as follows.

1. The teacher could escalate elementary school student motivation for learning social sciences using the jigsaw learning model. It was attested to by student learning motivation score, i.e., 55.07% in the preliminary observation, increasing by 75.87% in cycle 1 and then 85.69% in cycle 2. Accordingly, the jigsaw learning model induced students to be more enthusiastic in engaging in learning activities.
2. The teacher could escalate elementary school student motivation for learning social sciences using the jigsaw learning model. It was attested to by an increase in the number of students who fulfilled the Minimum Completeness Criteria for the social science subject. In the preliminary observation, 13 students (43.33% of the total number of students) had fulfilled the Minimum Completeness Criteria. Meanwhile, in cycle 1, 21 students (70.00% of the total number of students) had fulfilled the Minimum Completeness Criteria. The number increased in cycle 2, where 29 students (96.67% of the total number of students) had fulfilled the Minimum Completeness Criteria. That being so, the jigsaw learning model enabled students to increase their learning abilities and thereby achieving better.

**SUGGESTION:**

Predicated on the conclusions, we proposed suggestions as follows.

1. It is imperative to elevate student learning motivation because the motivation will manifest an effective learning process and therefore enable them to implement the learning output in their daily life. However, the teacher should make continuous innovations in using the jigsaw model.
2. The teacher should use cooperative models as an alternative in the learning process for cooperative models have a positive effect on student learning output. Nevertheless, in using the learning models, the teacher should control students and disallow them to make a self-made group. Teachers should also allocate time for students to discuss and confer the key answers in order that students can correct their mistakes.

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