

An Increasing of Secondary Student Mechanics Conceptual Mastering through Concept-Based Interactive Approach

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Abstract

The lack of traditional instruction method for concepts with have at finger-ends in the results of student concepts comprehension and keep it on a long-term has lead us to develop and enrich another interactive method or approach. The most suitable approach basically shall covering an effective involvement of student, teacher, learning instrument, and environment which is coinciding and supporting each other.

Concept-Based Interactive Approach is one of approaches which consider as most important to the mastering on student concept all at once as a counter traditional instruction. It contains 4 components which emphasize to the active student in the learning process, i.e: learning with focus on concept mastering first (*concept first*), using lecture demonstration for the next step (*lecture demonstration*), apply small group collaboration (*small group collaboration*) and give priority to the peer instruction in the classroom interaction (*peer instruction*)

The Implementation of those approach is done to 120 student on the secondary level (SMA) in Bandung which is supporting by Van Heuvelen Learning Kit on Mechanics and measure student misconception by Hasan et al for modification on Certain Response Index (CRI) with student interview.

The result of the approachment is obtained with normalized gain by Hake is significance in a good gain scale while using Concept-Based Interactive Approach.

Keywords : Concept-Based Interactive Approach, Van Heuvelen Learning Kit, Certain Reapsonse Index