

ABSTRAK

Maharani, Reni. 2022. *Pengembangan Game Edukasi Berbasis Android Untuk Pengenalan Peralatan Laboratorium Kimia SMA*. Skripsi. Tanjungpinang: Program Studi Pendidikan Kimia, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Assist. Prof. Ardi Widhia Sabekti, S.Pd., M.Pd. Pembimbing II: Assist. Prof. Friska Septiani Silitonga, S.Pd., M.Sc.

Kata Kunci: *Game* edukasi, android, peralatan laboratorium kimia

Pengenalan peralatan praktikum sebelum percobaan penting dilakukan agar peserta didik memiliki gambaran tentang alat praktikum berdasarkan kegunaannya. Kurangnya ketersediaan fasilitas peralatan laboratorium dan alokasi pertemuan menyebabkan keterbatasan waktu pendidik untuk menjelaskan informasi mengenai alat-alat praktikum tersebut kepada peserta didik. *Game* edukasi sebagai media pembelajaran perlu dikembangkan karena mudah diakses, memiliki visualisasi dari permasalahan nyata, dan dapat digunakan sambil bermain tanpa melupakan aspek edukasi di dalamnya.

Penelitian ini merupakan penelitian *Research and Development* (RnD) dengan menggunakan model ADDIE yang terdiri dari *Analysis, Design, Development, Implementation, dan Evaluation*. Penelitian ini menghasilkan produk berupa *game* edukasi berbasis android untuk pengenalan peralatan laboratorium kimia SMA. Produk divalidasi oleh ahli materi dan ahli media. Setelah divalidasi produk diujicobakan kepada pendidik dan peserta didik kelas X IPA MAN Tanjungpinang. Penilaian oleh ahli materi memperoleh sebesar 86% dengan kategori sangat valid, dan penilaian oleh ahli media sebesar 85% dengan kategori sangat valid. Persentase praktikalitas oleh pendidik sebesar 90.00% dengan kategori sangat praktis dan persentase praktikalitas peserta didik sebesar 92,25% dengan kategori sangat praktis. Berdasarkan hal tersebut hasil penelitian menunjukkan bahwa *game* edukasi dinyatakan sangat valid dan sangat praktis.

ABSTRACT

Maharani, Reni, 2021. *Android Based Educational game development for Introduction to High School Chemistry Laboratory Equipment. Thesis. Tanjungpinang: Chemistry Education Program, Faculty of Teacher Training and Education, Universitas Maritim Raja Ali Haji. Advisor: Assist. Prof. Ardi Widhia Sabekti, S.Pd., M.Pd. Co-advisor: Assist. Prof. Friska Septiani Silitonga, S.Pd., M.Sc.*

Keywords: *Education game, android, chemical laboratory equipment*

The introduction of lab work equipment before the experiment is important so that students have an idea of the practical tools based on their uses. The lack of availability of laboratory equipment facilities and meeting allocations causes limited time for educators to explain information about these practicum tools to students. Educational games as learning media are developed because they are easy to access. Has a visualization of real problems, and can be used while playing without leaving behind the educational aspect in it.

This research is a Research and Development (RnD) research using ADDIE which consists of Analysis, Design, Development, Implementation, and Evaluation. This research produces a product in the form of an Android-based educational game for the introduction of high school chemistry laboratory equipment. Products were validated by materials experts and media experts. After being validated, the products were tested on educators and students of class X IPA MAN Tanjungpinang. The assessment by material experts was 86% with very valid category, and the assessment by media experts was 85% with very valid category. The percentage of practicality by educators is 90.00% with very practical category and the percentage of practicality by students is 92.25% with very practical category. Based on this, the results of the study indicate that educational games are stated to be very valid and very practical.