

Effect of Practical Work in Physics on the Students' Performance in Physics

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Abstract

Science knowledge and skills are being regarded as very important in national development. Physics as one of the science subjects is useful in developing the upcoming engineers and medical doctors for any nation. An important component of the knowledge in these professions are skills which are acquired mainly through practical situations. This study explored the effect of practical work in physics among secondary school students in central part of Kenya. A quasi-experimental design was applied in the study. The experimental group was taught using a practical approach for one term while the control group followed the conventional or traditional approach. A pre-test was given to both groups at the start to determine their equivalence in ability. After the 12 weeks, a post – test, which was a physics achievements test, was administered to both groups. The results revealed that there was a significant difference in performance between the control and the experimental group, with the experimental group performing a lot better ($\bar{x} = 30.70$) than the control group ($\bar{x} = 27.25$). The results were significant at ($\alpha = 0.05$) level. This outcome showed that practical approach does reinforce the understanding of concepts in physics and thus boosts achievement.

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