

ABSTRAK

Ismu Wardana.1152080038.2023.Pengembangan Buku Digital Berbasis Android Berorientasi Multipel Representasi Kimia Pada Konsep Flavonoid

Penelitian ini bertujuan untuk mendeskripsikan tampilan buku digital dan menganalisis hasil uji validasi buku digital berbasis android berorientasi multipel representasi kimia pada materi flavonoid. Metode yang digunakan yaitu metode *Design Based Research* (DBR), dengan tiga tahapan yaitu *analysis*, *design*, dan *development* untuk mendapatkan produk berupa buku digital yang menampilkan teks, gambar dan animasi. Tahapan tersebut meliputi analisis materi flavonoid, analisis multipel representasi pada materi flavonoid, perancangan buku digital dan pengembangan buku digital. Instrumen yang digunakan yaitu angket uji validasi yang diisi oleh dua orang validator. Hasil penelitian yang didapat berupa produk buku digital berbasis android berorientasi multipel representasi kimia pada materi flavonoid dengan hasil uji validasi rerata r_{hitung} 0,72. Buku digital flavonoid yang dihasilkan dinyatakan valid dan dapat digunakan sebagai salah satu bahan ajar pada mata kuliah kimia bahan alam.

Kata kunci: Buku Digital, Multipel Representasi Kimia, Flavonoid



ABSTRACT

Ismu Wardana.1152080038.2023.Development of an Android-based digital book oriented to multiple chemical representations of the flavonoid concept

The aim of this study is to describe the appearance of e-books and to analyze the results of validation tests of Android-based e-books guided by multiple chemical representations of flavonoid materials. The method used is the Design Based Research (DBR) method, which has three phases: analysis, design and development, and obtains products in the form of digital books containing text, images and animations. These phases include analysis of flavonoid substances, analysis of multiple representations of flavonoid substances, digital book design, and digital book development. A validation test questionnaire was used as a tool and was completed by two validators. The results obtained in the form of an Android-based digital book product align multiple chemical plots and validation test results of the flavonoid material with a mean r_{count} of 0.72. The resulting flavonoid digital book is validated and can be used as teaching material for natural product chemistry course.

keyword: digital book, multiple chemical representations, flavonoid

