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UPGRADING THE INTEREST OF STUDENT LEARNING ON INTRODUCING NUMBER CONCEPT (Classroom Action Research on Initial Learning of Mathematics)

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ABSTRACT

This study intended to know the progress of applying Drawing Number Card method in learning of number concept. Number concept was one of initial mathematical learning. The methodology consisted of classroom action research and it was carried out in the class of kindergarten school at Taman Harapan, Malang of Indonesia. Result was used to perform a teaching model which would apply to upgrade the learning interest of student on mathematical learning.

Keywords: Drawing Number Card, initial mathematical learning, learning interest

INTRODUCTION

Teachers needed to upgrade themselves with their skills, knowledge, and positive attitude with the requirement of integrated curriculum of Kindergarten School. Kindergarten school was the basic before students began their education in elementary school. Previous teachers with some experiences had developed a theoretical framework to conceptualize their knowledge in performing effective learning process and teaching (Yusuf and Zakaria, 2010). Therefore, some experts in education had claimed that the content knowledge of pedagogy was critical. It was very important for a teacher to master it in order to have ability in conveying lesson content to their student effectively and efficient.

More current research had focused on teacher candidates to understand the measurement and evaluation methods (Inan and Bayindir, 2009). The evaluation methods consisted of objective, subjective, and performance of measurement and evaluation. Measurements and evaluation was rhe main topics discussed seriously among educators. Many workshops and seminars offered classes to teach teacher how to evaluate their students. It was known that measurement and evaluation was one of the most important and fundamental components of education.

Collaboration was defined as a process which disciplines work closely together (Soliman and Ismail, 2010), Collaborative learning was originally developed from practice and literature at kindergarten and elementary school. This view of learning could not be carried out as conventional learning. It was needed difference approach to set qualified learning process. This could only be achieved in a cooperative and collaborative learning that was grounded since kindergarten (Soliman and Ismail, 2010).

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CONTEXT AND REVIEW OF LITERATURE

This study was carried out at Kindergarten School of Taman Harapan. Location of Kindergaten Taman Harapan School was at Malang city, East Java Province of Indonesia. This study was included classroom action research and wanted to know the progress of applying Drawing Number Card as a tool to know number concept. Research was carried out in 2 cycles in one of kindergarten classes with number of students were 26.

Drawing Number Card Method

Drawing Number Card Method was an attractive model for introducing number concept to kindergarten students. Mathematics was assumed as the most difficult subject in school. Actually, mathematics was not only as counting tool but it was accurately as thinking pattern which was needed to analyze any kind of problem (Montarcih, 2009). Introducing number in Kindergarten was as initial stage of learning mathematics.

Drawing Number Card was designed as an attractive drawing card which was targeted to be able to get some attentions from students. It was due to numbers were something kind of abstract things for the beginner students. Method of Drawing Number Card demanded a task of teacher to design and explain actively the number concept. The student had to be activated in understanding the number concept. If the students were very interest with the drawing card, they were be able to understand the material of learning.

The process and the grade score of learning

There were some manners to be used to evaluate the success of teaching. Score of teaching would be used in this study. The score was consisted of 1 (bad), 2 (enough), and 3 (good). If the average of score was due to the success measurement of students learning, so the success of a teacher could be measured from teaching score.

The evaluation of education was more expanded compared with the evaluation of learning score and teaching process in class. Educational evaluation was included the evaluations of curriculum, teaching program, and some others innovation in the scope of teaching and education. Evaluation of learning score was focused on product (score) or effect that was produced by student due to instructional aim which had to be reached (Stufflebeam, 1974).

METHODS

The methodology was consisted of classroom action research which was carried out in 2 cyclers. The steps were described as in Table 1 and 2 below.

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Table 1 Program of cycler I

Day Date	Indicator	Teaching activity	Method	Tool/ source of learning	Score of student progress	
					Tool	Score
Monday 17-05-2010	To follow the rule of game sp.19 To stand in one foot at about 30 minutes. f.19 To answer the question about information B.8 To mention the number 1 to 10 consecutively K.7 To pin up the picture of vehicle with 4 wheels S.13 To sing about 15 children songs S.24	I. Initial activity 30' • Praying, ceremony, say hello • Sharing and telling story about the event at the street • Training body balance with standing in one foot and it was done in turn of the right and left one II. Main subject 60" • Talking about any vehicles with 2, 3, 4. 6 wheels • Mentioning the number consecutively by filling the blank number • Pinning up the available pattern III. Resting 30' • Free outdoor/ indoor playing, go to restroom and washing hand IV. Closing 30' • To sing some songs about vehicles like - Pedicab - City bus etc • Discussion/ moral message • Ceremony and say good bye	Demons-tration, direct practice asking-answer giving work giving work	picture Work paper Needle, pinned pillow Kind of swaying, sliding, wash lap, foot-stuffs demons-tration direct practice	performance work working Work result performance	

Table 2 Scenario of Cycler 2

Learning activity	Scenario of learning
To walk forward in straight line on the board f.15	• Students went to sport ground • Students heard teacher's information • Students made attention to teacher's explanation • Students carried out the work in turn
Numbering with point the thing of 1 to 10, introducing the number of 1 to 10 k.8	• Students heard teacher's explanation about the work which had been to do • Students took pencil cases • Students took work papers • Students could do their works well
To carry our 2-3 orders well B.4	• Students heard teacher's explanation • Students made attention to example showed by teacher • Students could answer the question gave by the teacher
To stick on S.19	• Students heard teacher's explanation • Students made attention to example showed by teacher • Students prepared handkerchief as the pad for sticking • Students took the patterns being stuck • Students could stick well.
To read rhyme with expression S.26	• Students heard teacher's explanation • Students heard the example by the teacher • Students followed to read rhyme • Students read the rhyme completely by themselves • Students read the rhyme one by one

FINDINGS AND DISCUSSIONS

Classroom action research cycler 1 was carried out by teaching numbering 1 to 10 using the Drawing Number Card. While the cards were divided, students were seemed so interested. The weak students were certainly needed more attention.

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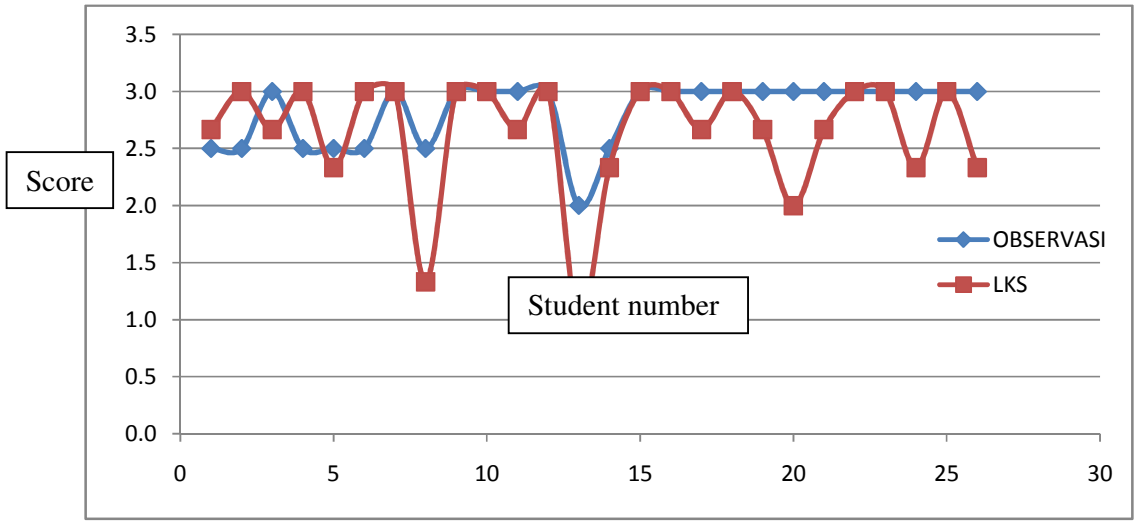
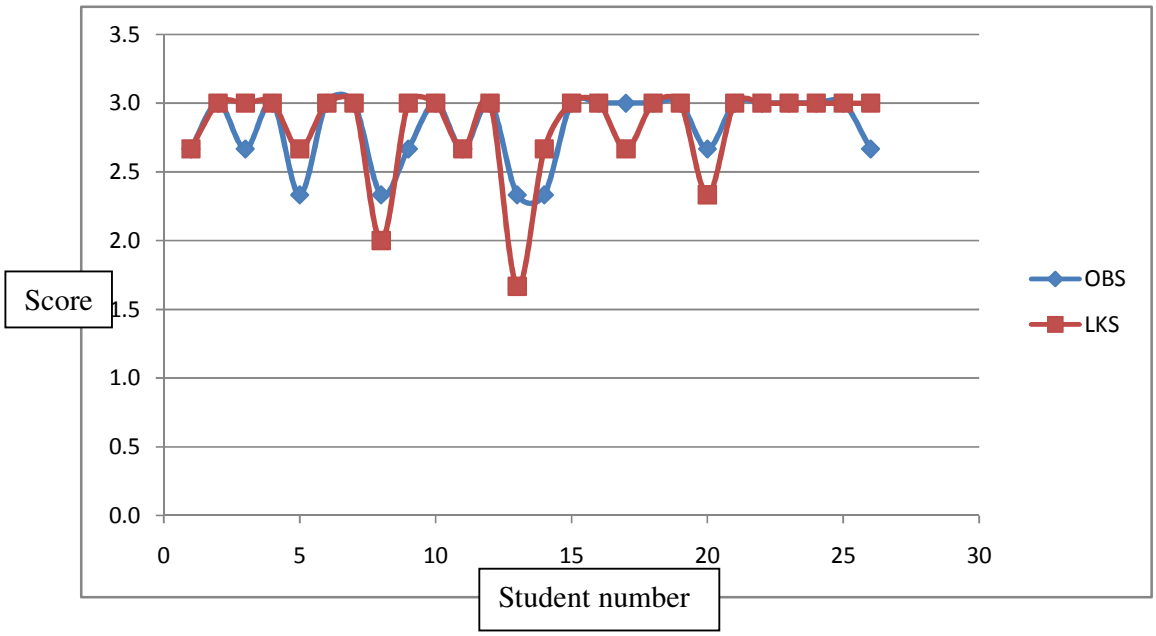
The results were described as in Figure 1 below.



Note: observasi = observation, LKS = work paper
Figure 1 Results of scoring observation and work paper

The curve showed that student with high score in observation had the trend of well known numbering. Students with low score in observation would get the low score too in work paper. The result showed that Drawing Number Card could support 80% of success. Result of classroom action research cycler 2 was described as in Figure 2 below



Note: OBS = observation, LKS = work paper
Figure 1 Results of scoring observation and work paper

Classroom action research was carried out to make students understood the number concept. While teacher divided the card, all of students, not only the strong one but the weak one were very interested. At the period of asking and answer questions, almost of the students could answered well. The trend of curved results as described in Figure 2 was the same as occurred in cycler 1: student with high score in observation had the trend of well known numbering and students with low score in observation would get the low score too in work paper.

CONCLUSION

Based on the analysis as above, it was concluded as follow:

1. The quality of carrying out teaching was very influenced to the teaching results and students learning score due to use Drawing Number Card method. It was shown by the average of observation score at cycler 1 was 2.83 and cycler 2 was 2.82.

2. Teaching result and learning result using Drawing Number Card was increased. It was shown that 80% of student at cycler 1 and 90% of student at cycler 2 understood the number concept. The average score of learning result at cycler 1 was 2.64 and at cycler 2 was 2.82

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