

Using Peer Instruction in Physics of Waves for Pre-Service Science Teacher

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Abstract : In this study, it was aimed to investigate Physics achievement of the pre-service science teacher studying in general science program at Suan Sunandha Rajabhat University, Bangkok, Thailand. The program has provided the new curriculum that focuses on 21st-century skills development. Active learning approaches are used to teach in all subjects. One of the active learning approaches Peer Instruction, or PI was used in this study to teach physics of waves as a compulsory course. It was conducted in the second semester from January to May of 2017. The concept test was given to evaluate pre-service science teachers' understanding in concept of waves. Problem-solving assessment form was used to evaluate their problem-solving skill. The results indicated that after they had learned through Peer Instruction in physics of waves course, their concepts in physics of waves was significantly higher at 0.05 confident levels. Their problem-solving skill from the whole class was at the highest level. Based on the group interview on the opinions of using Peer Instruction in Physics class, they mostly felt that it was very useful and helping them understand more about physics, especially for female students.

Keywords : peer instruction, physics of waves, pre-service science teacher, Suan Sunandha Rajabhat university

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