

## Implementation of PBL in undergraduate thinking and communication skills course: The UM experience

by

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### Abstract

The implementation of problem based learning in undergraduate thinking and communication skills course is a recent move by the University of Malaya to improve its student's ability to think and communicate effectively. This move was associated with the philosophy of the university to face the challenge of preparing students who are able to meet the needs of the real "world" when they graduated from the university. The aim of this paper is to discuss changes in the respective roles and belief of teachers and students about teaching and learning in an interactive environment. This papers discusses preparation of PBL packages, tutors training workshop, implementation of PBL curriculum in the thinking and communication skills course, issues of evaluation and students assessment, and challenges faced by the university in the implementation of the curriculum.

### Introduction

This paper briefly describes the implementation of problem-based learning approach in thinking and communication skills course for undergraduate programmes at University of Malaya. The course is offered to the undergraduates students based on the premise that thinking and communication skills can be enhanced if taught in an organized approach. It is hoped that the skills involved will be transferred and applied to other courses in various disciplines.

### Preparing PBL Packages

A workshop on Interactive Learning and Problem-Based Learning was being held at University of Malaya in April 2002. The vision to implement PBL in across discipline at the university was initiated by the Vice-Chancellor of the university in the five days workshop. The preparations of the PBL packages were being held at the Faculty of Education in May and June. The authors were involved in preparing the PBL package for The Thinking and Communication Skills (GXEP 2101), an undergraduate course for year two students across the university.

## Course objectives

The purpose of this course is twofold: to develop critical and creative thinking skills and the ability to communicate effectively. Emphasis will be on enabling students to make reasoned judgment and decision in authentic real-life situations, appreciate alternative points of views, make self-evaluations, and gain insights to improve their communication skills.

At the end of the course, students will be able to:

1. Develop thinking disposition and critical thinking abilities
2. Develop skills for effective communication

## Course contents

In this section is a brief discourse of the nature and content of the thinking and communication skills course. The principle aims of the course are to expose students to the effective thinking and communication skills. In particular, this course aims at improving student's skill in topics listed below:

### *Thinking skills:*

1. Problem identification
2. Prioritizing
3. Reason judgment
  - supporting cause of action
  - selection of alternative
  - supporting argument
4. Logical and coherent organization
5. Identifying sources
6. Judging credibility of source
7. Analyzing arguement
  - identifying assumptions
  - distinguishing facts and opinions
  - identifying fallacies
8. Drawing conclusions:
  - making generalizations
  - making value judgment
9. SWOT analysis:
  - identification of strength, weaknesses, opportunity and threats
10. Types of thinking:
  - critical and creative thinking
  - vertical and lateral thinking
  - convergent and divergent thinking

1. Interpersonal & Intra-personal communication
2. Writing job application & Resume:
  - oral presentation
  - effective listening
3. Courtesy and civility
4. Information-gathering interview
5. Letters to authority
6. Reports writing
7. Making presentation
  - preparing for presentations
  - use of audio-visual aids
  - speech texts
8. Evaluating communication
9. Non verbal communication
  - body language
  - expressions and gesture
  - personality
10. Arguing
  - arguable statements
  - clear and exact wording
  - supporting claims with reasons and evidence
11. Anticipating counterarguments
  - acknowledging counterarguments
  - accommodating counterarguments
  - refuting counterarguments

### Use of scenarios

Two scenarios were used as the stimulus for discussions and project works. First scenario was entitled "When the going gets tough..." were given to the student. In this scenario student were engage to a situation of an unemployed graduate, having problems of family commitment, poor command of English language, study loan payment overdue, and rejection letters of his or her job applications. Students were to response to the situation, how go about improving him or her chances of getting better employment, and produce winning letters of application and resume and perform excellently at interview.

Second scenario was entitled "Dumping woes". Objective of this scenario are students will be able to identify relevant sources of information, judge the credibility of the sources of information, analyze argument, write letters to the authorities; and write reports related to the problems posed in the scenario. Students were expected to identify the problems in the neighborhood that they should deal with and plan a line of action to deal with the problems. They were also expected to draw strategies to deal with the issue of the disposal and management of solid wastes in their residential area.

They were assigned to groups of six to eight to:

1. Highlight the important information in the scenario
2. What are the issues raised in the situation?
3. If they were the person in the situation, what further information would they require?
4. Where would they get this information?
5. List any actions they would take as the person in the situation.

### Tutors guide

Instructions for tutors were prepared to ensure that class activities are in compliance with PBL strategy. The instructions guide tutor to:

1. Ensure that students activities are within the learning objectives
2. Periodically remind students of their purpose and determine whether they are on the right track.
3. Provide feedback to students:
  - Point out poor thinking and good reasoning
    - Clarity of purpose
    - Unrealistic goals
    - Vagueness
    - Irrelevancy
    - Failure to see others point of view
    - Unaware of prejudice
    - Making claims without evidence
    - Unaware of key concepts and ideas
    - Making unclear assumptions
    - Contradictory and superficial inferences
  - Assess the relevance of reference materials that students use
  - Identify resources to help students walkthrough the problem
  - Types of thinking - look for the right materials to give students appropriate information about the different types of thinking skills
  - Find suitable Internet sites for more information on critical, reflective, rational thinking, and information on employment, employment agencies, etc.
  - Find suitable samples of letters of applications, resumé, reminder letter, and loan contracts.

### The implementation

The course was taught to all second year students of five different programmes at the Faculty of Education. The groups were comprised of students from Bachelor of Science with Education, the Bachelor of Early Childhood Education, Bachelor of Teaching of English as Second Language, Bachelor of Teaching of Tamil Language, and Bachelor of Islamic Study. Group of 267 students enrolled in the first semester and another group 219 enrolled in the second semester. Seven tutors were involved in

implementing the curriculum, four were members of the faculty and three were part-timers.

Table 1: Number of student enrolled in the course and their programmes of degree:

Programmes	Number of students
B. Ed. Sc.	175
B. Ed. (EC)	66
B. Ed. (TESL)	195
B. Ed. (T)	30
B. Ed. (I)	20
<b>Total</b>	<b>476</b>

\* B. Ed. Sc. - Bachelor of Science with Education

B. Ed. (EC) - Bachelor of Early Childhood Education

B. Ed. (TESL) - Bachelor of Teaching of English as a Second Language

B. Ed. (T) - Bachelor of Teaching of Tamil Language

B. Ed. (I) - Bachelor of Education in Islamic Studies

The course was conducted in three hours of instructions per week. Due to the big number of enrolment for each semester, the students were divided into six smaller groups. Each group comprises of about forty-five students. A tutor was assigned to each group. The classes were made up of three meeting per week, from 8.00 am to 9.00 am on Monday, Wednesday, and Friday for fourteen weeks.

Each tutor was given the module and PBL guide's book. The writer conducted a short session with the tutors, explaining about the module before the session started. Standard materials were being used in each lesson conducted by the tutor. However, some of the lessons were not being carried out in the same day due to unforeseen circumstances, such as tutors have to go on leave. At the end of the semester, tutors were to complete all components in the module.

### Course evaluation

There are three types of evaluations for the course:

1. Written test (40%) – comprise of 40 multiple choice questions, testing students ability to apply thinking skills in a given situations or statements.
2. Group participation and class presentation (30%) – Tutors were being given group participation checklist (see Appendix A) to assess the group interaction process among students in their tutorial group. They were also being given presentation skills

checklist (see Appendix B) to assess the performance of students during their presentations.

3. Problem solving project (30%) – Projects that involve effective problem solving strategies by knowledge, critical thinking skills and communication skills. The nature of the project involved student's ability to manage crisis, problem posing scenarios and simulations, and controversial and provoking situations.

The tasks of tutors are to monitor the students' progress during the lesson, assisting them when necessary in identifying and clarifying the problems in the scenario. The tutors would assist students in gathering relevant information, evaluating evidence (establishing multiple points of views, recognizing biases, identifying fact and opinion, assessing accuracy and credibility of information). Students were to consider all alternatives and implication of their decisions, and implementation of best alternative or plan of action. Cumulative scores of all the components in the evaluation will become the final grade of a student for the course.

### The Challenges

This is the first time Thinking and Communications Skill course being offered at the Faculty of Education, University Malaya. Several short-comings were to be expected from the beginning, some are minor challenges, which could be resolve without involving changes or revisions of policy of the University or the Faculty. Some of the minor challenges faced by tutors that need to be highlighted were:

- late registration of students
- late printing of modules
- late assigning of tutorials group
- changes of student to another tutorial group
- classroom arrangement
- lack of classroom
- lack of suitable classroom for PBL strategy

The coordinator needs to have the list of students enrolled in this course at the beginning of the semester. However, some students were still in the process of registering for the course two weeks after the semester begin. This cause the coordinator has to look for tutors to facilitate new group of students. Large number of enrollment also caused shortage of classrooms. The tutorial rooms at the Faculty of Education were too small for groups of more than forty students. Therefore, PBL strategy, such as group discussions and presentations were difficult to be carried out effectively.

Several major challenges that need to be addressed were being identified in the previous session. Among them are:

- lack of well trained tutors to conduct the curriculum and implement PBL strategy
- lack of tutors

- large group of students enrolled for the course for each semester
- lack of student's understanding about PBL strategy
- assessment strategy

Three tutors for the course were part-timers. They are a school teacher, a retired lecturer, and a teachers college lecturer. Even though they are experience teacher or lecturers, they have no specific training to implement PBL packages. There fore, it was observed that full implementation of PBL was not being carried out. Teaching the classroom still happen in the implementation of the module. Large group of students hindered successful implementation of PBL strategy. Added to this problem, students were not used to the new strategy. They were rather more comfortable with the traditional method of teaching. Perhaps, some were complaining that PBL make them to work more and used lots of their time.

### Conclusion

The implementation of PBL in the thinking and communication skills enriched the strategy of implementation of curriculum at the Faculty of Education, University Malaya. Some negative comments were given by students about the strategy, such as lots of time taken to think, lots of reading, research and understanding needed to complete each task. However, positive criticism such as being able to work with others, provides opportunity to explore a case, improve language skills, opportunity to make presentation, learned to be independent learners, learn to deal with others, and enjoyed working with others, over ride the negative feedback from students. It is believed that if PBL were to be implemented effectively in the thinking and communication skills course in the future, the university top management should look into challenges that the faculty has experienced in implementing this course in the previous semester.