

THE STRENGTH OF PROBLEM-BASED LEARNING PIVOTS ON TEAMWORK

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Abstract

Problem-based learning (PBL) was first conceived in medical training at McMaster University in Canada. This followed educators' disappointment with traditional teaching which involved students memorising, forgetting what they had memorised, and eventually failing to apply what they had learned at the workplace. The method has since gained support and is being used in many schools in higher education institutions. In PBL, problems serve as stimuli for learning, small groups of students engage in collaborative self-directed learning, and the teacher plays the role of learning facilitator. In addition, students reflect on their learning experiences. In this paper, I share my experience of PBL. Initially, I found PBL challenging but as time went on, I started to enjoy it as I realized it was making an important contribution to my personal and professional development. I recommend that team work be encouraged not only in learning but also at the work place.

Background and Introduction

Problem-based learning (PBL) was first conceived in medical training at McMaster University in Canada (Jones, 2008). This followed educators' disappointment with the traditional approach to teaching which involved students memorising, forgetting what they had memorised, and eventually failing to apply what they had learned at the workplace. PBL has since gained support and is being used in many schools in higher education institutions (Dolman, Wolfhagen, van der Vleuten, & Wijnen, 2001). PBL has been defined as student-centred approach to learning in which problems serve as stimuli for learning, small groups of students engage in collaborative self-directed learning, and the teacher plays the role of learning facilitator (De-young, 2009). One important component of BPL is students' reflection on their learning experiences.

In PBL, students are provided with an opportunity to work on problems that are similar to those that they are likely to meet in their practice (Gould, Brodie, Carver, Logan, 2015). As they analyse the problems and come up with solutions, this puts them in a position of taking

decisions on real life problems. PBL students have been found to be better problem solvers than those from the lecture method (Choi, Lindquist, & Song, 2014). In addition, PBL has been reported to increase students' critical thinking skills, enhances independent learning skills and deductive abilities as well as to active students' participation in learning (EL-Shaer & Gaber, 2014).

In nursing education, PBL has been found to speed up and enhance the development of clinical reasoning skills (Burrow, Lyte, & Butterworth, 2002) as the scenarios or problems that trigger learning simulate situations that nurses frequently encounter in their practice. However, the use of PBL in nursing education in Botswana is yet to be well established and not much is known about the students' experience of it. The purpose of this paper is to share my experience of my first encounter with PBL. The paper is based on a compilation of the reflections on the learning process that I made throughout the duration of the course offering. My reflection covers orientation of the class to PBL, group/team work, the class and presentations, learning facilitation, and a summary of what I have learned in the PBL experience.

My experiences of PBL Approach to Learning and Teaching

Orientation of the Class to PBL

The lecturer's introduction of PBL to the class invoked mixed emotions in me. At first, I was excited that for a change, I was going to learn something new. On the other hand, I was a bit worried as I did not know exactly what to expect from the approach that was quite new to my ears. The lecturer (or facilitator in PBL language) started by explaining what PBL was and what its philosophical underpinnings were. She carried us through four concepts that influenced the development of PBL, namely, constructivism, self-directedness, collaborativeness, and contextuality.

We were informed that in PBL, students work in small groups. We were therefore asked to split into five groups and to give our groups names that would communicate who we saw ourselves to be. Our group had five gentlemen and a lady. As we were to name our group at short notice, we decided to name it "Health Promotion Gurus" meaning that we were aiming at being experts in health promotion, the area that the course addressed. Groups were assigned scenarios (problems to work on), and the first scenario for our group was on the adolescent population. Issues in the scenario included unemployment, drug abuse and intergenerational relationships. I had a hard time understanding what we had to do, and therefore started to see PBL as exhausting, difficult, and demanding. Although the facilitator availed herself to give us guidance, my team went a little off-track in the first assignment. That was to be an important lesson for me as I took it upon myself to do further research on the concept of PBL to find out what it was all about. As other group made presentations to the class before ours, I gained a good insight into PBL from their presentations.

Group/Team Work

Henry Ford once said, "coming together is a beginning; keeping together is progress; working together is success." In support of Henry Ford, a Setswana adage goes, "setshwarwa

ke ntša-pedi ga se thata,” meaning, team effort yields better results than an individual’s effort. Indeed group collaborative work proved to be very important for our learning as we leveraged on one another’s efforts to come up with good results.

Working on the first scenario was frustrating to our group as none of us as clearly understood what we were expected to do. Although we managed to identify what we already knew and what we needed to know, as well to set our learning goals, we failed to appoint a team leader and allocate tasks among ourselves. We gathered information informative data on the presenting problems. However, we did not adequately address the implications of what we saw as problem solution to public policy, culture, and health care ethics as was required. We became more comfortable with PBL from the continuing guidance of the facilitator and from the presentations of other groups. I began to realize that in order to solve the problems in the scenarios, one needed to read extensively and to keep updated on current affairs.

The very first meeting of my team was not adequately organized. We had not worked with one another before and therefore we needed to build trust before we could be comfortable opening up. Because we had not appointed a team leader, communication was rather haphazard. The discussions failed to focus on the assignment but were derailed by irrelevant matters. Because we had not charged individual members with tasks, some members took a free ride and did not honour meeting schedules. Some were even caught having sneaked off to the library to attend to personal matters when they were expected to be attending the meeting and contributing to the group’s work. Scheduling group meetings was also a challenge mainly because shift work and wide geographical distances between our work places. Individual members’ social commitments competed with team meetings. It was not uncommon that some members would only register themselves “present” at the meeting without active participation. This failure to show commitment on the part of some group members frustrated the rest who even considered eliminating non-participative members from the group.

After learning from the first meeting that did not have a team leader, we appointed team leaders for subsequent meetings, set ground rules for the group, and distributed tasks amongst members. As our group consisted of members from different nursing speciality areas, namely, family nurse practitioner, psychiatric mental health, and community health, our diverse backgrounds helped us to learn from one another. I was amazed that my group members’ commitment to assignments was quite high. We even set a target of 90% score on the assignment.

The Class and Presentations

The around-a big-table seating arrangement classroom layout was conducive for individual students’ participation and exchange of ideas. It reminded me of boards/business meetings that I had seen. I felt like the Masters degree that I was studying for was somehow grooming me for opportunities in which I would be contributing to serious discussions. The classroom set-up therefore played an important role in my learning and personal growth.

Group presentations and discussions were an eye opener for me; and most importantly, the constructive feedback from the rest of the class as well as from the facilitator reduced my anxiety and enhanced my learning. In addition, feedback enabled us to recognise our deficiencies, stimulated our curiosity for learning, and helped us to search for new knowledge. It was interesting to see how divergent people's points of view can be on a given topic. Every presentation brought something new for me, and sometimes I even wondered where my class mates were getting information from. I realize that there was a lot that was happening in my environment that I was not aware of. This then encouraged and motivated me to go and read further after each and every lesson. It dawned on me that indeed a Masters degree student reads broadly and across fields.

Learning Facilitation

Learning facilitation was very helpful from the start as it helped us get familiarized with PBL and get started on it. The scenarios covered diverse areas of health promotion that many of us in class could relate to. I found writing reflective diaries beneficial as it helped me to understand myself as a learner and to feel at ease. During the start of the scenarios, the facilitator would walk from a group to the other to provide guidance in case we were encountering any challenges in our assignments. She encouraged everybody's participation by inviting those who were silent to contribute to the discussions.

What I Have Learned

According to Dolmans (2001), working in PBL groups has positive effects on student learning. This was evident in my case as working in groups has helped me to work efficiently with other people regardless of their characters. I was able to learn new things from my group members who were from nursing specialty areas other than mine. Although there were several challenges that we met in my group, we were able to resolve those amicably. We resolved problems ourselves rather refer them to the facilitator; and this is in line with Dolmans's position that learning teams' solutions to group dynamics must be consistent with student-directed learning.

Group work has taught me to work well with people of different attitudes, behaviours and personalities. When working with people, there are always challenges and it is very important that such challenges are resolved in order that the group can move on with work. As nurses, we work with people of diverse characters and backgrounds and no matter how difficult to work with they may be, we need to find a way of working with them because we need them and they need us. I have become more sensitive to listening to and respecting other people's opinions as every individual is different and has strengths and weaknesses, and above all, a point of view that has a potential to contribute to problem solution. I have learned that communication is very important in team building, and that where there is effective communication, one feels motivated to work hard in a team and to live up to the expectations of other members. Each group members serves as a peer reviewer, and members learn from one another. In group work, one always has someone to fall back on when things fail to go as expected. I feel the PBL experience will be useful for me in the future as Devine (1999) argued, teamwork skills are a valuable asset for employees in most organisations. I am better

able to work independently, have increased value for teamwork, and have developed skills for effective group work. Peer assessment made me to have thorough introspection and to appreciate how important my contribution is in achieving the group's objectives.

I have learned how to support my viewpoints with substantive evidence, and I am able to look at situations from different aspects and to do a thorough research before making a conclusion. I am better able to collaborate with other students to reach consensus in situations where there are multiple possibilities of a problem solution. I believe I am in a better position to integrate theory with practice. Discussing PBL scenarios increased my awareness of responsibilities, roles and concerns of other personnel that I work with in health.

Conclusion and recommendations

At first, I found PBL to be a difficult and challenging approach, mostly because it had a workload that was heavier than the learning approaches I was used to. However, as the weeks passed, I found it to be interesting to work with as it involves working with real life situations, encourages thorough research, and hence stimulates learning. Group work has taught me to work well with people of different attitudes, behaviours and personalities. I have become more sensitive to listening to and respecting other people's opinions. I have learned that communication is very important in team building and achieving team objectives. My PBL experience will be useful for me in the future as I am better able to work independently, have increased value for teamwork, have developed skills for effective group work, and as I am better able to collaborate with other students to reach consensus in situations where there are multiple possibilities of a solution to a problem. I believe I am in a better position to integrate theory with practice than I was before.

I recommend that team work be encouraged not in learning but also at the work place as it can strengthen the bond among employees, thus increasing the chances of meeting the targets. In team work, the workload is shared and individuals feel motivated to perform to the group's expectations. I particularly recommend PBL that PBL be commenced at undergraduate programmes so that students can start developing creative problem solving skills early in their academic journey.

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