ORIGINAL ARTICLES

A First Attempt At Problem-Based Learning (PBL): The Experience With First-Year Undergraduates

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ABSTRACT

This paper is based on a first-hand experience in implementing PBL for teaching Malaysian Legal System I for the first year undergraduates of the Ahmad Ibrahim Kulliyyah of laws, IIUM during semester 1 2004-2005. This PBL was a first attempt where previously the subject was taught using the conventional lecture-tutorial methods. However, it is emphasized that the PBL method applied here was more of a trial and error with many mistakes that may have been made along the way. This paper is thus about trials and tribulations of implementing a PBL method and the many practical difficulties and unexpected challenges encountered. The objective is to provide some insights that may be used by others attempting to implement PBL. It is in this spirit that this experience is shared.

Key word: PBL, Students, Lecturers, Learning.

Introduction

The eagerness to use PBL for this particular subject was timely as it received a full backing from the Ahmad Ibrahim Kulliyyah of Laws which is particularly supportive with the idea of applying PBL as a complementary teaching tool for the law subjects. It has been realized that the nature of these subjects demands the acquisition of a range of ability and skills, which the conventional method of teaching at university cannot cater. PBL, which provides a different learning environment, and with its emphasis on students’ involvement in solving practical and ‘real’ legal issues, provides the avenue for this.

Context for PBL:

Two sections of first-year first semester students participated in this PBL course for Malaysian Legal System 1. Two weeks of lecture (equivalent to 6 hours) were allocated for PBL. For this purpose, students of each section were divided into several groups with a specific problem to be resolved and were expected to collaborate efforts in research, presentation and writing.

On the first meeting of the PBL, students were given handouts containing an overview of PBL (Figure 1). Small groups of seven to eight students were formed. Each group met with the lecturer for three hour each week, and during other times, students planned what they would do. After spending two weeks on the problem and sharing and discussing its solution, each group submitted its written assignment and presented its findings in front of the whole class.

Introduction

During PBL, students will be divided several into groups, and will be assigned with specific questions on Malaysian Legal System 1. The problem in the question is the one that has not been taught in class previously. Students tasks here are as follows:
1. Understand the question
2. Identify the issues

3. Identify the laws/cases and other materials
4. Doing the research
5. Put the answer down formally in writing
6. Make presentation in class

It is important to note that all the tasks above must be done by students independently. The lecturer will only help to guide them throughout the process in tackling the issues, doing the research, and preparing the written submission and presentation. No Lecture will be given until the end of the whole process.

Why no lecture?

Are you serious to expect us to do all these works by ourselves?

We are only in our First Year, we know nothing!

There are valid reasons why this method of learning is being applied for you. This method is known as problem-based learning (PBL). Please read on:

For many students, having to pass the examination and getting a degree would be their only aim at the university. Indeed, in the Kulliyyah itself, many students are scoring above 3.5% in their CGPA. These are hardworking students and good at memorizing a vast amount of information and pouring them back during exams. When comes the subsequent semester, they would remember nothing from it. To those who remembered, many cannot apply the law to the legal problems they faced in working life, cannot reason effectively, unable to do research, do not know how to work with others and lack motivation. These problems occur when students were misguided by believing that memorizing lecture note alone can ensure success in academic and working life. Many failed to realize that the mere acquisition of a degree is not sufficient in preparing them for working in a complex and different environment. To face the future challenge, students need to equip themselves with a range of ability such as critical thinking, problem solving, use of information technology, and the social skill of group working.

For students who are merely seeking academic credit for graduation purposes, the desire for learning and improving themselves is minimal. When they go to lecture or tutorial, these students did not prepare the tutorial work, absent from class although it is compulsory; started to give various excuses when fail to submit assignment and work on time, relied too much on the lecture note or past year students’ note; did not read cases, never touch any textbook, seldom visited the library or computer lab, and much more.

To overcome this problem, a different type of learning method needs to be introduced and imposed on the students. When a different learning environment of PBL in being enforced on them, the students would be coaxed, encouraged and motivated to engage with the subject and to learn.

**Purposes for Using PBL:**

The goals for the PBL Malaysian legal System 1 is to expose the law students, at the earliest stage, a learning method that helps them to apply critical thinking, problem-solving skill and research skill. (See Figure 2). PBL also allows the students to assume considerable responsibility for their own learning by locating much of the information they need to solve the problems at hand. Thus, PBL starts with an issue, case or problem that can be researched, studied or solved. Solutions here however, do not necessarily have one correct answer. Instead, several good answers and method of resolving the issues are possible. The lecturer on the other hand,
plays several roles including facilitator, instructor and assessor. These roles also entail offering guidance, instruction and resources to help students acquire knowledge and problem-solving skills.

**Figure 2**

**Objective for PBL in the Malaysian Legal System**

The most important thing in PBL is not the end result, but the process itself. It is through the whole process of PBL that the students learn to become an independent and active student, problem solver, develop thinking and public speaking skills, and enhance communication and teamwork skills. Thus, PBL will be introduced at the earliest level, that is first year, to help students grasp all these skills as early possible so that the knowledge and skill gathered can be applied for other subjects throughout the 4 years of study. These attitudes, if prevail, would ensure that the students will not only succeed academically, but will also excel in their working life.

**Description of the PBL Assignment:**

Two weeks of class were devoted to working on the PBL problem below with each group was given the same problem to solve. The issues in this problem deal with the topic of the modification of English Law during the time of British Intervention in the Straits Settlements. This problem addresses several legal issues pertaining to the validity of Chinese customary law of polygamous marriage and charitable will. (see Figure 3).

**Schedule and Guidelines for Working on the Problems:**

The PBL schedule (Figure 4) and guidelines (Figure 5) were discussed as a large group. In the former, students were told about their schedule for each meeting hour and expectations during each of the meetings. Roles of the lecturer during these meetings were also provided. Whereas in the guideline, students were guided as to their understanding about the problems and ways to solve them.

**Requirements:**

To aid communication with each group member, students were required to exchange names and handphone numbers. To communicate with the lecturer after class hour, students were told to use their e-mail account. Once the groups were formed, a ‘team-orientation’ was conducted to give members opportunity to know one another. This is important as the selection of group members was done entirely by the lecturer and students were not given any autonomy to choose their own group. However, students were free to elect their own group leader and assign any duty to each and every individual in the group.

**Designing the PBL Question:**

The PBL problem was designed from the lecturer’s experience in teaching the subject concerned. When designing the problem, planning was required to balance these factors below:

- the course content
- duration of PBL
- students’ workload

**Lecturer’s Role:**

The lecturer had the meeting with each group for three hours each week, i.e. two hour lecture and one hour tutorial. During these meetings, the lecturer would check on the progress of the group and expected the group members to explain their development, contribute individual ideas, and plan what to do next. For the initial meetings, the lecturer’s role was mainly to make sure that the students defined the problem thoroughly and to refocus them on their goals or on elements of the problem that they had overlooked. As students began to work on the problem, they were asked to justify their ideas with the knowledge from their research. If students were stuck, the lecturer would ask them leading questions to provide them with certain information and then ask them to apply this information to the problem.
The case happened in the colonial Singapore, in around 1930s.

There was a very wealthy Chinese businessman by the name of Towkay Phua Chu Kang.

During his lifetime, he wedded several women in accordance with Chinese customary law, and had children with all of them.

Among all the wives, his favourite was Arianna Teoh, his 5th spouse who died after eating too much durian.

As a gesture of love and remembrance, Towkay Phua devised a will whereupon he bequested his biggest mansion for the purpose of performing a Chinese customary law of ‘sin chew’ or ‘remembering the dead’ for his beloved Arianna.

When Towkay Phua himself died, his long suffering first wife, by the name of Mdm. Laichee, brought the following actions to court:

1. That she was the one and only legitimate wife of the deceased and therefore only she and her children were entitled to the property of the deceased.
2. That she was also entitled to the mansion because the devise made by the husband was not valid.

Imagine yourselves young lawyers observing the whole trial. Do you think the court would grant these claims to Mdm Laichee?

- State what are the issues in this case,
- argue each of the issues, and
- support your answer with relevant cases.

Make a written submission of your answer and present it in front of the whole class!
GOOD LUCK!
<table>
<thead>
<tr>
<th>WEEK 1</th>
<th>ROLE OF STUDENTS</th>
<th>ROLE OF LECTURER</th>
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</table>
| 1st PBL hour | 1. To identify and assign group  
2. To understand the problem*  
* See student’s guidelines below  
3. To select group leader and to assign duties to each member of the group | 1. To arrange the group  
2. To distribute questions  
3. To help students understand the problem  
4. Self reflection journal |
| 2nd PBL hour | 1. Brainstorming: To discuss and identify issues, exchange views and ideas among group members  
2. Identify the sources  
3. Divide the job | 1. To observe attendance  
2. To help students approach the right issues  
3. Respond to queries by giving open ended questions to students. This is to enhance students enquiry skill as well as develop their skills of communication, inter-personal and time management. |
| 3rd PBL hour | 1. Identify the scope and content of the given issues  
2. Identify the relevant laws and materials  
3. Select sources of materials, and where to find them | 1. Check attendance  
2. Facilitate and guide the students |

<table>
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<tr>
<th>WEEK 2</th>
<th>ROLE OF STUDENTS</th>
<th>ROLE OF LECTURER</th>
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</table>
| 1st PBL hour | 1. Group leader ensure that all materials have been gathered  
2. Streamline all the materials  
3. Preparation of written submission  
4. Group leader ensure the division of work. | 1. Check attendance  
2. Facilitate and guide the students |
| 2nd PBL hour | 1. Writing time.  
2. Footnoting  
3. Acknowledgement of sources and materials  
4. Self reflection and peers evaluation | 1. Ensure attendance and facilitate participation  
2. Emphasize on the importance of punctuality and submission on time |
| 3rd PBL hour | 1. Presentation from each group  
2. In the oral presentation, students have to present their ideas using ‘concept map’ on A3 size paper.  
3. You are discouraged to read from prepare texts. However, power point presentation is encouraged  
2. You must listen and ask questions after the presentation  
3. Fill in the peers evaluation form | 1. Let students handle their own presentation freely, and independently  
2. Submit the peer’s evaluation form to be collected before the class ends. |
### Students’ Guidelines

#### Q: HOW TO UNDERSTAND THE PBL PROBLEM GIVEN?

**A: BY ASKING YOURSELF THESE QUESTIONS:**

- How do I understand what is being asked for me?
- What do I know about the problem?
- Did I learn about the topic before?
- Do I understand the terms discussed in the problem?

#### Q: WHAT DO I NEED TO KNOW IN ORDER TO UNDERSTAND THE PROBLEM?

**A: BY IDENTIFYING THE FOLLOWINGS:**

- What sources are available? E.g. textbook, internet, newspaper, journal etc
- Is the information useful?
- How does the information address the problem?
- Who will collect the information?
- How can I explain my understanding to my group
- Does everyone in the group understand my explanation/presentation

#### Q: HOW DO I SOLVE THE PROBLEM?

**A: BY ANSWERING THE FOLLOWING QUESTIONS:**

- How do I apply my knowledge to the problem
- How do I give my justifications

#### REFLECTIONS ON THE PROCESS

- What went wrong and what went well
- Should I apply the same approach next time
- Do the knowledge and processes that I have learned help me in applying the real-world problems?

#### HOW TO ENSURE HIGH SCORE IN WRITTEN SUBMISSION?

- No plagiarism
- Proper footnoting
- Good arguments
- Sufficient authorities and materials
- Extra inputs
- Good conclusion

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**Written Submission and Presentation:**

At the end of the PBL project, each group was required to submit a written assignment of their work, with the maximum of 5% mark allocated to this work. This assignment must be submitted right after the end of the PBL session. Each individual of the group would be sharing the same mark of the assignment. Apart from that, each group must also do a presentation of their findings. Students were free to choose any method of presentation preferred but must be within the time limit of 15 minutes.

In order not to interrupt any lecture schedule, the presentations were conducted at a different time, i.e. a time other than the lecture/tutorial hours. It took about 3 hours for each section to complete their presentation. Thus, the lecturer and the students had to allocate an extra of 3 hours (and for both groups the total was 6 hours) for presentation purposes.
Student’s Peer Evaluation:

As part of the assessment process, students were asked to evaluate the contributions of each group members in a specific evaluation form to be given towards the end of PBL (Figure 6). This is the time when a student evaluated the performance and attendance of each member of his or her group. This is to allow students to provide their team members with accurate and helpful feedback which is especially necessary for grading purposes. The result of this evaluation, together with student’s individual performance during group discussion and presentation will carry another 5% mark. The total of the whole PBL written submission and presentation carries 10 % of the total marks. (See Figure 7).

**Figure 6**

MALAYSIAN LEGAL SYSTEM 1 (LAW 1010)
PEER EVALUATION FORM

<table>
<thead>
<tr>
<th>Name of the group:</th>
<th>Name of group member:</th>
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</thead>
<tbody>
<tr>
<td>Your name:</td>
<td>Day and date for PBL:</td>
</tr>
</tbody>
</table>

Kindly grade your group member sincerely based on the given scale:

5: Excellent  4: Good  3: Satisfactory
2: Unhappy    1: Poor    0: Never

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<tr>
<th></th>
<th>Attendance in group discussions</th>
<th></th>
<th>Participation</th>
<th></th>
<th>Contribution in discussion</th>
<th></th>
<th>Contribution in research</th>
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<th>Contribution in written assignment</th>
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<tr>
<td>1</td>
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In your honest opinion, how do you rate PBL in terms of improving your understanding in the subject:

0  1  2  3  4  5

I would be grateful if you can elaborate why and how you stated the above

..............................................................................................................................................
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Thank you very much!

**Figure 7**

STUDENT’S MARK FOR PBL

<table>
<thead>
<tr>
<th>Subject</th>
<th>Section</th>
<th>PBL Group</th>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Peer evaluation (5%)</th>
<th>PBL attendance and Presentation (5%)</th>
<th>Total (10%)</th>
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Student Evaluation and Reflection of PBL:

Together with peer evaluation, the same form (Figure 6) was used to make a survey on students’ personal evaluation of the PBL. An open-ended question was provided to allow students to elaborate on their idea about PBL. Towards the end of PBL, students were also given a form on self-reflection to allow them to make personal evaluation on the benefits and effectiveness of using PBL in their learning process. (Figure 7).

![Students' self reflection](image)

After the end of the PBL process, student should ask himself or herself the following questions on the effectiveness of PBL method to their study:

1. Did I improve my problem solving skill?
2. Did I become a proactive thinker?
3. Did I exercise self assessment?
4. Did I feel self motivated
5. Does my IT skill improve?
6. Is my communication skill better?
7. Did I feel more confident as a person?
8. Did I feel more confident in expressing my ideas?
9. Am I a better person now?

Outcomes:

Some evidence from observation during PBL meetings and students’ survey shows that PBL was effective as a complementary tool for teaching law. Working as a team has a positive effect on the students. Students in both sections reported that they learned more, were more motivated, and had to take more responsibility for their learning during PBL than during traditional lecture. PBL also helped towards confidence building, self-dependency and investigation. The high quality of their presentation (all of them in power-point), and their written responses to an open-ended question substantiate these perceptions. These are some of the actual email messages from students giving their comments of the benefits of PBL:

assalamualaikum,mdm..the most important thing that i had learnt and got from PBL is about the learning and research skills.PBL also help me and really guides me on how to tackle the issues which is relevant. Its really open my eyes. However, i had also faced with some difficulties while completing this task. The most difficulties are when comes to find out the resources. The experience that i get from this task are learning on how to work with others which are not my friends and tought as well as motivated me on how to face the legal problems in the future.Thanks madam!!

nur farha mustafa, sec 2 law 1010

the most important thing that i learned from pbl is about the learning and research skills. pbl really helps me on how to tackle the issues which is relevant. The difficulties that i faced when comes to find the resources. The experience that i can get from this task are its really taught and motivate me on how to work with others which are not my friend and on how to faced with legal problems in the future..Thanks madam!
Assalamualaiikum Dr,
How are you today? I hope you are in the best of health. I am sending you this email to comment on the problem based learning that we've been having for the past two weeks. First of all, I am happy to tell you that I enjoyed taking part in the PBL. PBL is a good approach for the students to participate in class as well as improve our communication skill. Besides that, it made us think critically to solve the problem and had to do proper research in order to have the best solution. We had to argue on the issues, then find authorities for the arguments which made us go to the library and went through all sorts of law journals that we never read before. To me, the toughest part while doing PBL is to find the suitable authorities to support the issues as I am not familiar with some of the names of the law journals and it took me quite some time to find them. But I got through it with the help of my group members and friends. The best part of it is when we get to present our work and share our opinions with others. Though sometimes I get very nervous when it comes to presentations. I know as a law student, I should be able to speak in front of others confidently. Maybe after a while I will get use to it. I hope! I think if we have more of PBL then I can overcome it! InsyaAllah. Lastly, I think PBL is an excellent method of learning as it gives a good exposure to the students to feel like as if we are young lawyers.

Thank you Dr, for giving us support and very useful advices through out the process of PBL.

==kHaLiSa==

Akum.. actually this my 1st time with PBL ,its really help me especially to gain confidence & the methods used like a group discussion, so all team members have 2 give @express their opinion, no exception, we have also think how to answer the question given with our own way, think independent, whether it right or wrong. i like this method but some student don't like it.
AHJ@MLS

assalamualaikum.....madam my name is waheeda bt mohd idris. Madam regarding your question about the benefit from pbl, i will say that i enjoy the process of pbl. What i mean here is that we have to find all the information by our own. So, for me it's quite challenging. It is because we have to find by our own all the relevant point such as the law, the process, the benefit, the solution and others. All this makes me work hard to find all the relevant point. Even though it is quite tired, i don't mind because i know that this is one of the process of learning. So basically, i think that pbl is a good method in the process of learning. Regarding your question about the problem that we face while doing this job, i think is to gather the group member. It is because all of us also have pbl with other subject. Sometimes, when we want to decide a meeting, normally, it will clash with other discussion. However, we still can gather each other and once we get a chance, we will discuss it properly. The other problem is regarding the result of the work....sometimes due to so many problem, certain group members cannot finish the work on time. However it is still o.k. because i know that they also have other pbl but i hope that we can submit it on time.
I think that's all for now. Thank you madam.....

DR MAIZATUN,

I think that PBL is a good way of learning a particular subject because it encourages us to find the relevant information ourselves. therefore, it makes us understand a topic well. We can also discuss among our group members if we face any problems in getting the relevant information.

however, the only problem is that sometimes we may face some difficulties in searching for the information required. anyway, thank you very much for introducing such a new beneficial learning method to us.
Assalamualaikum wrh..

In my opinion, the PBL method of study is very acceptable to all students. So, i hope that this method can still use afterwards. Anyway, it could be better if we improve our approach in terms of various skills of learning such as negotiation skill, problem solving skill and also teach all students how to think and be critical in tackle all the issues. Thank you.
-Hazwan bin Mohd Nor

Problems Encountered:

Below are some of the problems and obstacles encountered while implementing the PBL.

Class Size:

One major problem was the large class size. It has been recommended by the PBL advocates that a PBL group should be of no more than seven students, with a trained facilitator for each group. The question here is, could a PBL work in a class of about 50 students, with only one lecturer? From the experience of conducting this PBL, it was found that:
- The lecturer had to take extra effort, and to be more creative in creating a way to manage groups and avoid chaos;
- The lecturer also had to give up some original assessment expectations and it was not possible to observe every student and assess individual problem-solving abilities. It is believed that this inability to make such assessment is a major disadvantage of using PBL in a large class;
- The lecturer had to find a way to meet with each group to help them get started. Considering that these were first year first semester students, it was not possible to give the groups complete freedom to work as they consistently asked for guidance and assurance from the lecturer.

With about 8 groups per section, and 16 groups as a whole, the task of checking on their progress was daunting and redundant especially when each group was assigned a similar problem.

Students’ Resistance:

Another problem is that PBL can be met with resistance from students who feel confused because they are not used to the demands of self-regulated problem solving that PBL requires. Students often have difficulty initially in adapting to the PBL methodology because generally, most of them have been exposed only to a typical educational system where knowledge is taught through lectures, and where they learned to memorize information and reiterate it on essay examinations. Thus, those who have been successful students in traditional lecture may not like the change in teaching method. This is because PBL is ‘student-centered’ and they are expected to take responsibility of their own learning and lecturer would let them experiment and make mistakes. This situation is thus difficult for those who have been particularly good students in the traditional learning environment. They are doing well under the well-structured traditional method of lecture, and would consider PBL as very threatening.

Duration of PBL:

Integrating PBL for just two weeks of the whole semester might have its pros and cons. The two weeks format might be sufficient to allow the students to grasp the idea of PBL and for them to quickly develop the sense of teamwork and time management. But it may not be sufficient to include enough thinking and working time for some students. Thus students might need to spend more time together as a team outside the class hour in order to fulfill their PBL expectations and this might interrupt their concentration and commitment on other subjects.

Free Riders:

In response to email communications and survey, a small number of students noted frustration with free riders in the collaboration groups. Thus, students’ positive attitude toward PBL was tempered by a problem that arose with several individuals who did not contribute sufficiently to their groups. This problem occurred despite holding students individually accountable to their learning and work.
Teamwork:

Another issue involved students who did not know how to work in a team by either not attuned to the need to listen to what other members had to say, or by controlling the whole discussion without letting others to speak. Some students need to be reminded explicitly about taking turns in talking and listening.

PBL Assessment vs. Final Exam:

The objective of PBL is different from that of traditional lecture, and thus, their method of assessments also differs. For the purpose of PBL, a new and authentic assessment models needs to be specially developed because traditional essay tests and even multiple-choice are not suitable for assessing the kind of learning that can be achieved using PBL. On the part of the students, they could not demonstrate the extent of their learning through the PBL method on traditional examinations.

In this regard, it might not be proper for lecturers to use the examination result to evaluate the success of PBL. This is due to the fact that PBL is more of a process that has been designed to help students to acquire and enhance variety of skills, but having to possess these skills does not necessarily become an advantage in ensuring better scoring during exam. This is particularly true for AIKOL because for most of our law subjects, the bulk of the marking still goes to the final exam (60%). In order to help the students to do well in examination, lecturers still has to rely on traditional method of lecturing such as by providing examination tips or by rigorously attempting past-years exam questions with students.

14. Suggestions and Conclusions:

It is truly believed that lecturers need to understand what the objective of PBL is and how it can be used as a complementary strategy for teaching law. It is important for lecturers to put a different expectation on the students learning from PBL as compared with that of traditional method of lecture. The objective of PBL is to allow the students to encounter this learning method in the form of experiencing it as a learner, acquiring and practicing the relevant skills along the way. This is in contrast with the traditional lecture where only the knowledge of the students on the subject was assessed in form of examination. On the part of students, they also need to be enlightened about PBL as most of them are quite apprehensive about trying out this different method of learning. Before the start of any PBL class, it would be necessary to talk to the class about PBL as a learning strategy and openly discuss with students successes and frustrations in their experiences with PBL previously. It is hoped that this paper has conveyed meaningful information about PBL and its educational values which might be of some use for other lecturers attempting PBL.