

# Nursing Education & Research

## APPLYING FLIPPED CLASSROOM IN TEAM-BASED LEARNING APPROACH FOR COLLEGE NURSING EDUCATION – AN PILOT STUDY

**Mei-Chun Lin**

Cardinal Tien Junior College of Healthcare and Management, Taiwan

**Background:** Team-based learning is a dialectics learning strategy involving the application of adult learning theory and the cooperative learning approach. The core principle of the flipped classroom is that responsibility for learning returns to the students, the role of teachers changing from that of the leader to that of provider. However, the application of the flipped classroom in the team-based learning method in nursing education literature is insufficient, and there is a lack of clarity as to the process of implementation process students' learning outcomes.

**Purpose:** The purpose of this study was to explore the effectiveness of team-based learning within the flipped classroom on learning outcomes in nursing education.

**Methods:** Using an experimental study design, structured questionnaires were used for data collection. A non-random, purposive sampling method was applied and recruited 50 participants, who were then randomly divided into an experimental group and a control group. Two kinds of course intervention (traditional lecture and online-based flipped classroom) were delivered to both groups. Pre- and post-testing was used to evaluate the learning performance in both groups. Analysis of the questionnaire data was undertaken using SPSS/PC 20.0, according to the variables of the study for statistical analysis.

**Results:** The results of the study showed that there was statistically significant difference in the post-test scores between the two groups following different interventions identified by an independent sample t test ( $t=13.24$ ,  $p<.001$ ). Both groups improved following the interventions as indicated by a paired sample t test ( $t=15.89/4.07$ ,  $p<.001$ ). There was evidence that the post-test performance of the experimental group was better than that the control group. The experimental group had satisfied in three areas, which included learning achievements ( $M=3.94$ ,  $SD=0.21$ ), learning materials ( $M=3.93$ ,  $SD=0.20$ ) and knowledge application ( $M=3.93$ ,  $SD=0.21$ ) by questionnaires.

**Conclusion:** Team-based learning within a flipped classroom in the nursing class teaching improved student learning motivation and learning effectiveness. It is a method aimed at developing proactive learning and enhancing the skills of critical thinking, and team communication and cooperation. On the other hand, this approach also promotes and increases diversity of teaching for educators.

meichun@ctcn.edu.tw