



# Explore the effectiveness of conceptual change with peer discussion

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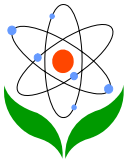
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## Abstract

The research aims to explore the conceptual change and effectiveness of learning on the dynamic air stream for the students from various universities by way of peer discussion. 114 samples from various universities as the research target at the time of pre-training for the internship task. They were divided into three major groups (say Group-A, Group-B and Group-C) for no group discussion, group discussion once and group discussion twice respectively, each of group was further classified into several teams that consisted of 3-4 people each. The methodologies of the research consist quasi-experiment, qualitative research, frequency distribution, T-test and ANOVA analysis to summary the results as below.

1. Various pre-discussion is one of effective approaches for the students from various universities to accept the conceptual change.
2. Peer discussion can help the non-science-based students from various students be aware of the knowledge of dynamic air stream that affects the daily life.
3. The effectiveness of group discussion twice was much better than others.



Meanwhile, the research also find out that most of non-science-based students who are lack of concepts of dynamic air stream. By way of hands-on science experiment to support the evidence of “seeing is believing” so as to effectively proclaim the common science knowledge among peers and refrain from prejudice.

**Keywords:** Peer Discussion, Quasi-Experiment, Conceptual Change, Science Learning, Science Museum