ABSTRACT

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APLIKASI UJIAN TOEFL MENGGUNAKAN METODE LINEAR CONGRUENTIAL GENERATORS (LCG) BERBASIS WEB PADA UPT. BAHASA UNIVERSITAS HALU OLEO

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In maximize the Toefl exams that are often held by Halu Oleo University, it is necessary to improve administration better. Considering the large number of test takers and the limited capacity of the space that can be used to conduct the test, for that the application of test files based on online web applications can be one solution.

Other than that to minimize cheating that might occur during the online test, packaging questions can be applied which are then randomized from the optional side and optimal question numbering. The Linear Congruential Generators (LCG) method is a method often used to generate random numbers. This method can be used to randomize optional questions and numbering. To test the optimization of the LCG randomization method, the Chi-Square test method can be used.

After conducting the Chi-Square test in 1 to 5 times the experiment was grouped into 10 groups of probability classes with a confidence interval of α = 14,684 (10%) which resulted in 3.2 ≤ 14,684, 2.8 ≤ 14,684, 2.8 ≤ 14,684, 2, 8 ≤ 14,684, 3, 6 ≤ 14,684 and 2.4, 14,684, so from 5 experiments it can be concluded that H0 is accepted or the results can be randomized or distributed according to the class specified.