



## International Academic Conference on Teaching, Learning and Education

# **A study on the effect of a newly-developed learning outcome-oriented educational intervention to promote nursing innovation**

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### **Abstract:**

Clinical nursing practice is often associated with a number of challenges and medical issues, including changes in the nature of disease, complexities of health issues, ever-increasing demand from patients, and cost-effectiveness considerations, which could pose serious challenges to health care institutions. Therefore, it is widely considered important for nursing education programs to strengthen curricula to emphasize the concepts and skills needed to participate in nursing innovations in clinical practice to facilitate nursing quality improvement and cost reduction. This study aimed to 1. administer an educational intervention to promote nursing innovation, and 2. investigate changes in nursing students' cognitive load, cognitive process in creative thinking, learning attitude, learning performance, and nursing innovations in clinical practice after the educational intervention. This experimental study was performed with pre-posttest only control group design. A sample of 89 senior nursing students from a vocational college in Taiwan was chosen. The sample was surveyed by means of questionnaire scales to investigate cognitive process in creative thinking, cognitive load, learning attitude, learning performance, and nursing innovations in clinical practice. One-on-one interviews were held with 10 participants following the educational intervention. Descriptive statistical analysis and repeated measures ANOVA were performed in SPSS 21.0. The findings were as follows: (1) Both groups' scores in cognitive process in creative thinking improved from pretest to posttest, with



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the control group showing a statistically significant improvement. (2) The control group attained higher, though statistically insignificant, cognitive load scores than the experimental group. (3) The control group attained higher, though statistically insignificant, learning attitude scores than the experimental group. (4) No statistically significant difference was observed between the two groups in learning performance scores. (5) Qualitative analysis highlighted generally positive reactions towards the intervention, with participants describing the intervention as a great source of inspiration for creative thinking and feeling satisfied with themselves for having designed nursing innovations in clinical practice. The intervention administered in this study could be modified and expanded for greater effect and applicability, and also to keep learners engaged with the learning process. Nursing students should be encouraged to discuss and develop a trans-disciplinary approach to nursing innovation design. In addition, the intervention may be used as a teaching strategy in nursing curricula to promote nursing innovation.

**Keywords:** nursing innovation, outcome-based education, nursing students, teaching strategy, cognitive load.