Applying Competition-Based Learning (CBL) in Nursing Education

Basma Al Yazeedi, RN, MSN; Diane Berry, PhD, ANP-BC, FAANP, FAAN
The University of North Carolina at Chapel Hill

Abstract

Competition-Based Learning (CBL) is a new innovative and promising method of learning. CBL has been defined in information technology and engineering education but not in nursing or medical education. However, the competition concept has been examined in few medical education studies and the results were promising. An approach for CBL Application in nursing education was suggested.

Introduction

In information technology education, CBL is defined as “a constructivist approach to learning in which competition is used as stimulus for the maximization of the Indented Learning Outcomes (ILOs) specified in a given course or curriculum, while team members participate in a project under controlled environment” (Issa, Hussain, & Al-Bahadili, 2015, p. 5).

In engineering education, CBL is described as project-based learning that involves teams of students in an open-ended assignment who account for the performance of the resulting case during final project testing (Carroll, 2013).

The two definitions are based on project-based learning, which is a method of learning that allow learners to acquire knowledge through the application of projects that are real and pertinent to the topic being studied (Dehdash, Mehrvalizadeh, & Kashani, 2013).

Similarly, problem-based learning is applied in nursing education where students define the problem and establish learning objectives to develop their understanding of the problem (Bassir, Sadr-Eshkaer, Amirkhorhe, & Karimkhous, 2014).

Problem-based learning in nursing education has been shown to enhance collaborative, active, and self-directed learning (Mayner, Gillham, & Sansoni, 2013; Spiers et al., 2014). CBL definition in nursing education could potentially be based on problem-based learning parallel to project-based learning in information technology and engineering education definitions of CBL.

CBL in Nursing Education Literature

Competition-based learning was not found in the nursing or medical education literature. However, the competition concept was examined in few medical education studies (Table 1).

In medical education, the addition of a competition component has been shown to be an effective learning approach (Lei et al., 2016; Makhoul et al., 2016; Scales et al., 2016).

Competition-based learning that involves a group of teams promotes collaborative learning and enhances students’ motivation and active learning (Lei et al., 2016; Makhoul et al., 2016).

Collaborative learning combined with enhanced motivation to learn emerge team-work spirit among students, promotes engagement and self-directed learning, emphasizes shared knowledge among group members, and stimulates student creativity and innovation to achieve better learning outcomes (Figure 1).

Meaningful rewards to winning a competition such as grades or monetary prizes result in negative consequences including shifting the outcome value from learning to winning and this fails the learning process (Shindler, 2008; Sternberg & Baalsrud 2014).

The application of CBL in the nursing education is unclear. A suggested approach of applying CBL in nursing education is illustrated in Figure 2.

Table 1. Medical Literature Findings

<table>
<thead>
<tr>
<th>Author (year)</th>
<th>Course</th>
<th>Audience</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lei et al. (2016)</td>
<td>Severe infection course</td>
<td>Medical students</td>
<td>Better outcomes in case discussions, referring to case-related articles, attending clinical group consultations, and a case analysis final examination</td>
</tr>
<tr>
<td>Makhoul et al. (2016)</td>
<td>Hematology Oncology fellowship</td>
<td>Fellow physicians</td>
<td>Improvement in attendance, participation, and engagement in learning</td>
</tr>
<tr>
<td>Scales et al. (2016)</td>
<td>Online educational course</td>
<td>Resident physicians</td>
<td>Increased level of engagement and participation</td>
</tr>
</tbody>
</table>

Figure 2. Suggested Approach of Applying Competition-Based Learning in Nursing Education

Conclusion

Competition-based learning is a new and promising method of learning. No literature was found to show that it has been used in nursing education. Nursing educators and researchers may want to consider examining this method of learning in nursing education.

Contact

Basma Al Yazeedi
The University of North Carolina at Chapel Hill
bsama@email.unc.edu
www.unc.edu

References

Scales et al. (2016). Online educational course | Resident physicians | Increased level of engagement and participation |

Figure 2. Suggested Approach of Applying Competition-Based Learning in Nursing Education

Conclusion

Competition-based learning is a new and promising method of learning. No literature was found to show that it has been used in nursing education. Nursing educators and researchers may want to consider examining this method of learning in nursing education.