EFFECTIVENESS OF PROGRAMMED INSTRUCTIONAL MATERIAL IN THE TEACHING OF REFLECTION TO FORM TWO PUPILS IN A RURAL SCHOOL

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ABSTRACT

The primary objective of this study is to determine the effectiveness of programmed instructional material as complementary aids in the teaching of a Mathematical topic, specifically Reflection, to Form Two pupils in a rural secondary school.

This is an experimental study. The design of the study is the pre-test-post-test type. An experimental group and a control group were involved in this study. The experimental group used the programmed text, Learn It Yourself Reflection (LIY Reflection) which comprises 4 Units while the control group followed the normal classroom instruction.

The students have similar pre-requisite as there is no significant difference in the pre-requisite test performance on the pupils from both the experimental and control groups. The students in both the experimental and the control groups performed better in their post-test mean scores as compared to their pre-test mean scores. However, the post-test mean scores in the experimental group in each unit is higher than that of the control group. It does infer that experimental group performed better.

Group t-test shows no significant differences between post-test mean scores of the two groups in Units 1 and 4. However, significant differences are indicated for Units 2, 3 and the Overall Units. The significant differences in the scores of the Overall Units show that the LIY Reflection materials do play a major role in improving students' performance.

The students responded positively towards the use of LIY Reflection with 100% of them stating that LIY Reflection is interesting and 85.7% of them recommending the usage of programmed instructional material for other topics, subjects or pupils.
ABSTRAK

Objektif utama kajian ini adalah untuk menentukan keberkesanan program pemelajaran terancang dalam pemelajaran Matematik, terutamanya tajuk Pantulan untuk pelajar Tingkatan Dua di sebuah sekolah luar bandar.


Pelajar-pelajar dalam kedua-dua kumpulan ini mencapai markah yang lebih tinggi dalam pasca-ujian bila berbanding dengan markah pra-ujian. Walau bagaimanapun, markah pasca-ujian kumpulan eksperimen adalah lebih tinggi daripada markah pasca-ujian kumpulan kawalan untuk setiap Unit. Ini mengimplikasikan kumpulan eksperimen telah berjaya menunjukkan keputusan yang lebih baik.

Analisis ujian t berkumpulan tidak menunjukkan perbezaan signifikan antara markah min pasca-ujian kedua-dua Unit 1 dan Unit 4 masing-masing. Perbezaan signifikan didapati untuk Unit 2, 3 dan Unit Keseluruhanannya. Perbezaan signifikan dalam markah Unit Keseluruhan menunjukkan LIY Reflection memainkan peranan yang penting dalam mempengaruhi kemajuan pelajar-pelajar.

Pelajar-pelajar memberi maklumbalik yang positif tentang kegunaan LIY Reflection. Semua pelajar dalam kumpulan eksperimen menyatakan LIY Reflection adalah menarik dan 85.7% daripada mereka mencadangkan program pemelajaran terancang digunakan untuk tajuk, perkara dan pelajar yang lain.
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