# Using of Blended Learning in Improving Collaboration Skill of Nursing Students

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# Using of Blended Learning in Improving Collaboration Skill of Nursing Students

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## ABSTRACT

**Background:** An issue of collaboration between nurses and doctors can be caused by the lack of learning process which contains the element of collaboration in nursing education. Therefore culture and attitude to collaborate are lacking among nursing students.

**Aim:** This research is aimed to analyze the use of blended learning in enhancing the skill of collaboration of nursing students.

**Method:** The research is conducted by way of non-systematic type of literature review. Data in the form of articles were collected from several databases which includes PROQUEST, Science Direct, Elsevier, BMJ, Google Scholar and PubMed by searching several keywords search namely "e-learning", "blended learning", "Nursing Education", "collaborative nursing", "IPE", "IPC", "Professional Collaboration", "Interprofessional Education" using boolean "AND". In addition to keywords search, the researcher also used inclusion and exclusion criteria in filtering the articles reviewed confining to articles published in 2013 -2018.

**Results:** Blended learning can improve nursing students' collaboration skills through increasing the elements of cooperation, assertiveness, responsibility, communication, autonomy, coordination, understanding of general goals, mutual respect and trust.

**Conclusion:** Blended learning can be adopted in nursing education. Blended learning can increase motivation, improvelearning outcomes, instill good character values, encourage critical thinking and enhance the collaboration skills of the students.

*Keywords:* Blended learning, Nursing Education, Collaboration

## Introduction

Nursing is professional service which forms an integral part of the health services in the form of comprehensive biopiscosocial and spiritual services aiming at individuals, families and communities. Nursing is a service-oriented profession by helping patients to overcome their health problems. One of the characteristics of this profession is to have the skills of collaboration namely establishing cooperation among various health professions in dianogsisong health problems and helping to resolve them [1].

The skill in collaborating is currently considered to be lacking in the nursing profession. According to the research finding of Rumanti, it was stated that the practice of collaboration between nurses and doctors was lacking and most of them were still in the stage of negotiating[2]. Likewise, Reni's research finding stated that the collaborative implementation between nurses and doctors in one of the Sumedang district hospitals was still not effective. This shows that the spirit oof collegiality among the nurses and the doctors has not been formed. The hierarchical interaction between nurses and doctors can still be seen in the interdisciplinary

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relationship among physician nurses[3]. Collaboration problems were also experienced by nurses in Turkey according to Durmus' research. and collaboration [4]. It also happens to nurses in China where the level of collaboration between nurses and doctors was in the medium category in repect of effective communication, perceived respect and willingness to collaborate [5].

The problems of collaboration between nurses and doctors were caused by various factors including a less positive attitude. According to Tang's research which stated that doctors view that the collaboration of nurses is less important but assess the quality of collaboration to be higher as compared to the nurses. Besides that, it is also influenced by other factors including communication, respect, trust, unequal strength, understanding professional roles and assigning priority tasks [6].

The collaboration problem between nurses and doctors can be attributable to the problem of learning process in nursing education and lacking of the application of learning methods that contain element of colloboration which resulted the lacking of culture and attitude to collaborate among the nursing students. The skill of interprofessional cooperation is not easy but yet it can be honed by all nurses provided that they must be trained in the early stage through the process of collaborative learning in interprofessional education[7, 8]. Likewise Foote's research stated that interprofessional educatioan with collaborative learning approaches can enhance the collaboration skill of interprofessional team, defining roles and responsibilities and increasing trust in nursing skills[9, 10].

However, various efforts can be made to the learning process in order to resolve the problems of collaboration ofnursing students such as the use of clinical instructors to improve the learning experience of the nursing students [11]. Other than that, preceptorship programs can also improve the learning outcomes of nursing students [12]. Besides that, learning with concept maps and blended learning is also able to enhance collaboration [13, 14]. The purpose of this research is to study the utilization of blended learning in improving the collaboration skills of nursing students.

## Method

This research is conducted by way of non-schematic type of literature review. Data in the form of articles were collected from several databases which include PROQUEST, Science Direct, Elsevier, BMJ, Google Scholar and PubMed, Data by searching several key words namely "e-learning", "blended learning", "Nursing Education", "collaborative nursing","IPE","IPC","Professional Collaboration","Interprofessional Education" using boolean "AND". In addition to keywords search, the researcher also used inclusion and exclusion criteria in filtering the articles reviewed confining to articles published in 2013 - 2018 in Indonesian as well as English with realiable sources.

## Results and Discussion

There are two reasons for adopting blended learning model especially in universities where there are for students and lecturers or referred to as differentiated instruction and the presence of comfort and presence list or referred to as pacing and attendence.

Differentiated instruction means that lecturers can determine the contents of the curriculum, environment, online learning activities, face-to-face depending on the level of difficulty, interest, learning style and are able to determine the time of the students working in groups and to provide additional materials that are not available in online module. Meanwhile, pacing and attendence means that students can independently determine when they want to study. As such, there will be no issue even if the students do not not present during the lecture, they are still able to access the learning materials online so that they will not be left behind.

In addition to the above reasons, blended learning has validity, practicality and effectiveness in learning. Validity can be seen from the elements in blended learning, namely there were elements of application and tutorial had a role in improving the procedural abilities needed by the learning process. Collaboration skill can be honed from the e-learning process of blended learning as there is element of collaboration among the students in solving problems in a given case.

The practicality and effectiveness in blended learning can be seen from planning and implementation. Planning using e-learning facilities of blended learning consists of ease of obtaining subject identity, learning outcomes, learning objectives, materials, time allocation, learning methods, learning activities, assessment of learning outcomes, learning resources, completeness

of learning tools, presence of face-to-face learning, independent learning, collaboration, assessment and learning material support.

In the implementation of blended learning model, it is practical and effective in orientation, organization, investigation, presentation, analysis and evaluation such as learning preparation, delivery of learning objectives, introduction of materials, introduction of problems related to materials, assigning tasks, related problems to be studied by students, independent and group investigations, gathering information related to the problem to be studied, solution to the problem studied, developing work and presentation of works and evaluating learning outcomes. Likewise, the effectiveness of blended learning is able to make students to be more active and increasing the interest of students in learning as it is not boring.

Some research findings have proven the advantages of blended learning. For example, Ali's research stated that the implementation of blended learning could increase the motivation of the students and improve learning outcomes[15]. Susana's research also stated that blended learning is able to instill good character values in learning among the students[16]. Likewise in Fitriani Research and Ikhsan, it was stated that blended learning is able to improve students' critical thinking [17].

In nursing education, the application of blended learning also has an impact in improving the learning skills of nursing students in which the Mean et.al study stated that blended leaning is more effective than face-to-face learning in the ability of meta-analysis[18]. Likewise, Campbell et al.'s research stated the application of discussion in blended learning has better results as compared to face-to-face discussions[19].

In the development of blended learning model, it had been carried out by using various approaches such as the development of moodle-based blended learning in microbiology courses[20]. Development of blended learning design by using assure approach[21]. Development of blended learning in aspects of learning design by using online social media platforms as supporting lectures [22] and the integration of collaborative problem based learning with blended learning [23].

Blended learning as a learning method has several criteria where Rosenberg has identified the three basic criteria in e-learning:

1. e-learning is a network that can make, improve quickly, save or reappear, distribute and share learning materials and information;

2. e-learning is accessible by all users who have access to internet;

3. e-learning focuses on broader learning where learning solutions can be superior to the training paradigm. [24, 25].

Collaboration according to Orchard (2005) is a joint communication and decision-making process with the aim of meeting health care needs or it can also be defined as a partnership between a team of health professionals with a participatory, collaborative and coordinated approach to share decision making communication about health issues. [26]. Collaboration is needed by nurses as there are various elements associated with collaboration which include cooperation, assertiveness, responsibility, communication, autonomy, coordination, general purpose, mutual respect and trust [27].

Collaboration is the first element in building collaboration. Through collaboration one will respect the opinions of others, willing to trust and to accept other opinions. Assertiveness is the second element in building collaboration. Assertiveness means the skill of collaborative team members to offer information, appreciate the scientific approach and share experience they have, and to ensure the opinions of each team are accepted and that consensus can be achieved. Responsibility is the third element in building collaboration which means that each team member must take responsibility based on the consensus, both as a member of the team and the profession. Communication is the fourth element in collaboration which means that each member of th team must share important information about patient care or various information related to clinical decisions. Autonomy is the fifth element in collaboration which means that each team member would have scientific independence or autonomy within the limits of his competence and the freedom to apply knowledge and manage patients in accordance with their fields or professional competencies. Coordination is the sixth element in collaboration which means that each joint decision-making is decided through coordination among team members and at the same time to reduce duplication of decisions making for organizational efficiency. General goals is the seventh element in collaboration which means that collaboration is based on

general-purpose concepts, emphasizing mutual respect and a professional approach to solving problems. Mutual respect and trust are the eighth element in collaboration which means that relationships are dynamic to achieve mutual satisfaction or a relationship that facilitates a dynamic process characterized by a desire to advance and achieve satisfaction for collaborative team members while trust could determine success in collaboration goals. Therefore the element of collaboration could be developed through blended learning.

## Conclusion

Blended learning is one of the learning models that can be used as an alternative learning model in nursing education in the era of information technology. Blended learning is easy to use and it can increase motivation, improvelearning outcomes, instill good character values, encourage critical thinking and enhance the collaboration skills of the students through increasing of the elemetns of collaboration, assertiveness, responsibility, communication, autonomy, coordination, understanding of general goals, mutual respect and trust

## Acknowledgements

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