

The Effectiveness of PBL in Enhancing Students' Critical Thinking

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Background: Critical thinking is considered as a desirable educational outcome in nursing education. Among the strategies purported to foster students' critical thinking, problem-based learning (PBL) seems promising.

Objective: To compare the effect of PBL and lecturing on the development of nursing students' critical thinking.

Design: Randomized controlled trial

Setting: A nursing department in a university in Hong Kong

Sample: Eighty students in the first year of the Bachelor of Nursing programme

Methods: The students were randomized to the experimental or control group. Experimental group students underwent PBL while the control group undertook the lecturing method in a 2-semester course. Data were collected at entry into study, on completion of the course (posttest 1), at one year (posttest 2) and two year (posttest 3) after completion.

Main outcome measure: critical thinking disposition.

Results: Students in the experimental group made steady improvement in their Total Critical Thinking Disposition Scores at Posttest 1, Posttest 2 and Posttest 3. Control group students, on the other hand, deteriorated in their Total Critical Thinking Scores at Posttest 1, and although they improved at Posttest 2 and Posttest 3, they failed to catch up with the experimental group. Overall, there was improvement for both groups of students over time ($p=0.018$) but the time effect was significantly different between the experimental and control group ($p=0.008$).

Conclusion: The development of critical thinking disposition in a group of nursing students appeared to improve over time and PBL seemed to have an enhancing effect.