

# An Introductory Course on Study Skills Forming a Bridge Between Traditional and Problem Based Learning (PBL)

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Pages with reference to book, From 27 To 30

## Abstract

**Objective:** To introduce entrants in a medical university coming from traditional system of education to student-centered, problem based learning (PBL) and acquaint them with small group dynamics in order to make them life long learners.

**Setting:** Ziauddin Medical University, Karachi, Pakistan.

**Subjects:** First Year Students of Medical University.

**Design:** The course was of ten hours, divided in six session. In the first session, there were exercises for interaction in small groups, followed by sessions on principles of learning, learning methodologies, PBL, assessment and lastly importance of feedback.

**Result:** Evaluation of the course revealed that 63% of the students agreed that the course achieved its objectives, 25% were not sure while 12% disagreed. Seventy one percent agreed that the course promoted student to student interaction, 24% were not sure while 5% disagreed.

**Conclusion:** The course made the process of transition from traditional system of learning to more innovative methods of learning, smoother for the students. The general feeling of the faculty members was that these students were able to perform better than the students who had not taken this course, It is too early to determine the success of this course. A follow-up study however is needed to evaluate the effectiveness of this course by determining the performance of students in small group session of Problem-Based Learning (JPMA 49:27, 1999).

## Introduction

Ziauddin Medical University started an undergraduate program in 1996. Before initiating, the undergraduate program it was decided that the curriculum would be based on the integrated model, be community based and use Problem Based Learning as one of the instructional strategies. The educational system in Pakistan from which the students come can be summarized by the acronym "Rule", which refers to: R-rote learning; Uuninitiatin and requiring guidance throughout; L-lecture dependent and E-examination oriented<sup>1</sup>. So it was decided that the introductory course includes a short course on "Study Skills". This paper describes this course.

## Methods

The ten-hour course was divided in six sessions. The objectives of the course and different sessions are shown in Table 1.

Table I. Course program and methods.

Objectives	Session	Time	Methodology
Experience small group learning activities in order to identify the key elements of group dynamics	Small group dynamics	2.5 hrs.	Workshop based on the principles of experiential learning
Share learning experience in order to identify principles of learning	How do we learn	2.5 hrs	Workshop based on the principles of experiential learning
Discuss strengths and shortcomings of different learning methodologies including student-centered learning such as Problem Based Learning (PBL) in order to understand the rationale of using various methods	Methods of learning	1 hr	Interactive session
Acquire some experience in Problem-Based learning in order to function effectively in PBL tutorial sessions	Introduction to process of PBL (7-jumps)	3 hrs.	a) Problem was given followed by discussion b) Presentations c) Video session on process of PBL, prior questions were asked about process of PBL and discussion followed the video
Acquire some experience in assessing one's own self, peers, the session and the course. Discuss strengths and shortcomings of different assessment methods in order to understand the rationale of using a combination of methods	Assessment of students' competence	1 hr	Interactive session
Discuss the importance of feedback by students, peers and teachers	Importance of feedback	1 hr	Interactive session

\*Courses on use of library and computers went on simultaneously with the course of Study Skills.

In the first session the class of 71 students was given an exercise, 'What characteristics would you like to see in yourself as a professional person five years from today i.e. after graduation'. They were asked to assemble in small groups and identify the key elements of small group dynamics by Speaking only when in possession of the power object . (In this case a tennis ball was the power object).

If one wants to express the opinion, he/she should signal for the power object, non-verbally. Individual holding the power object had the right to refuse or pass on the power object to any one he/she wishes.

The students identified the tendencies toward dominance or submission which are important individual dynamics characterizing particular group members, both as a student and in real life, needing to be inwardly identified by the group leader and countered by bringing in others, whether assertive or retiring, to contribute to the dialogue<sup>2</sup>.

The students had an experiential insight into the working of a small group. They learned how to think critically and systematically and to improve their thinking powers by exploring them to their peers for constructive criticism. This is the bases of audit and can only occur in small groups<sup>2</sup>.

The second session was devoted to developing a list of learning principles through an exercise, 'Recall three memorable occasions in your past life from which you learnt something and which were significant, memorable and pleasant'. Each individual wrote his experiences and shared them in small groups, focusing on "why" this event is still remembered. Towards the end of small group discussion, each group was given an incomplete statement, "a learning experience should be designed so that we ". The students completed the statement with a list of principles associated with the process of learning. The list included active participation, interest in a subject, emotional involvement and presence of a role model, reward and practice of a skill, etc.

The third session was a one-hour interactive session. Students came out with a list of learning methods, which they experienced previously. These included a lecture, group discussion, practical, demonstration and field visit. They also identified Conference, Seminar, Audio visual aids; computer assisted learning as other useful learning methods. Students discussed rationale, strengths and shortcomings of each method. The facilitator briefly introduced them to student-centered Problem-Based Learning.

The fourth session on PBL was based on, the evidence that information learned in the context in which it will be used is more readily recalled<sup>3</sup>. Training the students for this learning process, the following session was incorporated in the introductory course in which the two tutorials of a given problem are divided in seven steps<sup>4</sup>. The students will come fresh and unprepared to the problem but share previous knowledge and experience in order to progress with the problem. Quite soon they identify what they do not understand and proceed to formulate their own learning objectives<sup>5</sup>. The methods included small group discussion of a problem according to the seven jumps, group presentation, followed by a video on "PBL Session at the University of Limburg at Maastricht in Netherlands". The students provided feedback in which the role of the tutor was identified as that of a guide, observer and facilitator, that of the group leader as the one responsible for effective discussion, uniform participation and appropriate group dynamics. The role of the secretary was writing and confirming important points. During the session the students also filled a self-assessment form regarding their participation in small group discussion.

Session five was a one-hour interactive session. The students enlisted various methods of assessment and identified their rationale, shortcomings and strengths. They were introduced to the continuous assessment system being followed at Ziauddin Medical University. The students had already experienced self-assessment regarding their participation in small group discussion in the previous session.

Session six was also a one-hour interactive session. Students defined feedback as "response to activity" or "critical analysis of the activity". Activity may be the session, course etc. Teachers, peers, own-self colleagues, etc were identified as the sources of feedback. Importance of the students' opinion regarding the identification of the strengths and the weakness of the session/course was highlighted. They also identified the importance of their

feedback in continuous quality improvement at Ziauddin Medical University, which unfortunately the traditional system lacks. At the end of each session and at the end of the course the students were asked

to evaluate them.

## Results

The results of the evaluation at the end of the course are shown in Table II.

**Table II. Course evaluation.**

#	The Course	Strongly agree %	Agree %	Neutral %	Disagree %	Strongly disagree %
1	Succeeded in achieving the desired objectives	10	53	25	10	2
2.	Was conducted in an effective manner	15	53	28	2	2
3.	Was appropriate for my level of understanding	29	52	14	3	2
4.	Promoted student to student interaction	32	39	24	3	2
5.	Was allocated sufficient time	25	60	13	2	0

Sixty three percent of the students agreed that the course achieved the objectives, 25% remained neutral while 12% disagreed. Eighty one percent said that the course was appropriate for their level of understanding, 14% remained neutral while 5% disagreed. Seventy-one percent agreed that the course promoted student interaction, 24% remained neutral while 5% disagreed.

## Discussion

The advantages of small groups and PBL methods over traditional methods of instruction are well documented in the world literature<sup>1,2,6-11</sup>. Some of these are that the students are able to put forward their point of view in front of the group, get criticized and reach a consensus solution. They are also able to listen to others' views, think analytically, criticize in light of their own experience and knowledge and find the solution to a given problem. They could well coordinate their factual knowledge with the process of reasoning. These advantages of the newer methods produce life long learners and problem solvers.

As stated in the introduction before starting the M.B.B.S. program the university made a policy decision that an integrated, problem based strategy will be adopted. To prepare students for self-learning strategies, which they will need in later course of studies, a short course on study skills was introduced in the first term. It is too early to determine the success of this course. A follow-up study however, is needed to evaluate the effectiveness of this course by determining the performance of students in small group sessions of Problem-based Learning. Another follow-up study, ten years or so after graduation, would be needed to establish if Ziauddin Medical University students are better self learners than graduates from traditional medical colleges.

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