

## ABSTRAK

**Erika Tampubolon, NIM 4203141052 (2024), Pengembangan Media Mobile Learning (M-Learning) Melalui Aplikasi Bio Fun Berbasis Android untuk Meningkatkan Hasil Belajar Siswa pada Materi Sistem Koordinasi Manusia di Kelas XI SMA Panca Budi Medan.**

Penelitian ini dilakukan untuk menghasilkan produk berupa media *mobile learning* berbasis Android yaitu aplikasi Bio Fun dengan bantuan iSpring Suite 11 dan Website 2 Apk Builder yang memenuhi kriteria kelayakan kategori valid atau layak berdasarkan tanggapan para ahli materi, media, guru biologi, dan siswa. Penelitian ini menggunakan desain penelitian yang diadaptasi dari model pengembangan 4D (*Define, Design, Development dan Disseminate*). Hasil penelitian berupa media *mobile learning* berbasis Android yang disebarakan kepada sampel penelitian yaitu siswa kelas XI-3 SMA Panca Budi Medan dengan jumlah siswa sebanyak 31 siswa dengan kelayakan materi sebesar 90,29 %, kelayakan media sebesar 83,5%, respon guru sebesar 82%, dan respon siswa sebesar 90,93% dengan kategori sangat baik. Selain itu, pengaruh media *mobile learning* berbasis Android pada materi Sistem Koordinasi Manusia dalam meningkatkan hasil belajar siswa yaitu 0,57 dimana nilai  $n\text{-Gain } 0,30 \leq (g) \leq 0,70$  berada pada kategori sedang. Sehingga dapat disimpulkan bahwa media pembelajaran ini mampu dan efektif untuk meningkatkan penguasaan konsep siswa pada materi Sistem Koordinasi Manusia.

**Kata kunci** : Pengembangan, Media *mobile learning*, Aplikasi Bio Fun, Sistem Koordinasi Manusia

## ABSTRACT

**Erika Tampubolon, NIM 4203141052 (2024), Development of Mobile Learning Media (M-Learning) Through Android-Based Bio Fun Application to Improve Student Learning Outcomes on Human Coordination System Material in Class XI of SMA Panca Budi Medan.**

This research was conducted to produce a product in the form of Android-based mobile learning media, namely the Bio Fun application with the help of iSpring Suite 11 and Website 2 Apk Builder which meets the eligibility criteria of the valid or feasible category based on the responses of material experts, media, biology teachers, and students. This study uses a research design adapted from the 4D development model (Define, Design, Development and Disseminate). The results of the study were in the form of Android-based mobile learning media distributed to the research sample, namely students of class XI-3 SMA Panca Budi Medan with a total of 31 students with material feasibility of 90.29%, media feasibility of 83.5%, teacher response of 82%, and student response of 90.93% with a very good category. In addition, the effect of Android-based mobile learning media on Human Coordination System material in improving student learning outcomes is 0.57 where the n-Gain value of  $0.30 \leq (g) \leq 0.70$  is in the moderate category. So it can be concluded that this learning media is able and effective to improve students' concept mastery on the material of the Human Coordination System.

**Key Words :** Development, Mobile learning media, Bio Fun Application, Human Coordination System