

ABSTRAK

PENGEMBANGAN GAME EDUKASI BERBASIS ANDROID “SAVE THE NATURE” MENGGUNAKAN UNITY UNTUK MENINGKATKAN TINGKAT KESADARAN LINGKUNGAN SISWA SEKOLAH DASAR DENGAN MENERAPKAN METODE SINGLE GROUP PRETEST-POSTTEST DESIGN

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Isu lingkungan merupakan salah satu masalah paling mendesak di dunia saat ini. Isu lingkungan ini harus dikenalkan sejak usia dini, dengan salah satu target ideal yaitu anak sekolah dasar karena sedang dalam fase perkembangan kognitif yang sangat penting. Pada zaman yang serba digital seperti saat ini, media edukasi pun menjadi sangat beragam, salah satunya yaitu melalui media *game*. Pada penelitian ini dilakukan pengembangan *game* edukasi berbasis android dengan menggunakan unity serta metode pengembangan perangkat lunak yaitu *Game Development Life Cycle (GDLC)*. Setelah *game* berhasil dibuat maka dilanjutkan dengan pengujian *Pretest* dan *Posttest* yang mendapatkan rata-rata nilai *Normalized-Gain* sebesar 0,72 yang termasuk ke dalam kategori tinggi. Selain itu pada pengujian *User Acceptance Test* didapatkan nilai rata-rata sebesar 81,13% yang termasuk ke dalam kategori sangat baik. Berdasarkan dua hasil perhitungan tersebut, maka dapat disimpulkan bahwa *game* edukasi “*Save The Nature*” layak dijadikan media pembelajaran yang edukatif untuk meningkatkan pengetahuan serta kepedulian lingkungan anak sekolah dasar.

Kata kunci: GDLC, Isu lingkungan, *Normalized-Gain*, Pengujian *Pretest-Posttest*, *User Acceptance Test*

ABSTRACT

DEVELOPMENT OF THE ANDROID-BASED EDUCATIONAL GAME "SAVE THE NATURE" USING UNITY TO ENHANCE ELEMENTARY SCHOOL STUDENTS' ENVIRONMENTAL AWARENESS BY APPLYING THE SINGLE GROUP PRETEST-POSTTEST DESIGN METHOD

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Environmental issues are among the most urgent problems in the world today. These issues should be introduced from an early age, with elementary school children being one of the ideal target groups, as they are in a crucial stage of cognitive development. In this digital era, educational media have become highly diverse, one of which is through games. This study focuses on the development of an Android-based educational game using Unity and the Game Development Life Cycle (GDLC) method. Once the game was successfully developed, Pretest and Posttest evaluations were conducted, resulting in an average Normalized-Gain score of 0.72, which falls into the high category. Additionally, the User Acceptance Test yielded an average score of 81.13%, classified as very good. Based on these two results, it can be concluded that the educational game 'Save The Nature' is a viable learning medium for enhancing elementary school children's knowledge and environmental awareness.

Keywords: *Environmental issues, GDLC, Normalize-Gain, Pretest-Posttest Design, User Acceptance Test*