

From theory to practice-The curriculum design and learning effects of integrating information technology into instruction for pre-service teachers

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The purposes of this study were to design a course of integrating IT into instruction for pre-service teachers and to investigate pre-service teachers' performances on the literacy of integrating IT into instruction, reflective thinking ability and cooperative learning ability. The subjects of this study were 12 pre-service teachers. They were volunteers to take a course, named "The Theory and Application of Integrating IT into Instruction" for a semester. This study conducted the methods of questionnaire, group interview, observation, and document analysis to collect the data.

The findings of this study showed that: (1) Pre-service teachers' literacy of integrating IT into instruction had significantly positive effect, especially in the performances of operation of software and computer hardware, cognition about IT integrated into instruction, instructional design ability, and ability of applying IT integrated into instruction. (2) Pre-service teachers only had significantly positive effect on the compared part of reflective thinking ability, but in the described and criticized parts of reflective thinking ability was needed to improve. (3) In cooperative learning, pre-service teachers had significantly positive effects on the division of labor, working efficiency and enthusiastic discussion, but it needed to enhance the ability of exact recording. In leaning process, pre-service teachers had changed themselves from working individual to cooperate with others in teamwork.

Keywords : Integrating information technology into instruction, Curriculum design, Pre-service teacher

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