PROBLEM LEARNING UNLEASHED THE POTENTIAL IN ME

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Abstract

Problem-based learning, which is an approach to learning that engages students in finding a solution to a complex problem, has continued to gain popularity in many disciplines, including nursing. This paper reports my experience of PBL as it was used in one graduate level course. Although the experience was initially frustrating for me, participating in a PBL course offering has been an eye opener for me as I have come to appreciate what I have always taken for granted. The experience has enhanced my critical thinking and problem solving skills, helped me realize and tap my talents as a leader, enhanced my collaboration and communication skills, as well as enhanced my ability to take control of my own learning. I can confidently recommend PBL for graduate nursing education as I believe it can be instrumental in preparing competent, caring, and creative graduate who can successfully work in collaborative professional teams.

Background and Introduction

Learning remains a life-long expedition achieved through various approaches some of which have stood the test of time while others continue to develop. One approach to learning that has continued to gain popularity even to recent times is problem-based learning (PBL) (Savery, 2015). PBL is an approach to learning that engages students in finding a solution to a complex problem (Preeti, Ashish, & Shriram, 2013). PBL began in 1950s in medical education following observation that the traditional methods of instruction that relied on lecture and memorization had limited effect on medical student's future performance (Barrows, 1996). Since then, PBL has been used in many disciplines and programmes in many countries (Barrows, 2006). In Botswana, the use of PBL is still in its infancy and how leaners experience it is not known.

This paper reports my experience of PBL as it was used in health promotion across life-span course offered at graduate level in the faculty of Health Sciences, University of Botswana. Students were given scenarios to explore, interpret, identify and they research on the problem dimensions and find multi varied solutions. As a student nurse, problems identified were analysed through the clinical perspective. My experience of PBL focuses on introduction of the PBL concept to the class, discussions on scenarios presented and interaction with colleagues during group work assignments. At the end of the paper I provide conclusion and recommendations.

Student Experience in PBL

Introducing the PBL Concept to the Class

The lecturer introduced PBL to the class in our first meeting and in her briefing she indicated that learning was more interactive, solving ill - structured problems and will use group work approach. There were only five of us in the class and we were all females. I was worried when I learned that we were going to work in groups because I had a not-so-good experience working in groups. I became even more concerned when the lecturer informed the class that her role would be providing guidance while students would research on the solution to the problems presented in scenarios. I was concerned because I felt the course offering would be overwhelming to me and my classmates. I was used to the traditional one way communication pathway in which the learner plays a passive receiving role. I did not think that learning would yield any positive outcomes. However, I became at ease when the facilitator noted that working in groups assists in training students to be effective communicators and collaborators; and that the opportunity would help us develop skills in areas such as cooperating, respecting each other's viewpoints, leadership, and communication.

Learning Scenarios

Learning scenarios for the course "health promotion across the life span" covered children, adolescents, middle aged adults and older adults; and could focus on individuals, families or communities. I had a challenge with the first scenario as I did not clearly understand what we were expected to do. However, things became clear after the presentation, at which the facilitator provided more clarification and guidance for further work. Generally, my performance on scenario analysis improved as I tackled more scenarios. Working with certain scenarios/problems enabled me to develop a sense of empathy for my clients as I imagined myself going through what characters in the scenarios were going through. Scenarios were ill-structured; and this provided me with an opportunity to determine what the real problems were. I believe working with ill-structured problems prepared me for assisting clients going through similar problems. This is because clients that nurses provide care to frequently present with complex problems that demand that the nurse applies his or her critical thinking to isolate the real problem.

One aspect of PBL that I appreciated was that the learners have to determine what they already know and what they need to know in order to solve the problem presented to them. However, for some scenarios, it was not easy for me to determine what I knew and what I do not know. In such instances, the facilitator would ask group members probing questions which would guide us. Finding information was not a big challenge as information was usually available on-line. In addition to getting information from the internet, we visited local agencies or offices to get some learning materials or to interview relevant people.

Learning Group Work

The approach to group work was that the group agreed on the date and time for a meeting. For each scenario, we would meet four times. At the meeting, members would analyse the scenario to determine what was happening or what problem(s) needed to be solved. During

the first group meeting, all members identified what they already knew about the topic, then determined the knowledge and skill that they would need in solving the problem(s). All that was achieved by developing an inquiry plan, brainstorming solutions and prioritizing to trim down possible solutions. This brainstorming and prioritizing exercise assisted us identify possible solutions, as it allowed us to think 'outside the box' and come up with more creative interventions. The group would then develop learning goals for the scenario and prepare a list of tasks needed meet the set goals. Furthermore, as a group we would discuss how the tasks would be distributed amongst ourselves, and this entailed assigning each group member a specific learning goal. During the second meeting, all group members were expected to bring forth their assigned task along with a list of resources they had used to get information and present their report to other members. Due to longer discussions, individual presentations of assigned tasks would normally take 2 sessions. Therefore other group members would present their work on the third meeting. The fourth and final day would be a class presentation and discussion.

A decision on who was assigned a given task depended on the team leader but could also be the choice of an individual. Working on an assigned task entailed one finding all relevant information on the task, preparing a report, and sharing that at a group meeting. During these sessions; as an individual, I worked on my assigned task, study resource's and prepared reports for the group. This enhanced my independence in learning. Throughout the semester there was fairness in distribution of tasks, members would choose the tasks they were well conversant with.

Team leadership rotated among group members. During my turn as a team leader, I guided and directed the group, ensuring that it remained focussed. My focus was on the task to be performed and team members' relationships. The plan of meeting the learning goals was discussed by all group members such that the group owned any decision taken. This democratic style of leadership proved to be challenge because group members often took long to make decisions on the assigned task. I managed group dynamics fairly well, even though at times I found the leadership role challenging; particularly when group members failed to carry out their assigned tasks. Some members would fail to show up at meetings or take their time to respond when we tried to set meeting schedules that were convenient for all of us. Some would derail the discussion or hold side meetings that interrupted group work. As a leader, I had to see to it that harmony prevailed in the group and that learning objectives were achieved. I made sure that those members were called to order. For that reason, I employed both democratic and authoritarian leadership styles depending on the particular situation I was dealing with.

I had an opportunity to be the secretary for the group twice during the semester. My duties were to document all discussions during meetings. It was challenging when members failed to complete their assigned tasks because that meant that the submission of the completed group work would be delayed. When I was neither the leader nor the secretary for the group, I made it a point that I carried out all the tasks the group assigned to me. I welcomed constructive feedback from my colleagues and I enjoyed the ebb and flow of the discussions that ultimately helped clarify issues to me.

Working on assigned tasks gave me a chance to take an active part in my learning. The problems depicted in the scenarios provided an opportunity for me to tap on my previous life experiences to find solutions to the problems. In this way, the experience enhanced my critical thinking and problem solving skills. The team leadership assignments helped me

realize that good communication skills are key to successful group work; and that as much as working in groups has dynamics, the very group work can also be a resource for managing group dynamics. Our heated debates revolving around the interpretation of what was taking place in the scenarios never escalated into serious conflicts. Rather, they provided us with energy that fuelled our drive toward problem solutions.

One component of PBL that I appreciate is collaborative work. The learning team experience helped me develop collaborative and communication skills. The fact that in PBL problem solution is a group rather than individual's task is reassuring as group members can count on one another. As a nurse, I found collaborative problem solving in line with my profession as nurses work in collaboration with other members of the health care team. Although I initially found PBL challenging, self-directed learning was an eye opener for me, as it has challenged and enhanced my ability to take control of my own learning. I had to get used to generating answers rather than expect the facilitator to provide me with those. The facilitator's role was that of guiding and motivating the group's learning, and re-directing it when it went off-track. Through engagement in scenario analysis, research on problem solution, self and peer assessment, we took responsibility for our learning. I learned to take learning as my responsibility rather than that of the lecturer, and to value it for my personal development rather than for an academic grade. I have learned to fairly appraise myself, reward myself for my achievements, and my quest to learn has been enhanced. I believe what I have learned will motivate me for life-long learning and critical decision making.

According to Mary (2011), group learning enhances not only the acquisition of knowledge but also several other desirable attributes such as communication skills, teamwork, problem solving, independent responsibility for learning, information sharing, and respect for others. Therefore PBL can be thought of as a teaching method that provides for both acquisition of knowledge and the development of generic skills and attitudes. It is through peer teaching that students achieve deep understanding of applicable skill and knowledge and become more likely to reach high standards in the profession (Johnston and Tinning, 2001). It has been argued that small groups enable closer contacts between students and teachers and that the regularity of small-group tutorials in the PBL environment generates peer pressure that is useful in motivating students to be diligent in their self-study and to meet the deadlines for work agreed upon by the group (Klegeris & Hurren, 2011). The team leadership was a growth enhancing opportunity as team leadership has been found to help in coordinating the work of groups (Edmondson, 2003); and that coordination of work is an important task in nursing where work involves multi-disciplinary teams (Huber, 2013).

Our PBL course offering did not only provide us with the substantive content of health promotion. As we analysed scenarios, we were expected to select and apply a theory to guide our learning goals. In addition, were had to consider the policy, ethical and cultural implications of the decision that were making. Working with theory and its application to problem solving gave me an opportunity to realize that theories do not only guide research but can guide our day-to-day professional work as well. It was very difficult to find a fitting theory for our first scenario. However, with subsequent ones, it became easier for us to select and apply theory to the problems we were working on. This enabled me to learn more about theories from both nursing and other disciplines and to appreciate their value in communities' health promotion. We interrogated a number of national Botswana public policies as we needed to determine the extent to which a given policy would assist or jeopardize the

solutions that had proposed. Policy refers to decisions taken or not taken by those with responsibility for a particular area (Buse, Mays et al. 2012). It serves to protects the safety of communities and enhance their quality of care (Arabi, Rafii, Cheraghi, & Ghiyasvandian, 2014) through government' statements of commitment and provision of resources. In many instances, we realize that there was a lot the Botswana was doing to address the health needs of its populations.

As we explored the ethical implications of the decisions that we made following analysis of scenarios and development of our learning goals, I began to realize how I had taken the ethics of health care for granted. Nursing has a set of values, beliefs and principles that defines the responsibilities of its practitioners (Maurer & Smith, 2013). My PBL course helped me to realize my responsibility for ethically responsible health care. I learned that decisions that nurses make can affect someone's life and self-esteem. That it is therefore very important that we take health care ethics into consideration whenever we work with communities. It was through PBL that I learned that collecting culturally relevant data when assessing clients can assist in planning attainable goals for the client. This is important because the cross-roads for professional values cultural values may be smooth, rough, or totally impassable; and nurses have the responsibility to make the path to healthy living a smooth passage. Culture is the totality of learned behavioural patterns, arts, beliefs, values and thought characteristics of population that guide decision making (Purnell, 2012); and both nurses and clients of nursing are cultural beings. Nurses' cultural competence enables them to care for people from across different languages and cultures. Understanding the behaviour of people allows the nurse to plan the best and genuine care for clients. I realized that there was a lot that we can tap from communities' diverse cultures to inform the promotion of their health.

Conclusion and Recommendations

Participating in a PBL course offering has been an eye opener for me as I have come to appreciate what I have been taking for granted. I must admit it was not that easy at the beginning; I was frustrated and worried about the unknown path that I found myself in. However, time proved to be a healing balm for me as I realized that there was a lot that I was learning and that what I was learning was not an end in itself but a license to life-long learning. The experience has enhanced my critical thinking and problem solving skills, helped me realize and tap my talents as a leader, enhanced my collaboration and communication skills, as well as enhanced my ability to take control of my own learning.

I can confidently recommend PBL for graduate nursing education. I believe that PBL can be instrumental in preparing competent, caring, creative graduates who can successfully work in collaborative professional teams. For future course offerings, however, I would suggest scenario's with medical conditions to assist learners in preparing for dealing with clinical situations. This could be achieved through by integrating PBL in more nursing courses and creating learning facilitating teams.

References

- Arabi, A., Rafii, F., Cheraghi, M. A., & Ghiyasvandian, S. (2014). Nurses' policy influence: A concept analysis. *Iranian Journal of Nursing and Midwifery Research*, 19(3), 315.
- Barrows, H. S. (1996). Problem-based learning in medicine and beyond: *A brief overview*. *New directions for teaching and learning*, 1996(68), 3-12. doi:10.1002/tl.37219966804
- Buse, K., et al. (2012). Making health policy, McGraw-Hill Education process and on student performance. *Academic Medicine*, 67(7), 470-474.
- Edmondson, A. C. (2003). Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40(6), 1419-1452.
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235-266.
- Huber, D. (2013). *Leadership and nursing care management*. St Louis: Elsevier Health Sciences.
- Johnston, A. K., & Tinning, R. S. (2001). Meeting the challenge of problem-based learning: developing the facilitators. *Nurse Education Today*, 21(3), 161-169.
- Klegeris, A., & Hurren, H. (2011). Impact of problem-based learning in a large classroom setting: student perception and problem-solving skills. *Advances in Physiology Education* 35(4), 408-415.
- Maurer, F. A., & Smith, C. M. (2013). *Community/public health nursing practice: Health for families and populations* (5th ed.). St. Louis: Elsevier Health Sciences.
- Mary, O. (2011). The benefits of problem based learning. NLM UID, 14(8), 32-5.
- Preeti, B., Ashish, A., & Shriram, G. (2013). Problem based learning (PBL)-an effective approach to improve learning outcomes in medical teaching. *Journal of Clinical and Diagnostic Research JCDR*, 7(12), 2896.
- Purnell, L. D. (2012). Transcultural health care: *A culturally competent approach*. Philadelphia, USA: *FA Davis*.
- Savery, J. R. (2015). Overview of problem-based learning: Definitions and distinctions. Essential Readings in Problem-Based Learning: Exploring and Extending the Legacy of Howard S. Barrows: 5-15.