

ABSTRAK

Meylina. 2023. Pengembangan Alat Peraga Model Sarkomer pada Materi Mekanisme Kerja Otot untuk Siswa Kelas XI. Skripsi. Tanjungpinang: Jurusan Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Assist. Prof. Adam Fernando, S.Pd., M.Pd. Pembimbing II: Assist. Prof. Elfa Oprasmani, S.Pd., M.Pd.

Kata kunci: Alat Peraga, Sarkomer, Mekanisme Sistem Otot

Penelitian ini bertujuan untuk menghasilkan produk berupa alat peraga model sarkomer pada materi mekanisme kerja otot untuk siswa kelas XI yang valid, praktis, dan efektif. Penelitian ini merupakan penelitian pengembangan dengan model 4D yang terdiri atas 4 tahapan, yaitu: 1) *define*; 2) *design*; 3) *develop*; dan 4) *disseminate*. Berdasarkan hasil penelitian yang telah dilakukan, diperoleh rata-rata hasil validasi ahli keterwakilan konsep alat peraga dan ahli media sebesar 86,6% dengan kriteria “sangat valid”. Hasil penilaian praktikalitas oleh guru dan peserta didik diperoleh hasil rata-rata sebesar 97,31% dengan kriteria “sangat praktis”. Selanjutnya, hasil penilaian efektivitas melalui perhitungan *N-gain score* sebesar 0,63 dengan kategori “sedang” dalam kriteria efektif. Berdasarkan hasil tersebut, maka dapat disimpulkan bahwa alat peraga model sarkomer pada materi mekanisme kerja otot untuk siswa kelas XI dinyatakan valid, praktis, dan efektif untuk digunakan dalam pembelajaran Biologi.

ABSTRACT

Meylina. 2023. Development of Sarcomere Model Teaching Aid on Muscle Work Mechanism Material for Class XI Students. Thesis. Tanjungpinang: Biology Education Department, Teacher Training and Education Faculty, Raja Ali Haji Maritime University. Advisor: Assist. Prof. Adam Fernando, S.Pd., M.Pd. Co-advisor: Assist. Prof. Elfa Oprasmani, S.Pd., M.Pd.

Keywords: Muscle Work Mechanism, Sarcomere, Teaching Aid

This study aimed to produce a product in the form of a sarcomere model teaching aid on the mechanism of muscle work for class XI students that was valid, practical, and effective. This research was a research and development with a 4D model which consists of 4 stages, namely: 1) define; 2) design; 3) develop; and 4) disseminate. Based on the research that has been done, the average validation results obtained by experts representing the concept of teaching aids and media experts are 86.6% with the criteria of "very valid". The results of the practicality assessment by teachers and students obtained an average result of 97.31% with the "very practical" criterion. Furthermore, the results of the effectiveness assessment by calculating the N-gain score are 0.63 with the "medium" category in the effective criteria. Based on these results, it can be concluded that the sarcomere model teaching aids in the material of muscle work mechanism for class XI students were valid, practical, and effective for use in Biology learning.