

Ekgapoom Jantarakantee 2011: Thai Pre-Service Science Teacher's Understanding and Practice of Classroom Research. Doctor of Philosophy (Science Education), Major Field: Science Education, Department of Education. Thesis Advisor: Professor Vantipa Roadrangka, Ph.D., Ed.D. 315 pages.

This interpretive case study research project is concerned with 1) pre-service science teacher's understanding and practice of Classroom Research, 2) the cooperating teachers and university supervisor supervision of Classroom Research conducted by pre-service teachers, and 3) the factors that support or hinder the pre-service teachers' practice of a Classroom Research project. The research is divided into three phases: the exploratory phase, the developmental phase, and the implementation phase. The participants of this study were three pre-service science teachers, three cooperating teachers, and one university supervisor. The setting of the study was a final internship year for a five-year pre-service teacher education program in a university situated in western Thailand. The first phase explored the pre-service science teacher's understanding of Classroom Research before engaging in the initiative. In the second phase, the initiative was developed based on the collected data in the first phase accompanied with the cooperating teachers' and university supervisor's background information about the understanding of Classroom Research, and the supports that they preferred to receive for helping them to supervise Classroom Research to the pre-service science teachers. The third phase studied the effect of the initiative on pre-service teacher's practice of Classroom Research, the cooperating teachers' and university supervisor's supervision of Classroom Research to pre-service teachers, the development of pre-service teacher's understanding of Classroom Research, and the factors that supported or hindered the pre-service teacher's practice of Classroom Research. The data from this study were obtained from a questionnaire, individual interviews, observations, journal entries, and pre-service teacher's Classroom Research report. The approach to analysis involved an inductive process for generating themes of the research findings.

The results demonstrated an improvement of pre-service teacher's understanding of Classroom Research after engaging in the initiative. The cooperating teachers played a more important role in supervising Classroom Research to pre-service teachers than the university supervisor. The initiative was useful in helping the cooperating teachers and university supervisor to supervise Classroom Research to the pre-service teachers. The factors that supported pre-service teacher's practice of Classroom Research were the close supervision from the cooperating teachers, the students' responses, and the school's facilities. The factors that hindered the pre-service teachers' practice of Classroom Research were lack of time, insufficient school support, insufficient rapport between the university supervisor and the cooperating teachers, and the insufficient university support for the pre-service teachers. Further research is needed to investigate how pre-service teachers can sustain their understanding and practice of Classroom Research in the first few years when they start their career as a science teacher.

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Student's signature

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Thesis Advisor's signature