THE IMPLEMENTATION MODEL OF BASIC TECHNOLOGY EDUCATION (BTE) TO IMPROVE ENTREPRENEURSHIP SPIRIT OF STUDENTS' ON CHEMISTRY LEARNING AT PHARMACY VOCATIONAL HIGH SCHOOL

Julinton Sianturi (Reg Number 408131063)

ABSTRACT

The aim of this research was to explore the differences between entrepreneurship spirit of students based on ownership of the concepts (OC) and science process skills (SPS) aspect using by BTE model and conventional model. The population of the research was students' grade XI consisted of 4 classes. The samples were selected by using purposive sampling and Questionnaire to choose two classes as experiment class taught by BTE model and control class taught by conventional model. The variables of this research were: (1) independent variables are BTE and conventional model. (2) Dependent variables are the development SPS and OC of students, as dependent variables and (3) Control variables are time allocation, text book, instrument test, material, and teacher. Test instrument that used in this research were 24 items that had been valid from 40 items. The result showed that this model is very significance to improve the ability of students in learning chemistry, especially on colloidal systems topic. The statistical data analysis of research showed that gain of ownership of the concepts aspect in experiment class is (76.10 ± 8.33) and control class is (55.63 ± 8.91) and gain of science process skills in experiment class is (80.64 ± 6.91) and control class is (62.47 ± 7.98) . Based on the test hypothesis I gain values at the significance $\alpha = 5\%$ showed that $t_{count} > t_{table}$ (9.22>1.55). Therefore Ha received and Ho refused. Thus, OC taught by BTE model is higher than OC taught by conventional model. While in Hypothesis II showed that $t_{count} > t_{table}$ (9.43>1.701). Therefore received Ha and refused Ha. Thus, SPS taught by BTE model is higher than SPS taught by conventional model. Hyothesis III showed there is relation with regression equation Y = 26.59 + 0.71x, by comparing $F_{\text{count}} = 27.99$ to $F_{\text{table } (0.05)(1)(28)} = 4.20$, it could be concluded that Ha received. It means there is a relation, which its percentage relation is 68.57%. The yen of students' in entrepreneurship case at experiment class is 23.33%, which categorized high, 6.67%, which categorized enough, 20%, which categorized less, while in control class is 13.33%, which categorized high, 10%, which categorized enough, 53.33%, which categorized less and 23.33% students' at control class is not interest to be an entrepreneur.