Student Engagement: Enhancing Critical Thinking Through Problem-Based Learning

Definition

Problem-based learning (PBL) can be defined as “student leaning through active participation in small groups to analyze, synthesize, and manage problems” (Chikotas, 2008, p. 360). PBL is described as student centric as it empowers the student to take control of the learning process as they make decisions about practice-based scenarios or case studies that mirror real life (Chikotas, 2008). The use of problem-based learning (PBL) for advanced practice nursing students has been found to be a positive experience to enhance critical thinking (Distler, 2008), however, the use in other graduate nursing track.

Application in Nursing Education

Due to the interest of faculty at a College of Nursing and proven positive results in other programs, utilization of this type of learning was explored to immerse graduate nursing students in the executive track with the PBL format to enhance critical thinking and promote student engagement.

The PBL scenarios utilized within the course were meant to pull in prior student knowledge while at the same time, helping students identify their individual learning needs and thus stimulate self-study in an area. Schmidt, Rotgans, and Yew (2011), found that PBL students often take more personal responsibility for their learning and are more independent learners. Baker et al. (2007) revealed that PBL increased the learning skills and job skills of students. PBL may also involve small-group educational methods. The small group platform of collaboration on a problem breeds friendships among students, builds closer contacts among the students and the educator and at the same time can generate peer pressure that can be useful in motivating students to be diligent in their self-study (Schmidt et al., 2011). The sharing of
knowledge to solve problems using PBL encourages engagement above traditional TDs. (Crawford, 2011).

Being current with the changing health care delivery system helps to propel students into a practice that they will be able to appreciate and engage in while in the college or university, and immediately upon graduation as a result of the real-life scenarios involved in practice upon graduation. The quality of the case study or problem serves as a major source of influence in PBL including the quality of group discussions, time spent on self-study as well as interest in the subject matter (Schmidt et al., 2011). Case studies have the opportunity to closely approximate situations that foster expansive and lively discussions. Employing content experts for a specific course and who have interest in this type of course work/facilitation is imperative.

Using the curriculum program outcomes as a guide, faculty created complex problems that required students to use flexible thinking patterns through group collaboration. Problems with multidisciplinary solutions requiring students to gather information from various nursing content areas such as education, policy, leadership, or other disciplines such as psychology, sociology and anthropology provide the highest level of learning opportunity

Synopsis

Problem-based learning may involve a small-group educational method depending upon the intended course goals and material. The small, collaborative group platform of a problem encourages friendships among students, builds engagement among the students and the educator, and can leverage peer pressure in motivating students to be diligent in their self-study (Schmidt et al., 2011). The sharing of knowledge to solve problems using PBL encourages engagement above traditional TDs. (Crawford, 2011).
In a study by Distler (2008), of the 25 respondents most of the students (91%) strongly agreed or agreed that PBL resulted in more active information seeking on their part, while 82% strongly agree or agreed that PBL improved classroom flexibility. Sixty-five percent felt PBL helped develop critical thinking skills and 52% either agreed or strongly agreed PBL improved their ability to retain knowledge.

With PBL, the student’s previous experience is valued and respected, where in traditional education methods, the faculty is viewed as the expert and students typically receive the faculty member’s knowledge. However, PBL makes use of real-life situations that faculty have experienced and the facilitation of learning using the PBL approach requires faculty to take a more passive approach to teaching and encouraged student interaction so that they may develop their own ideas and problem solving. Students become responsible for their own learning, resulting in the development of critical thinking and problem solving (Distler, 2008). Evaluations of PBL have revealed that students prefer this method over traditional lecture-based methods (Poulton, Conradi., Kavia, Round, & Hilton, 2009).

Evaluations of PBL have revealed that students prefer this method over traditional lecture-based methods (Poulton et al., 2009). Typical student PBL goals include improved knowledge base, problem-solving abilities, student engagement, collaboration and group skill sets and motivation to learn relevant real world, knowledge. Examples of skills practiced in the PBL approach include the ability to communicate effectively, think critically, apply clinical or organizational judgment, and use data to gather information and inform practice (Rounds & Rappaport, 2008).

Recommendations
As a result of the above findings and faculty interest at a College of Nursing, select faculty adopted the PBL approach in their nursing courses. Implementation of PBL within select nursing courses started in January 2014. The course feedback by faculty and students utilizing the PBL approach in the courses are pending. To help support the faculty in this new approach, the College of Nursing developed an orientation manual with training and mentoring for faculty regarding the PBL approach.

New faculty or those without prior PBL experience should be mentored and monitored in their courses during the implementation phase and provided constructive feedback regarding improvement of the implementation and approach. Nursing faculty should be encouraged to continue adopting this innovative and creative teaching approach within all their courses. When beginning the use PBL in a nursing curriculum, the author recommends an initial hybrid approach so both the faculty and students are engaged and adjust to the change from the traditional learning approach. Guidance and support should be offered to students as well during the implementation and transition and support their engagement. As supported by the above information, PBL has been effective and has resulted in improved critical thinking and competence when this method was utilized within the curriculum.