

SELF-LEARNING METHODS PREFERRED BY SECOND YEAR MBBS STUDENTS IN UNDERSTANDING PHARMACOLOGY: AN OBSERVATIONAL QUESTIONNAIRE BASED STUDY

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ABSTRACT

BACKGROUND

AIMS

To evaluate the self-learning habits via different learning styles which can influence and be a useful indicator for potential learning performance of an individual.

MATERIAL & METHODS

Observational questionnaire based study to evaluate self-learning habits among Second year undergraduates, Adichunchanagiri Institute of Medical Sciences, B. G. Nagara, Mandya, Karnataka.

RESULTS

50.55% had an opinion that Problem Based Learning (PBL) stimulates self-directed learning. 76.92% were said self-learning process should include both LBL (Literature Based Learning) & PBL together. Majority of the students said the learning is boring through Literature based learning. And 59.34% said topic could be more interesting & less boring if both were included according to the situation. 84.62% said self-learning through LBL is more time consuming over PBL. 80% preferred to integrate all the subjects. 46.45% said it is better to start the PBL early in the 1st year itself.

CONCLUSION

'Learning to learn' is a crucial skill. Continued additions can lead to "Curriculum Hypertrophy", emphasising on "Lifelong learning" skills in students & who develop such skills will be equipped for whatever the future holds and will keep up to date when they are no longer on formal training programs.

KEYWORDS

Learning Methods, Study Habits, Self-directed Learning.

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INTRODUCTION: Learning style is an individual's preferred way of gathering, organising, remembering, and thinking about information.¹ Learner's motivation and information-processing habits relates to the Learning style which involves learner's preferred ways to receive, process, and recall information during instruction.² Different learning styles can influence and be a useful indicator for potential learning performance of an individual.^{3,4,5,6} Research studies on learning styles have shown that learning can be enhanced through consideration of personal characteristics in design and delivery of the instruction.⁷ Some learners use visual information like pictures, diagrams, and simulations to understand better, while others can get more from oral and written information i.e. literature based or through problem based learning,^{8,9,10} styles have distinct preferences during different instructional activities.¹¹

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Study habits reflect student's usual act of studying and serve to direct the learner's cognitive processes during learning. Study habits includes a variety of activities: Time management, setting appropriate goals, choosing an appropriate study environment, using appropriate note-taking strategies, choosing main ideas, and organisation.¹² Thus, present study was done to know the self-learning behaviour among second year medical undergraduates so that preferred study habits can be made more effective through improvised teaching sessions.

AIMS & OBJECTIVES:

- To evaluate the self-learning habits via Problem Based Learning (PBL) & Literature Based Learning (LBL).
- To improve the teaching activity in accordance with their learning styles.

MATERIAL & METHODS: This study was an observational questionnaire based study to evaluate self-learning habits through PBL or LBL. Eight validated questionnaires were given to Second year undergraduates studying in Adichunchanagiri Institute of Medical Sciences, B. G. Nagara, Mandya, Karnataka & were enrolled only after their consent to participate in the study.

Permission was obtained from the Institutional Ethics Committee for the same.

STATISTICAL ANALYSIS: Only Completed questionnaires was analysed & data was expressed in percentages (%) using Microsoft excel.

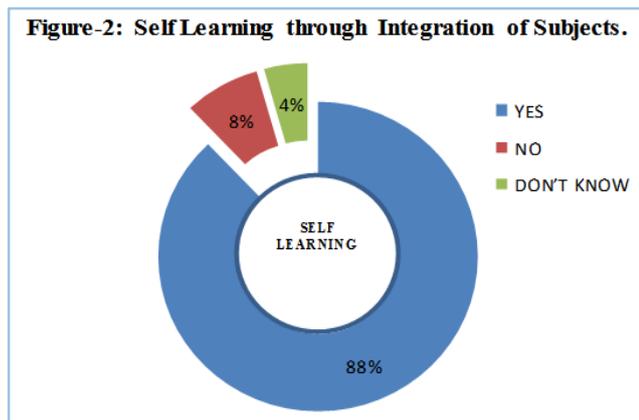
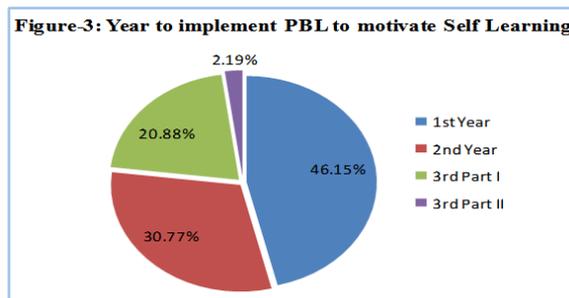
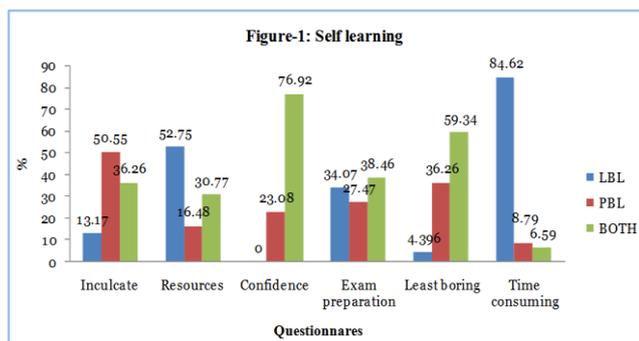
RESULTS: 91(97.84%) students out of 93 had returned the completed questionnaires were analysed and 2 incomplete questionnaires were excluded.

| Sl. No. | Questionnaires | Gender | | Male=52 Female =39 | | | |
|---------|---|-----------|-------|--------------------|-------|------|-------|
| | | Responses | | | | | |
| | | LBL | | PBL | | BOTH | |
| No | % | No | % | No | % | | |
| 1. | Habit of self-learning is inculcated by? | 12 | 13.17 | 46 | 50.55 | 33 | 36.26 |
| 2. | Are you satisfied with the availability of resources for self-learning (library, internet, stationary, separate study room, etc.) in the college? | 48 | 52.75 | 15 | 16.48 | 28 | 30.77 |
| 3. | Which method is necessary or helps in acquiring confidence in treating a patient through self-learning? | 0 | 0 | 21 | 23.08 | 70 | 76.92 |
| 4. | Which method helps in preparing for exams through self-learning? | 31 | 34.07 | 25 | 27.47 | 35 | 38.46 |
| 5. | Which method is least boring for self-learning? | 4 | 4.396 | 33 | 36.26 | 54 | 59.34 |
| 6. | Which is more time consuming method in understanding through self-learning? | 77 | 84.62 | 8 | 8.79 | 6 | 6.59 |

| 7. | Do you think that integration of all the basic science subjects is beneficial & helpful for self-learning? | Yes | No | Don't Know |
|----|--|-------------|-----------|------------|
| | | 80 (87.91%) | 7 (7.69%) | 4 (4.39%) |

| 8. | From which academic year do you think PBL to be started in your opinion to motivate self-learning? | 1 st year | 2 nd year | 3 rd year Part I | 3 rd year Part II |
|----|--|----------------------|----------------------|-----------------------------|------------------------------|
| | | 42 (46.15%) | 28 (30.77%) | 19 (20.88%) | 2 (2.19%) |

Table 1



DISCUSSION: 50.55% had an opinion that PBL stimulates self-directed learning; this may be due to interest which is created through small groups involved to view their thoughts. We know that teachers are concerned about helping students in a lifelong learning process, so that the student develops an interest and provide base for concepts and skills that will facilitate further learning and thinking. Although Modern teachers need to provide a variety of learning experiences for students, the concept should change from that of 'teacher' to that of 'facilitator of learning', 'motivator' and 'designer of the learning situation' and sometimes join the students honestly as a continuing co-learner.¹³

Creating an environment in which students can learn effectively and efficiently is the core managerial role of Self learning. 52.75% were unhappy about the resources available for PBL, said it was useful only for traditional based learning, i.e., either it was teacher centred or student centred. So providing separate section in library, creating a

website to have discussions & to give their reflections towards learning objectives can help in solving & arriving at right solution as early as possible.

76.92% said self-learning process should include both LBL & PBL together so that they gain confidence in prescribing drugs. The probable idea of having both is to have good hold on both theoretical as well as practical skills can be advantageous. In present study, 34.07%, 38.46% favoured LBL & both methods respectively because some students may be well adjusted with studying on their own without discussing with others for exams & few prefer to learn through discussion. Thus, it shows the preference of individual learning styles which make them comfortable.

Majority of the students said the learning is boring through Literature based learning. And 59.34% said topic can be made more interesting & less boring if both were included according to the situation.

84.62% said self-learning through LBL is more time consuming over PBL where different ideas are gathered on particular topic, which makes less tedious and solving it very quickly. 80% opined to integrate all the subjects through PBL helps for better understanding and bringing rational approach. 46.45% said it is better to start the PBL early in the course as soon as they join into 1st year, so that they start learning on their own, helps in better thinking capacity, improves logical applications which are very much necessary while diagnosing & treatment.

The main characteristic of such learning is that students take some significant responsibility for their own learning over and above responding to instruction.¹⁴ Educators have an important role to play in assisting students to acquire the skills for self-directed learning, and to do this they need to understand the concept of self-directed learning.

'Learning to learn' is a crucial skill. Continued additions can lead to "curriculum hypertrophy".¹⁵ Through self-directed learning you can control what you want to learn, how you want to learn and when you want to learn. Students engaged in self-directed learning undergo a transformation that begins with negative feelings (i.e., Confusion, Frustration, and Dissatisfaction) and ends with confidence and skills for lifelong learning.¹⁶

CONCLUSION: An important benefit of the self-directed approach is that it can tackle one of the most enduring problems in medical education: The exponential growth in knowledge. It is a fact that the course cannot teach everything that doctors consider relevant. Educators have been trying to accommodate the extra knowledge, including lengthening the course and introducing postgraduate and continuing medical education, but none has solved the problem. Hence emphasising on "lifelong learning" skills in students & who develop such skills will be equipped for whatever the future holds and will keep up to date when they are no longer on formal training programs.

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