SCENARIO OF MATHEMATIC LEARNING BASED ON BRUNER AT SCHOOL

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Abstract

This study attempts to discuss the scenario of learning by BUNER's theory at school. In designing the Lesson Plan of Learning, the teachers often confused to make an interesting and students actively. However, Lesson Plan (Scenario Learning) is a very important element to succeed the goal of learning. In this research, the writer used Bruner's theory of learning to help the teacher in designing the activities of teaching and learning process. Bruner's theory of Learning is based on four activities as below: (1) Construction, (2) Notation, (3) Contrast, (4) Connectivity. According to Bruner's theory, successful learning is the process of teaching which oriented with the concept and the structure in the process of learning related to the four activities which has been discussed in the previous statement.

Key Word: Scenario, Construction, Notation, Contrast, Connectivity

1. INTRODUCTION

In designing the activity of teaching and learning process, one of the parts which are very important is the scenario of learning. In my opinion, many students and teachers are not able to describe and design appropriately, clear and more simple in the scenario of learning. This is not difficult work because it is only to apply the theories of learning. By understanding what problems found in designing the scenario of learning, the writer wants to make the teachers more easily in designing the scenario of learning in teaching and learning process.

2. REVIEW OF RELATED LITERATURE

Scenario (Modul PLPG, 2011) "rancang bangun alur kegiatan pembelajaran yang diharapkan dapat mencapai tujuan belajar yang ditentukan". There are three steps in designing the scenario of lesson planning which in each steps describes the strategy of method an time allocation that considered these indicators:

a. The strategy and method with the indicators
b. The strategy and method with the learning materials
c. The strategy and method with the characteristics of the students
d. The procedure with the time allocation (Opening: 5-10%; 70-80%; 10-15%)

Related to the theories of learning which is best known (Ruseffendi, et al: 1993) and used in Mathematic teaching and learning process is Bruner's theory. According to Bruner, successful learning is oriented to the conceptual and the structures related to the material. Bruner classifies into four activities as below:

1. Construction
   Construction is a learning activity to build the conceptual from the students' activity to present their idea related to the activity of the construction.
2. Notation
   Notation is a learning activity to formulate, to make a formulation of the conceptual which is built by the construction.
3. Contrast
   Contrast is a learning activity to compare or to shape the difference between the conceptual material one with another material. This learning activity can be done by various learning activity such as giving examples to make the understanding more clearly.
4. Connectivity
   Connectivity is a learning activity which relates to other material to see that there is a connection between one material with other material.

3. RESULT AND DISCUSSION

Based on Bruner's theory above we make the scenario of learning for the material in order to calculate the area of triangle as the following (this can be integrated in the students' answer sheet LKS):

3.1. Students' Activity

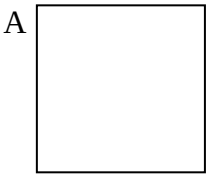
a. Pre Activity (Opening)

a1. Draw a square.Measure what you have drawn and determine the area of the square.

a2.Draw two triangle and sebangun.

a3. Mention the criterias of the two tirangle and sebangun.

b. Main Activity

b1. 

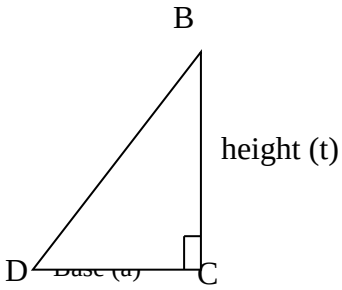
This below picture is Bangun…..

b2. D Draw the line C from A to C .

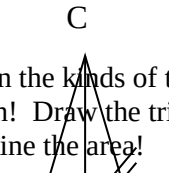
b3. Mention what will happen?.

b4. Does the line congruent and sebangun? Why?

b5. Area 1 (one) bangun aboved = ...X square.

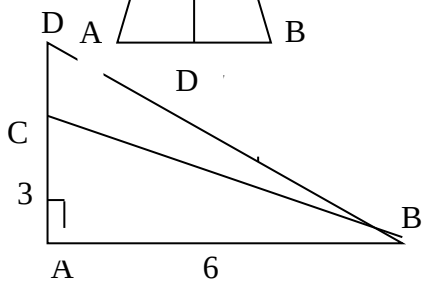
b6. 

Considering the above result of area, thus the area of the triangleBCD is

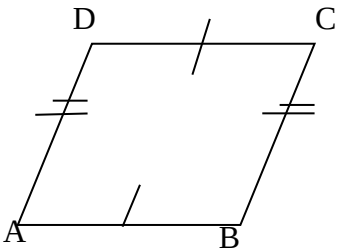
b7. 

Mention the kinds of the triangle ABC in the above explanation. Is it sebangun? If the answer is yes, you mention! Draw the triangle ABC to be drawn with other form. What kind of bangun is formed? Determine the area!

b8. The area is con t uent wit the area of the triangle ABC as the following :……

b9. 

From the above picture, determine the area of the triangle ABC.

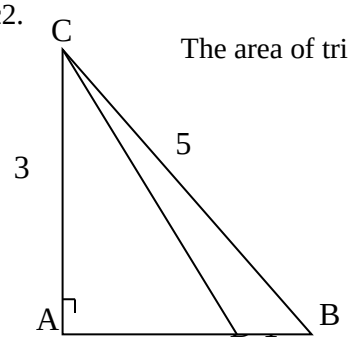
b10. 

By using the above formula, measure and calculate the area of ABCD

b11. The triangle area KLM iscompared with thetriangle area PQR is 3:7.
Length of the triangle KLM 8 cm and height 6 cm.
Count the triangle height of PQR if the base length is 7 cm.

c. CLOSING
c1. The area of triangle is …….

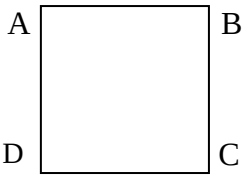
c2. From the below picture, Count:



The area of triangle BCD =….
The area of triangleADC =….
The area of triangleABC =….

3.2. Teacher's Activity
a. Pre Activity (Opening)
a1. To help the students to draw the square. Measure the picture and determine the area of the square!
a2. To help the students to draw the two triangle and sebangun.
a3. To help the students to mention the criterias of the two triangle and sebangun

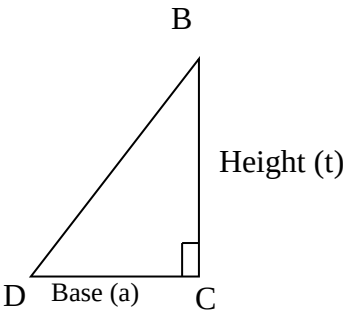
b. Main Activity
b1.



To help the students to mention the name of the picture

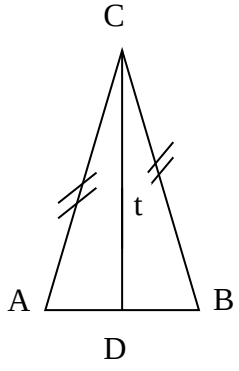
b2. To help the students to draw the line from A to C.
b3. To help the students to mention what happens with the square.
b4. To help the students to mention what happens with the square.
b5. To help the students to determine the area 1 (one) the above bangun = ...X Square.

b6.



Tohelp the students to determine the area of the triangleBCD

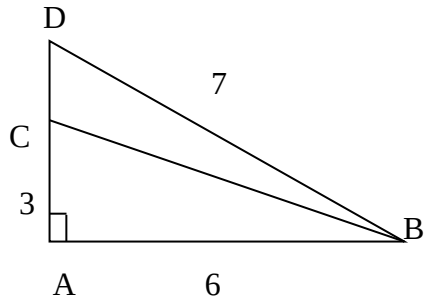
b7.



Membantu siswa menyebutkan jenis segitiga ABC. Membantusiswamenyebutbentuk yang sebangun.Membantusiswamembuatsegitiga ABC menjadibentukbangunlaindanmenentukanluasbangun yang terjadi.

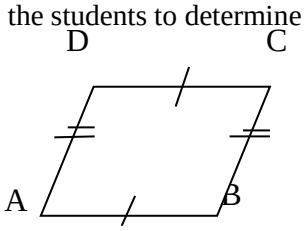
b8. Membantu siswa menentukan luas bangun yang terjadi samadengan luas segitiga ABC

b9.



To help the students to determine the area of the triangle CBD

b10.



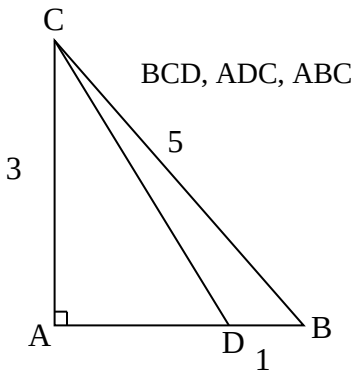
To help the students to count the area of ABCD

b11. To help the students to determine the height of the trianglea PQR

c. Closing

c1. To help the students to conclude the area of the triangle

c2. To help the students to count the area of the triangle



4. CONCLUSION AND SUGGESTION

Based on the above explanation, the writer draws the conclusion and suggestion as the following:

4.1. Conclusion

The theory learning by Bruner can be applied to design the scenario of teaching and learning activity in the classroom particularly in Math learning.

4.2. Suggestion

For the teachers and the candidates of teacher: Bruner's theory of learning can be applied to design the scenario of learning with other material in the process of teaching and learning.

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