

Title:

An Education Effect of Cooperative Learning With the Visual Text in Nursing Technique Acquisition

Kiyoko Tokunaga, MS

Nursing, Kyoto Koka Women's Univesity, Kyoto, Japan

Miwa Yamamoto, PhD

Nursing, Medicine, Tottori University, Tottori,, Tottori, Japan

Session Title:

Education Posters Session 2

Keywords:

visual text, cooperative learning and nursing skill

References:

AbuSeileek, A. F. (2012). The effect of computer-assisted cooperative learning methods and group size on the EFL learners? achievement in communication skills. *Computers & Education*, 58(1), 231-239. doi:<http://dx.doi.org/10.1016/j.compedu.2011.07.011>

Lin, Z.-C. (2013). Comparison of technology-based cooperative learning with technology-based individual learning in enhancing fundamental nursing proficiency. *Nurse Education Today*, 33(5), 546-551. doi:<http://dx.doi.org/10.1016/j.nedt.2011.12.006>

Klavina, A., Jerlinder, K., Krist..n, L., Hammar, L., & Soulie, T. (2014). Cooperative Oriented Learning in Inclusive Physical Education. *European Journal of Special Needs Education*, 29(2), 119-134.

Abstract Summary:

This study used cooperative learning with questioning and visual text (pictures and video images) to motivate students. The watching duration of the first-year students was significantly longer than that of the second-year students. Conclusion: Cooperative learning with visual text and questioning affects learners' motivation and promotion of nursing skill acquisition.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Learners can actively learn cooperative learning by using visual text.	Active cooperative learning.
Learners have high motivation.	Use of visual text to motivate learning.

Abstract Text:

Japan's nursing basic education is designed to give nursing students nursing skills in an overcrowded curriculum during a limited time. Improving teaching methods is necessary, just as motivating students is indispensable. This study used co-learning with questioning and visual text (pictures and video images) to motivate students. Then it verified the effects of the co-learning on nursing skill acquisition status.

Research purposes: To verify the effects of co-learning with visual text and questioning on acquisition of nursing skills. Research subjects: After we explained the purpose of this study to second-year students (who learned skills by conventional methods) and first-year students (who learned skills by conventional methods plus co-learning) of A university, we affirmed that anonymity would be preserved. Thereafter, we obtained consent from all research subjects: 96 first-year students and 97 second-year students. Research period: second-year students, June 25 through July 9 in 2015; first-year students:

April 26 through May 10 in 2016. Research methods: Figure 1 shows a list of questions that we presented to the first-year students. After the instructors confirmed the questions in front of them, the students described their own individual opinion on their worksheet. Then, they shared and talked about their opinions in a group. They described the results of the discussion on their worksheet. If necessary, they shared them with the whole class. The evaluation of skill acquisition was scored on five items: how to hold sterilized forceps; the direction in which to remove them from outer packing; how long to turn over the outer packing; closing the tips of the sterilized forceps; and keeping the tips of the forceps taken out of the packing horizontally. Analytical methods: The acquisition status of the nursing skill to remove sterilized forceps under sterile conditions and self-learning by watching videos were compared between the first-year students who experienced co-learning with visual text and questioning in the unit of sterilization operation and the second-year students who did not. They were evaluated with scores in the five items: how to hold sterilized forceps; in which direction to take out them from outer packing; how long to turn over the outer packing; to close the tips of the sterilized forceps; keeping the tips of the forceps taken out the packing horizontally. An unpaired *t* test was applied to assess differences in scores and average video watching time by e-learning between the first-year students and second-year students. Results: The evaluation scores were $t(126)=9.79, p<0.001$. Scores of the first-year students ($M=4.75, SD=0.503$) were significantly higher than those of the second-year students ($M=3.41, SD=1.248$). Additionally, the video watching time for self-learning was $t(190)=2.69, p<0.01$. The watching duration of the first-year students was significantly longer than that of the second-year students. Discussion: The increase of self-learning demonstrates the promotion of learning motivation. Furthermore, the improvement of scores represents that of the skills. Conclusion: Co-learning with visual text and questioning affects learners' motivation and promotion of nursing skill acquisition.