Chapter 60

A Dice Game of Education Taxonomy

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ABSTRACT

The product of this innovation is called “Permainan Dadu Taksonomi Pendidikan”. Permainan Dadu Taksonomi Pendidikan (PDTP) is designed to apply High Level Thinking Skills in teaching aids that will attract students and enhance student understanding and performance. This product can help teachers teach modules or topics in a school textbook syllabus. The Bloom Taxonomy concept was developed in 1956 by Benjamin S. Bloom who classified education into three domains namely cognitive, affective and psychomotor (John, 2007). This product is an application of Higher Level Thinking Skills in teaching aids that will enhance student achievement. The questions are also structured in stages so that students easily to understand the concept of questions from very simple, simple and difficult questions. This method can include educational objectives that focus on knowledge, attitude and psychomotor. Pupils themselves will become players and feel the game. The game aims to attract students to study anywhere to enhance student understanding of a topic. The game features a variety of teaching methods to engage students from the same learning in the classroom. This can be seen from the increasing student attendance at KVSAS. This teaching aids is divided into three namely questionnaires, dice boards and dice. All three teaching aids tools are run manually where students become players. The Innovation Idea of the teaching aids tool aims to attract students and enhance students’ understanding of teaching in the classroom or beyond the classroom. The objectives of the study were to add value to the teaching aids method by incorporating the play elements and owning the learning environment, attracting students’ interest in the subject being studied, increasing student understanding of teaching aids and increasing student attendance in the classroom. The materials used consist of product waste and the cost spent in assembling the PDTP is RM85.00. To test the effectiveness of the PDTP, two methods were implemented by using questionnaires and time comparison test between PDTP and teaching aids. The questionnaire was produced by using Microsoft Word. The questionnaires were distributed to 100 respondents (52 males and 48 females) at 3 secondary schools at Kuala Rompin District and 35 students at KVSAS. The questionnaires were analysed...
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by using Microsoft Excel. From the results, 100% of respondents agreed that using PDTP saves time compared to teaching aids in a classroom. 100% of respondents stated that using PDTP is safer and more appropriate during teaching and learning process. 98.3% of respondents agreed that Permainan Dadu Taksonomi Pendidikan should be used at KVSAS to assist lecturers in teaching absorber system. Three programs have been identified about attendance. There are industrial machining, electrical technology, and business management. According to the analysis, after the learning process, 100% student attendance is increased. The result of the test comparison time is 10 minutes. The cost is reduced to RM32.00. In conclusion, Permainan Dadu Taksonomi Pendidikan achieves the objectives of the study in term of time-saving, safety and usability at KVSAS also increasing student attendance in the classroom.

Key Words: “Permainan Dadu Taksonomi Pendidikan”, existence, interest in learning, safety, attract students.

1. INTRODUCTION

Creativity and innovation are becoming increasingly important for the development of the 21 century knowledge society. They contribute to economic prosperity as well as to social and individual wellbeing and are essential factors for a more competitive and dynamic. Education is seen as central in fostering creative and innovative skills. Governments are taking part in the debate about Education and Training to meet the challenges of the 21st century, though member states are tackling the issue in different ways (Jeffrey, 2006). Craft (2005) stated that sees creativity as the ability to see possibilities that others haven't noticed, innovation and creativities were generated varies of new ideas (Esquivel, 1995). (Esquivel, 1995). As a result, used “Permainan Dadu Taksonomi Pendidikan” proponents suggest students are therefore capable of higher academic achievement levels. The innovated learning aid provides many benefits in terms of presence, increasing students' interest, ease of use, better understanding and usage suitability at KVSAS and the secondary schools.

2. PROBLEM STATEMENT

Student attendance to school every day is important. Students who are having trouble existence will lead to decrease academic achievement and personality. This study was to do because (i) student attendance declined and was unsatisfactory and (ii) students are not interested in learning.

3. OBJECTIVES

The objectives:

i. to increase student attendance in the classroom.
ii. to attract students to study in the classroom.
4. METHODOLOGY

The cost spent in assembling innovated teaching aids is RM 140.00. Questionnaire was produced by using Microsoft Word. It was distributed to 100 respondents (52 males and 48 females) who are students at three secondary schools in Kuala Rompin and 35 students in Sultan Ahmad Shah Vocational College (KVSAS). Figure 1 shows the process of questionnaire distribution to respondents. The questionnaire was analysed by using Microsoft Excel.

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Figure 1: Distribution of Questionnaire to Respondents

5. RESULT AND ANALYSIS

To test the effectiveness of the innovated teaching aids, two methods were implemented by using questionnaire and time comparison test between teaching aids and innovated teaching aids.

5.1 Questionnaire

The questionnaire was distributed to 100 respondents (52 males and 48 females) at 3 secondary schools at Kuala Rompin District and 20 students at KVSAS. The questionnaire consists of 10 questions. Question number 6, 5 and 9 were selected to be analysed because the questions supported the objectives of the study. Question number 10 was also analysed as it proves that innovated teaching aids can be used at KVSAS and schools. Graph 1 shows the analysis for question number 6 (Do you feel comfortable using innovative teaching aids compare to manually teaching aids?). The results of
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Analysis for question number 5 (Do you feel interested in using innovated teaching aids in your teaching and learning process?) is shown in Graph 2. Graph 3 shows the analysis of question number 9 (Do these innovated teaching aids enhance your understanding?). Analysis for question number 10 (Do you agree that innovated teaching aids are suitable to be used at KVSAS and other schools?) is shown in Graph 4. Based on the analysis, 100% of respondents agreed that using the innovated teaching aids enhance their understanding. 100% of respondents stated that using Innovated Teaching Aids during Teaching and Learning Process. 98.3% of respondents agreed that Permainan Dadu Taksonomi Pendidikan should be used at KVSAS to assist lecturers in teaching absorber system. Three programs have been identified about attendance. According to the analysis, after the learning process, 100% student attendance is increased. The result of the test comparison time is 10 minutes. The cost is reduced to RM 2.00. In conclusion, Permainan Dadu Taksonomi Pendidikan achieves the objectives of the study in term of time-saving, safety and usability at KVSAS also increasing student attendance in the classroom.

Graph 1: Number of Respondents Who Claimed That The Innovated Teaching Aids Enhance Their Understanding

Graph 1 shows the number of respondents who claimed that the innovated teaching aids enhance their understanding. Based on the analysis, 100% of the respondents agreed that the teaching aids gived respondents who feel comfortable.

Pie 1: Respondents Who Are Interested in Using Innovated Teaching Aids during Teaching and Learning Process

386
Pie 1 shows the respondents who are interested in using innovated teaching aids during teaching and learning process. Based on the analysis, 100% of the respondents agreed that the teaching aids gived respondents who are interested in using innovated teaching aids during teaching and learning process.

Graph 2 shows the percentage of student attendance in classroom at KVSAS. Three program are consist of industrial machining, electrical technology, and business management. Three programs have been identified about attendance. According to the analysis, after the learning process, 100% student attendance is increased.

6. CONCLUSION

Based on the analysis, 100% of the respondents agreed that the teaching aids managed to attract the students, interested in using and increase their understanding teaching aid. 100% of respondents also stated that they prefer using the innovated teaching aids. 98.3% of respondents agreed that the innovated teaching aids can be used for KVSAS student and also at the secondary schools. The cost for the upgrade was RM 20.00. In conclusion, the innovated teaching aids provide many benefits in terms of increasing students’ interest, ease of use, better understanding and usage suitability at KVSAS and other secondary schools. In conclusion, “Permainan Dadu Taksonomi Pendidikan” achieves the objectives of the study in term of presence, interest in learning, safety, attract students, and usability at KVSAS also increasing student attendance in the classroom.

REFERENCES

Creative learning practices: European experiences: Tufnell Press.

PICTURES