

Critical thinking disposition: the effects of infusion approach in engineering drawing

ABSTRACT

Critical Thinking Disposition is known as an important factor that drives a student to use Higher Order Thinking Skills (HOTS) in order to solve engineering drawing problems. Infusing them while teaching the subject may enhance students' disposition and higher order thinking skills. However, no research has been done in critical thinking disposition while teaching engineering drawing. The current study is to evaluate how critical thinking disposition infused in Engineering Drawing affected students' thinking disposition. Quasi-experimental with non-equivalent control group design was conducted on the groups from two different Technical Matriculation College for 8 weeks. Two teaching methods, which are Conventional approach and Infusion Approach, were used while teaching Engineering Drawing for control group and treatment group. Control group with 29 students and treatment group consist of 31 students were selected as samples. Pre-test shows that there is no significant different in critical thinking dispositions between control group and treatment group. However, the result in post-test shows that treatment group was significantly higher in critical thinking dispositions compared to control group.

Keyword: Conventional approach; Higher Order Thinking Skills; Technical matriculation college; Quasi-experiment