

Using Active Workbooks as a Tool to Develop Concepts and Problem-solving Skills in Work and Energy

Thursday, May 21, 2015 8:00 AM (3 hours)

This research aimed to develop students' conceptual understanding and problem-solving skills in work and energy work using active workbooks. These workbooks were prepared in advance by the teacher and consisted of essential concepts, ideas, diagrams, graphs, problems, and conclusions. The participants in the research were 23 grade 10 students at Khiansaphittakom School, AmphurKhainsa, SuratThani province in the second semester of the 2014 academic year. The research tools consisted of active workbooks, lesson plans based on the predict-observe-explain technique, the Work and Energy Evaluation, Test and the evaluating learners' satisfaction. The results of the study demonstrated a significant increase in student learning performance both concepts and problem solving skills with the application of the active workbooks and the targeted groups were satisfied by using active workbooks.

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