

Field Trip for Case Study: Action Research to Improve Teaching and Learning in Midwifery Course

Sununta Youngwanichsetha¹, Warangkana Chatchawet², Sureeporn Kritcharoen¹, Sasikarn Kala²,
Benyapa Thitimapong²

¹Associate Professor, ²Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla, Thailand

ABSTRACT

Background: Field trip for case study is an active learning approach that can be used to promote motivation, student engagement and academic achievement. However, it is not widely apply in nursing lecture class.

Purpose: An active learning experience, field trip for case study, was created and implemented in the Midwifery course in order to improve teaching strategy and learning outcomes.

Methodology: Action research method was employed. Participants were 160 third year nursing students enrolled in the Midwifery course. Three main active learning activities were: 1) participating in a field trip for case study, 2) learning from case study, and 3) presentation of case study.

Results: The findings indicated that nursing students had positive learning experiences, achieved learning outcomes, and were satisfied with learning activities. Well-planned activities of the field trip for study, well-constructed for active learning strategies, and additional instructional media were suggested.

Conclusion: The field trip for case study could be used as an active learning strategy in nursing education.

Keywords: Field trip for case study, active learning, nursing students, action research

Introduction

Active learning, developed under constructionist learning theory, is an instructional process integrating activities designed to promote student engagement and participation in the classroom. The main focus is the integration of big concepts in education. Knowledge is dynamic in our experiences. Learning is an interactive process building upon student's prior beliefs and knowledge. The educator's role is changed from directive authority to facilitator of learning processes. It is recommended in the educational profession to improve 21st century skills of students. It can be used both in the classroom and simulation laboratory¹. However, it was not widely implemented in nursing lecture class.

Students and their learning needs are the focus of active learning. All teaching and learning activities aim at enhancing student ability to build new knowledge based on their prior competencies. Students are active learners while educators act as learning facilitators. Examples of active learning activities are field trips for case study, flipped classroom, short-lecture with assigned activities in class, questions and answers, case study, presentation, seminar, reflective journal writing, and concept mapping².

Using active learning in class has many benefits for the learning process and outcomes. It can promote active participation in the learning process through engagement in reading, critical thinking, participation in class activities, and reflection on learning experiences. As a result, it can enhance short-term and long-term outcomes because it combines cognitive, psychomotor, and emotional components. Prior research evidence shows that active learning activities can increase exam scores by 6%³.

Corresponding Author:

Sununta Youngwanichsetha
Faculty of Nursing, Prince of Songkla University,
Hat Yai, Songkhla, 90112, Thailand
Email: sununta.y@psu.ac.th
sununta.y@gmail.com

Lecturing is conventional in nursing and midwifery education, resulting in an inactive learning process and diminished achievement in some learning outcomes. Students attending a standard lecture class are more likely to learn more passively, only listening to lectures. In addition, they were less motivated to participate in a large classroom. Therefore, they are 1.5 times more likely to fail in achievement of expected learning outcomes as compared to those engaged in active learning activities⁴.

Currently, the active learning approach is a proposed educational innovation of Thailand's qualification framework and quality assurance processes. Therefore, this study aimed to apply the field trip for case study to active learning strategy in order to promote student engagement and improve expected learning outcomes.

Research Methodology

In this study, an action research was created and implemented to improve student engagement and participation in active learning activities in Midwifery class. The problem identified was passive learning among students in lecture class. Therefore, action research was selected as suitable to enhance effectiveness of teaching strategy and improve learning outcomes in the classroom. The action research process was composed of planning, acting, observing, reflecting, and modifying further cycles⁵. This study was approved by the Institutional Review Board for ethical in research design and data collection. The third year-nursing students registered in the Midwifery course during second semester of 2017 academic year were asked to participate in action research. Written-informed consent was obtained before a research plan and data collection was implemented. Data were collected using individual records, interview guides, and reflective journal writing. Content analysis was used to interpret qualitative data⁶. Credibility of this study and its results were ensured by prolonged engagement in the field. Field note was written down for reference. Data triangulation was conducted using interview guides, reflective writing and participant observation. Additionally, participants and peer review were applied to ensure thoroughness⁷.

Findings

One hundred and sixty nursing students signed informed consents in order to participate in this study.

Eleven were male and the other 149 were female. The Midwifery course during second semester of 2017 academic year promoted active learning into two phases: Phase I- field trip for case study, Phase II-active learning activities in classroom.

Firstly, passive learning among nursing students in the Midwifery course was identified as a research problem. Secondly, the field trip for case study was developed and implemented. The objective of the field trip was for each group of students to select a case study of interest. A teacher was assigned to mentor. Sixteen case studies were presented as options to students: 1) teenage pregnancy, 2) elderly pregnancy, 3) hyperemesis gravidarum, 4) multiple pregnancy, 5) hypertensive disorders, 6) abortion, 7) placenta previa, 8) gestational diabetes, 9) heart disease, 10) anemia, 11) sexually-transmitted infection, 12) Prolonged labor, 13) preterm labor, 14) fetal distress, 15) postpartum hemorrhage, and 16) cesarean section.

In Phase I, the first cycle of 80 students were divided into eight groups. Each group comprised of 10 students. The students were assigned to collect clinical data for the select case study in a postpartum ward of Songklanagarind hospital during 10.00 a.m.-12.00 p.m. and 13.00 p.m.-15.00 p.m. on the weekends. Observing step, involved data collection through observation and semi-structured interview focusing on student's motivation, engagement and data collection. The researchers observed that the field trip for case study in one hospital location did not achieve the learning goals.

Reflecting step, involved documenting teacher's reflection on the learning activities and collecting student's reflection on the learning experience. Most students were interested in actively participate in the field trip but some were observed to be less motivated to engage in this activity due to the weekend requirement. The students did not necessarily understand the objective and benefits of the field trip for case study.

Modification of the field trip was made for the second group with 80 students who were assigned to collect clinical data of case study in postpartum wards at Hat Yai hospital. This time the participants were informed in detail of the purpose and significance of the learning activity. The mentor motivated the students by assisting in selection of case study and showing interesting data that could be used for further discussion in class.

Tapping into student peer group dynamic was helpful to promote engagement and participation in active learning activities during the field trip.

In Phase 2, active learning activities in classroom were planned and implemented by teachers and students assigned to the group. After obtaining case study from the field trip, the students were divided into group to analyze important clinical data for the case study and to compare its pathophysiology, treatments and nursing care. Thirteen groups could select appropriate case study from the field trip and 3 groups could not collect any data of the select case study. Therefore, example of case study was created for class learning and presentation.

The findings revealed that most of the students gained positive learning experiences and were satisfied with going to the field trip to select case study. They also learned from the case study, and presented them case study in classroom. Suggestions for further learning activities were: 1) well-planned activities for the field trip for case study, 2) well-constructed active learning activities in class, and 3) instructional media. For learning achievement, mean score of case study presentation was 92 (81-100) while mean score of case study report was 90 (85-95). As a result, one student received grade A, 48 students received grade B⁺, 74 students received grade B, 34 students received grade C⁺, and 3 student received grade C. Summary of the action research process is presented in Table 1.

Discussion

Three active learning strategies were used in this study: going on the field trip for case study, learning from case study, and presenting of the case study in class. These activities can promote student engagement in the learning process and achieve the learning outcomes. Students participating in the field trip for case study could learn from collecting clinical data of a real-life case study. Learning from case study in group promotes critical thinking and collaboration among students. Presenting the case study in class can improve student's communication skill, creativity, and collaboration⁸. As a result the students can construct their own knowledge based on prior knowledge and new learning experience⁹. Achieving the learning outcomes can enhance student's satisfaction with active learning activities thus gain

positive learning experience¹⁰. However, well-planned activities including the field trip should be considered for further implementation. Scheduling should be clearly designated in the syllabus. Educators should go to the field with students in order to maximize and support learning activities and experiences.

Promoting the students' participation in active learning activities and as a team should be well-constructed and well-prepared^{11,12}. Variety of activities such as games and application of social media should be created in order to facilitate creativity and critical thinking^{13,14}. Additional instructional learning media should be developed and applied in active learning class including computer-assisted instruction, audio-visual presentation or internet-based activities^{15,16}. These teaching and learning strategies can enhance comprehension and long-term retention of knowledge¹⁷.

Analysis of student's reflections in experiential learning showed that action research can motivate the students' active participation while increase content knowledge¹⁸. Finally, action research is suitable for further studying to improve teaching and learning activities¹⁹.

Conclusion

In this study, an interactive learning experience was created and implemented using action research method among nursing students attending the Midwifery course. Three main active learning approaches were going to the field trip for case study, promoting learning activity from such case study and improving presentation skill of the case study. As a result, positive learning experiences, satisfaction with learning activities and expected learning outcome were achieved. Application of the field trip for case study should be considered and implemented in variety nursing courses in order to promote more learning engagement and critical thinking skill.

Conflict of Interest: Nil

Source of Funding: Faculty of Nursing, Prince of Songkla University, Hat Yai, Thailand

Ethical Clearance: Taken from Center for Social and Behavioral Sciences Institutional Review Board of Prince of Songkla University, Thailand.

REFERENCES

1. Marchi NM, Dolansky M. Using active learning to foster patient safety knowledge, perceived skills and attitudes in baccalaureate nursing students. *Nurs Educ Perspect* 2017; 38: 146-148.
2. Waltz CF, Jenkins LS, Han N. The use and effectiveness of active learning methods in nursing and health professions education: A literature review. *Nurs Educ Perspect* 2014; 35: 392-400.
3. Freeman S, Eddy SL, McDonough M, et al. Active learning increases student performance in science, engineering, and mathematics. *Proc Natl Acad Sci U S A* 2014; 111: 8410-8415.
4. Berkhout JJ, Helmich E, Tennissen PW, et al. How clinical medical students perceive others to influence their self-regulation learning. *Med Educ* 2018; 52: 34-44.
5. Efron SE, Ravid R. *Action research in Education: A practical guide*. Philadelphia: Wolters Kluwer; 2013. p. 56-59.
6. Waltz CF, Strickland OL, Lenz ER. *Measurement in nursing and health research* (5 th ed.). New York: Springer; 2016. p.124-126.
7. Denzin NK, Lincoln YS. *Strategies of qualitative inquiry* (4th ed.). Los Angeles: Sage; 2013. p.156-160.
8. Larsson K. Understanding and teaching critical thinking: A new approach. *Int J Educ Res* 2017; 84: 32-42.
9. Gwen E, Liz S, Clair W. Action research and millennials: Implementing pedagogical approaches to encourage critical thinking. *Nurse Educ Today* 2018; 61: 140-145.
10. Moore-Cox A. Lesson plans: Road maps for the active learning classroom. *J Nurs Educ Pract* 2017; 56: 697-700.
11. Day-BlackC, Merrill EB, Konzelman L, Williams TT, Hart N. Gamification: An innovative teaching-learning strategy for the digital nursing students in a community health nursing course. *ABNFJ* 2015; 26: 90-94.
12. Urio A, Haag F B, Zanettini A, et al. Challenges in the use of active learning strategies with students in a public school. *J Nurs Educ Pract* 2017; 11: 4866-4874.
13. Huda S, Ali TS, Nanji K, Cassum S. Perception of undergraduate nursing students regarding active learning strategies and benefits of active learning. *IJONE* 2016; 8: 193-199.
14. Martin SE, Marie B, Gunila M. Developing, implementing, and evaluating the educational module student active learning via internet observation in undergraduate nursing education. *Perspect Psychiatr Care* 2017; 53: 104-110.
15. Morales KA. Active learning strategies to enhance nursing students' knowledge of Pharmacology. *Nurs Educ Perspect* 2017; 38: 100-101.
16. Jacob SA, Khan TM, Pusparajah P, et al. Students' perceived predictors of an effective active learning/problem-based learning session: A pilot study. *J Res Pharm Pract* 2016; 46: 42-46.
17. McGuire M, Goldstein C, Claywell L, et al. Analysis of student reflections of experiential learning in nursing health policy courses. *Nurse Educ* 2017; 42: 95-99.
18. Markowski A, Greenwood K. Evaluation of an active learning experience for educating physical therapist students on oral health screening for health promotion. *Man Ther* 2016; 25: e117-e117.
19. McDonnell P, McNiff J. *Action research for nurses*. Los Angeles: Sage; 2016.p. 45-49.