

# PROBLEM-BASED LEARNING: THE BEST TOOL FOR LEARNING

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## Abstract

*Problem-based learning (PBL), which was first developed in medical education in the 1950s, has become increasingly popular across disciplines in higher education institutions. PBL is a focused, pragmatic approach to learning that provides an opportunity for students to investigate, explain, and come up with solutions to an ill structured problem. It has been found to be effective in developing or enhancing learners' problem solving skills, self-directed learning and collaborative working relationships. In this paper, I reflect on my experience of PBL. I have found PBL to be a key strategy for learning responsibility, independent thinking, and discipline. It also helps in building substantial knowledge as it adopts a multidisciplinary approach to problem solving. Collaborative learning empowers students to become proficient communicators and problem solvers. However, I believe students could benefit from a comprehensive orientation to PBL before they take on their learning assignments.*

## Background and Introduction

Problem-based learning (PBL) was first developed in medical education in the 1950s in response to an observation that the traditional teaching and learning methods were failing to prepare medical students for solving problems in clinical settings. According to Hung *et al* (2008), PBL is generally credited to the work of medical educators at McMasters University in Canada in the 1970s. PBL is a focused, pragmatic approach to learning which provides an opportunity for students to investigate, explain, and come up with solutions to an ill structured problem (Sage and Torp, 2002). It has been found to be effective in developing or enhancing learners' problem solving skills, self-directed learning and collaborative working relationships (Yew & Goh, 2016). PBL has also been found to promote long term retention of knowledge through engaging students in application of new knowledge in contextualized situations. PBL has been credited for being the most innovative and effective approach to learning and teaching ever developed (Yew & Goh, 2016). In this paper, I reflect on my experience of PBL. My reflection addresses two main areas, namely; learning scenarios and group work, and what I have learned and appreciated about PBL. At the end of the paper, I present conclusion and recommendation.

## **My Experience of Problem-based Learning**

### **Learning Scenarios and Group Work**

My group had five members and two of the members were about ten years older than the rest. However, the age difference was never used to intimidate or oppress others; rather, we were at the same level and this made learning enhanced and enjoyable. All members demonstrated a sense of responsibility and commitment to learning. We always ensured that we worked on our individual tasks. Some would even go an extra mile to study other members' tasks. This made our discussions very rich and productive. For every meeting we had, we would choose a chairperson to lead the discussion; and I had the opportunity to be that in one of the meetings. I did not have any problem playing the team leader role as I had prepared well for the discussion and my group members had also researched on their assigned tasks. However, we had a challenge regarding scheduling meeting, mainly because of our work schedules and commitments. This did not stop us from carrying out the assignments as the few who were available would meet and agree on a decision, and then use the WhatsApp chat group that we had created to share our decision with the rest of the team members.

We were expected to do self and peer assessment in our groups. We would, for instance, evaluate the chairperson for every discussion, looking at how organized she or he had been and how effective she or he had managed the learning process and team building. The assessment helped us to work on our strengths and weaknesses and to build one another's confidence. According to Yew and Goh (2016), peer assessment helps individuals to understand themselves and their context as well as the ways and situations they learn best in. I must also note that awarding marks to one another was not an easy task as each member would demand more marks than she or he had been awarded. Interestingly, even in my own self-assessment, I always felt I deserved better than I had rated myself.

My team was appraised poorly by the larger class on our first assignment as we had missed what we were supposed to do. I felt that we were being attacked because our colleagues only picked on what we had not done and failed to appreciate the little that we had done. However, when I look back, I realize that the feedback meant to help us improve. Although I still believe that it was rather intimidating, it was meant to help us identify gaps in our thinking, our effectiveness of our problem-solving strategies, and help us improve on application of the knowledge acquired for addressing the scenario. However, for the second scenario, the feedback given was quite motivating; perhaps because we had performed well.

### **What I Have Learned and Appreciated about PBL**

I have realized that PBL is quite a departure from the traditional lecture method that I was familiar with and that I needed a new mind-set to be able to carry out the assignments. One of the scenarios assigned to my group required us to be able to capacitate expectant parents on social and emotional learning, and social responsibility for child socialization. My initial understanding

of what we were expected to do was to come up with a health education strategy. My group therefore concentrated on learning how to give health education. We did not pay much attention to the two concepts “social and emotional learning and “social responsibility.” To our surprise, we later found out that actually, the two concepts needed to be the focus of our learning. We realized that we were not supposed to address the problem but rather be challenged by the scenario to learn about social emotional learning and social responsibility. Correnti (2014) noted that in PBL, students do not necessarily learn about problems but they are challenged by them to learn about the content of interest. I found addressing the scenario that followed much easier because by then, I had a sense of what PBL was about.

I have found that PBL enhances students’ motivation for learning. What I recall from my undergraduate studies is that we would be instructed to read/study specific topics that would be discussed in the following class. However, I personally hardly did that. The best I would do is just rush through the topics without thoroughly studying them so I could understand the content in-depth. This was because I knew that the lecturer would give us the information anyway. Therefore there was really nothing pushing me to read the given assignment. However, things turned out to be completely different with problem-based learning, as the content and skills to be learned were organized around authentic ill-structured problems, rather than through a list of topics. Solving the ill structured problems motivated us to actively create our own knowledge. We were not guided on what to learn and how to access the learning materials. Rather, we were just presented with problems that in turn provided a purpose for learning.

I obtained my undergraduate degree and went to practice nursing that I have been doing for the past six or seven years. I realize that for those years of practice, I have been giving health education to my clients almost every week but have never seen the importance of learning the “how to” of the process. I would just pick a topic I feel comfortable with and proceed to address my clients. However, my encounter with PBL, particularly with the ill structured problems that we analyzed, has made me re-think how I have been doing my work as I realized that there are several considerations that must inform how I approach health education. In PBL, learners do not merely develop knowledge; they also develop the capacities to apply the knowledge in appropriate contexts. I therefore believe that knowledge constructed through PBL is richer and more practical, better retained, and readily transferable as it is anchored on specific contexts.

I have also learnt that respect for one another and appreciation of others is very vital when working together. As people, we are unique in our own ways, having different strengths and weaknesses. As such, it is very important that we embrace one another’s uniqueness when working together. There is a saying that “two cannot walk together unless they agree;” meaning that it is important that a common ground is established and everyone is willing to compromise for the benefit of the group and for progress’ sake. I was able to appreciate the importance of upholding good communication skills such as active listening, use of non-offensive language, and giving others constructive feedback. Collaboration helps learners to become open with one another and provide constructive feedback to one another. It helps collaborators to discover their

own strengths and weaknesses and to improve their interaction with one another (Correnti, 2014).

## **Conclusion and Recommendations**

PBL is a key strategy for learning responsibility, independence, and discipline. Its self-directed learning and reflection on learning enhances independent thinking. In addition, PBL enhances acquisition of broad-based knowledge as the focus goes beyond the immediate facts of a situation to a wider field in an effort to find the best possible solution to ill-structured problems. I believe broad-based knowledge would be more flexible for use in diverse situations than that which is narrowly conceived. Collaborative learning helps learners to build social interactions and communication skills. Through the analysis of contextualized ill-structured problems and active participation in learning, PBL enhances retention of knowledge.

Based on the merits that I have discovered in PBL such as the development of problem-solving skills and flexible knowledge, I recommend problem based learning for higher learning institutions. I also recommend that a comprehensive students' orientation to problem-based learning be made before they are given tasks to work on as this could ease their transition to the unfamiliar approach to learning. It is equally important that students are assisted to be able to provide constructive feedback to their colleagues and to receive such feedback without feeling intimidated.

## **References**

Correnti, S. (2014). Enhanced problem-based learning through an innovative virtual learning environment: An opportunity for science teachers. In *International Conference: New Perspectives in Science Education* (pp. 1-6).

Hung, W., Jonassen, D. H., & Liu, R. (2008). Problem-based learning. *Handbook of research on educational communications and technology*, 3, 485-506.

Sage, S., & Torp, L. (2002). Problem as possibilities: Problem-based learning for K-16 education. *Alexandria, VA, USA: Association for Supervision and Curriculum Development*.

Yew, E. H., & Goh, K. (2016). Problem-Based Learning: An Overview of its Process and Impact on Learning. *Health Professions Education*, 2(2), 75-79.