

ABSTRAK

Debora Charnia Alfa Br Ginting, NIM 4203141018 (2024). Pengembangan Berbasis *Case Based Learning* Untuk Meningkatkan Kemampuan Berpikir Kritis Siswa Pada Materi Sistem Gerak Manusia Kelas XI Tahun Ajar 2024/2025.

Penelitian ini bertujuan untuk mengembangkan suatu bahan ajar berupa modul sistem gerak manusia berbasis *Case Based Learning*, mengetahui kelayakan modul sistem gerak manusia berbasis *Case Based Learning*, mengetahui kemenarikan modul sistem gerak manusia berbasis *Case Based Learning*, dan mengetahui seberapa besar efektivitas pembelajaran menggunakan modul melalui peningkatan kemampuan berpikir kritis siswa. Modul sistem gerak manusia dikembangkan dengan pengembangan 4D dan panduan penulisan modul DIPP UNAIR 2020. Hasil penelitian menunjukkan bentuk modul sistem gerak manusia berbasis *Case Based Learning* dikembangkan berdasarkan sintaks CBL. Modul terdiri dari 3 kegiatan pembelajaran, yaitu kegiatan belajar 1 materi rangka manusia, kegiatan belajar 2 materi sendi, otot, dan mekanisme gerak, serta kegiatan belajar 3 materi kelainan dan gangguan sistem gerak manusia. Kelayakan modul sistem gerak manusia berbasis *Case Based Learning* berdasarkan penilaian dikategorikan sangat layak. Nilai kemenarikan modul menurut siswa dikategorikan sangat menarik (nilai kemenarikan = 85,97). Pembelajaran menggunakan modul sistem gerak manusia berbasis *Case Based Learning* dinyatakan sangat efektif. Hal ini dilihat berdasarkan nilai kemampuan berpikir kritis siswa pada kelas yang menggunakan modul 88 (sangat tinggi) sedangkan pada kelas yang menggunakan buku paket 76,69 (tinggi). Berdasarkan hasil uji N-Gain kemampuan berpikir kritis siswa pada kelas yang menggunakan modul, modul dikatakan efektif dengan skor N-Gain 0,73 (tinggi) sedangkan pada kelas yang menggunakan buku paket dikatakan efektif dengan skor N-Gain 0,59 (sedang). Modul sistem gerak manusia berbasis *Case Based Learning* berpengaruh signifikan terhadap peningkatan kemampuan berpikir kritis siswa. Respon siswa pada kelas eksperimen terhadap pembelajaran menggunakan modul juga dikategorikan sangat efektif (nilai respon siswa = 92).

Kata Kunci: Modul, *Case Based Learning*, Kemampuan Berpikir Kritis



ABSTRACT

Debora Charnia Alfa Br Ginting, NIM 4203141018 (2024). Development of Case Based Learning to Improve Students' Critical Thinking Abilities on Human Movement Systems Material for Class XI Academic Year 2024/2025.

This research aims to develop teaching materials in the form of a human movement system module based on Case Based Learning, find out the feasibility of a human movement system module based on Case Based Learning, find out the attractiveness of a human movement system module based on Case Based Learning, and find out how effective learning is using the module through increasing students' critical thinking abilities. The human movement system module was developed using 4D development and a guide to writing the DIPP UNAIR 2020 module. The research results show that the form of the human movement system module based on Case Based Learning was developed based on CBL syntax. The module consists of 3 learning activities, namely learning activity 1 about the human skeleton, learning activity 2 about joints, muscles and movement mechanisms, and learning activity 3 about abnormalities and disorders of the human movement system. The feasibility of the human movement system module based on Case Based Learning based on the assessment is categorized as very feasible. According to students, the attractiveness value of the module was categorized as very interesting (attractiveness value = 85.97). Learning using the human movement system module based on Case Based Learning is stated to be very effective. This is seen based on the value of students' critical thinking abilities in classes that use module 88 (very high) while in classes that use textbooks it is 76.69 (high). Based on the results of the N-Gain test on students' critical thinking abilities in classes that use modules, the modules are said to be effective with an N-Gain score of 0.73 (high) while in classes that use textbooks they are said to be effective with an N-Gain score of 0.59 (medium). The human movement system module based on Case Based Learning has a significant effect on improving students' critical thinking abilities. The response of students in the experimental class to learning using the module was also categorized as very effective (student response value = 92).

Keywords: *Module, Case Based Learning, Critical Thinking Skill*

