

**RANCANG BANGUN *GAME-BASED LEARNING* PADA MATA  
PELAJARAN PEMROGRAMAN DASAR DALAM DESAIN  
PEMBELAJARAN CONTEXTUAL TEACHING AND LEARNING**

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**ABSTRAK**

Penelitian ini bertujuan untuk membantu peningkatan pemahaman siswa terhadap pemrograman dasar khususnya materi tipe data. Penelitian dilakukan di salah satu SMK Negeri Bandung. Metode yang digunakan adalah metode *contextual teaching and learning*. Multimedia yang digunakan pada saat pembelajaran ialah multimedia berbasis *game*. Multimedia dibuat mengetahui kualitas dari multimedia pembelajaran. Instrumen multimedia dilakukan oleh ahli media dan ahli materi menggunakan yang berdasarkan *multimedia mania 2003*. Dari pengujian tersebut diperoleh hasil penilaian ahli media sebesar 80,83 yang masuk dalam kategori baik dan penilaian ahli materi sebesar 85,83 yang masuk dalam kategori baik. Berdasarkan dari penilaian tersebut dapat disimpulkan bahwa multimedia *Game-Based learning* sangat layak untuk digunakan dalam pembelajaran. Peningkatan pemahaman ini dikuatkan lagi dengan suatu indeks *gain* 0,58 pada kelas atas, 0,50 kelas tengah dan 0,47 pada kelas bawah, dengan rata-rata keseluruhan indeks *gain* tersebut sebesar 0,51. Serta hasil respon pengguna multimedia yang baik dengan rata-rata penilaian 92 % yang interpretasinya sebagai media dapat dikatakan sangat baik. Selain dilihat dari nilai *gain*, dilihat juga dari nilai perbandingan soal tes *pre-test* dan *post-test*, dengan rata – rata perbandingan sebesar 58,6% .

**Kata Kunci :** Metode *contextual teaching and learning* , Rancang Bangun *Game-Based Learning*, Pemrograman Dasar.

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***DESIGN OF GAME-BASED LEARNING ON BASIC  
PROGRAMMING LESSONS IN LEARNING CONTEXTUAL  
TEACHING AND LEARNING DESIGN***

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***ABSTRACT***

*This study aims to help increase students' understanding of basic programming, especially data type material. The research was conducted in one of the Bandung State Vocational Schools. The method used is the method of contextual teaching and learning. Multimedia used when learning is multimedia-based games. Multimedia is made to know the quality of multimedia learning. Multimedia instruments were carried out by media experts and material experts using multimedia mania 2003. From these tests the results of the media expert's assessment were 80.83 which were included in the good category and the material expert's assessment was 85.83 which was in the good category. Based on the assessment, it can be concluded that multimedia Game-Based learning is very feasible for use in learning. This increase in understanding is strengthened again by an index gain of 0.58 in the upper class, 0.50 in the middle class and 0.47 in the lower class, with the overall average gain index being 0.51. As well as the results of good multimedia user responses with an average rating of 92% whose interpretation as media can be said to be very good. Besides being seen from the gain value, it is also seen from the value of comparison of the test -re-test and post-test questions, with an average comparison of 58.6%.*

Keywords: *Methods of contextual teaching and learning, Designing Game-Based Learning, Basic Programming.*