

## ABSTRAK

### **PENGARUH BAHAN AJAR BERBASIS ALAT PRAKTIKUM BIOLOGI SEDERHANA PADA PEMBELAJARAN SISTEM PERNAPASAN TERHADAP MINAT BELAJAR DAN PENGUASAAN KONSEP SISWA**

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh bahan ajar berbasis alat praktikum biologi sederhana pada pembelajaran sistem pernapasan terhadap minat belajar dan penguasaan konsep siswa. Bahan ajar yang diterapkan yaitu berupa modul, Rencana Pelaksanaan Pembelajaran, alat evaluasi, dan alat praktikum biologi sederhana (spirometer sederhana). Jenis penelitian ini adalah *weak experimental* dengan tidak menggunakan kelas kontrol dan dibuat dengan menggunakan desain *one group pre-test post-test*. Penelitian ini dilakukan terhadap 30 siswa kelas XI pada SMA swasta di Bandung. Data minat belajar diperoleh dengan menggunakan angket minat belajar model ARCS (*Attention, Relevance, Confidence, dan Satisfaction*). Data penguasaan konsep diperoleh melalui tes berupa soal pilihan ganda yang diberikan sebelum dan sesudah pembelajaran. Hasil analisis menunjukkan terdapat peningkatan minat belajar dan penguasaan konsep setelah penggunaan bahan ajar. Perolehan nilai *N Gain* penguasaan konsep yaitu 0,5 menunjukkan peningkatan penguasaan konsep berada pada kategori sedang. Hasil uji *Wilcoxon* menunjukkan nilai *pre test* dan *post test* berbeda signifikan ( $p < 0,05$ ), artinya penerapan bahan ajar berbasis alat praktikum biologi sederhana memberikan pengaruh terhadap minat belajar dan penguasaan konsep siswa.

**Kata kunci:** *bahan ajar, alat praktikum biologi sederhana, minat belajar, penguasaan konsep*

## ABSTRACT

### **THE EFFECT OF TEACHING MATERIALS BASED ON SIMPLE BIOLOGY PRACTICE EQUIPMENT ON THE LEARNING OF RESPIRATORY SYSTEM TOWARDS LEARNING INTEREST AND STUDENT CONCEPTS MASTERING**

The study aims to determine the effect of teaching materials based on simple biology practice equipment on the learning of respiratory system towards learning interest and student concepts mastering. Teaching materials applied are modules, Learning Implementation Plans, evaluation tools, and simple biology practice equipment (simple spirometers). This study is weak experimental by not using the control class and was made using the one group pre-test post-test design. This study was conducted on 30 students of class XI in private high schools in Bandung. Learning interest was obtained by using questionnaires of interest in learning in ARCS (*Attention, Relevance, Confidence, Satisfaction*) model. Student mastering concept is obtained through tests in the form of multiple choice questions given before and after learning. The results of the analysis show that there is increase in learning interest and student mastering concept after the use of teaching materials. *N Gain* value of mastering concept is 0.5 indicating that increase of student concepts mastering in the medium category. Wilcoxon test results showed that the pre-test and post-test values were significantly different ( $p < 0.05$ ), meaning that the application of teaching materials based on simple biology practice equipment had an effect on learning interest and student concepts mastering.

**Keyword** : *teaching materials, simple biology practice equipment, learning interest, concepts mastering*