IMPACT OF PRELECTURE ASSIGNMENT AS A TEACHING LEARNING TOOL FOR PHASE 2 MBBS STUDENTS IN A FLIPPED CLASSROOM

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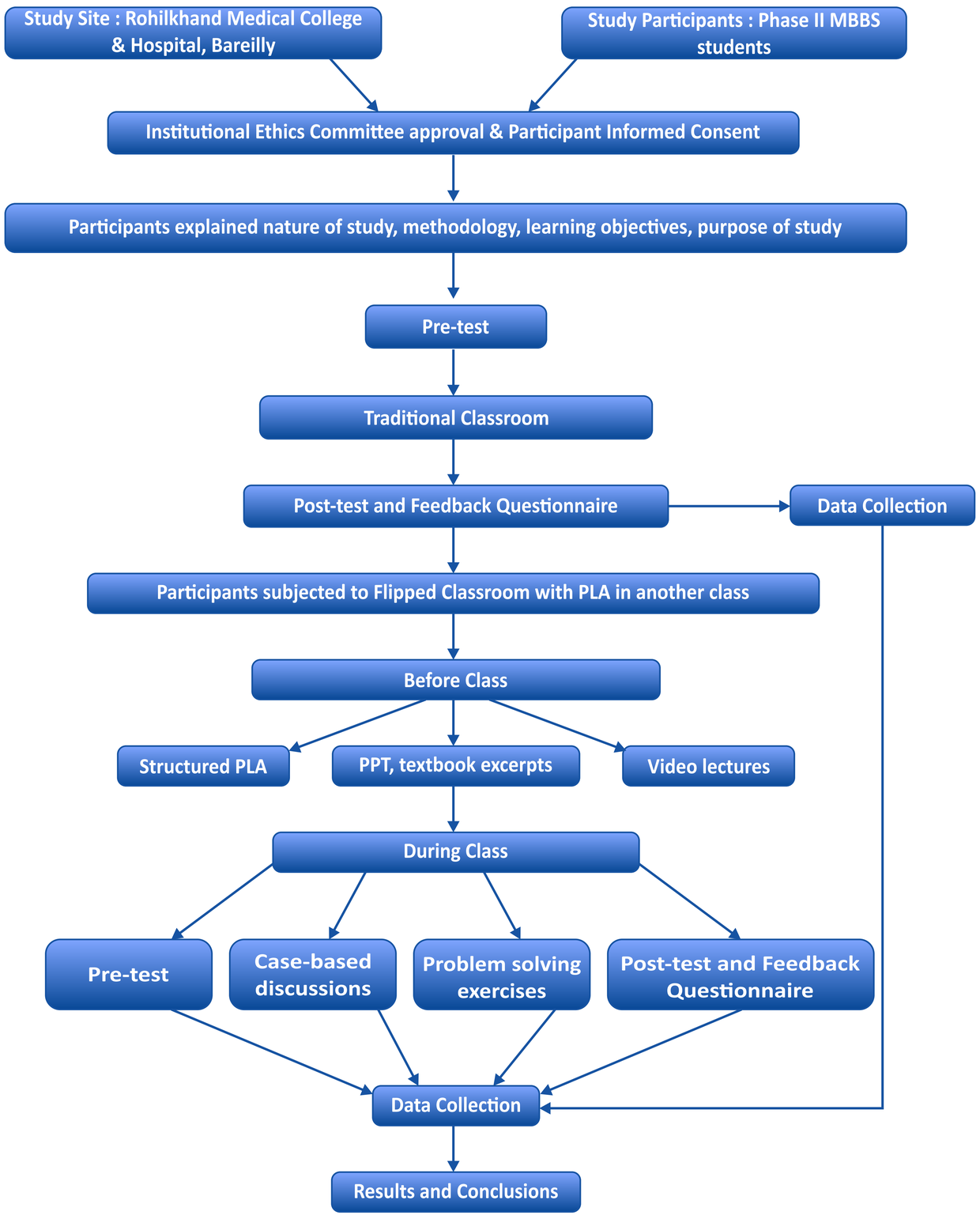
INTRODUCTION

Didactic lectures for concepts in pathology are passive, teacher-centric, and carry lesser attention span and are retained less by students. These represent mainframe of student learning and form the backbone of current education trends. Effective lecture delivery and application of innovative ideas lead to better understanding and acceptability amongst students. Additional forms need to be developed and implemented to make learning easier and more retainable for the students. Self-reading, especially prelecture assignment is one such tool which may help in better understanding and retention of topics and in turn enhance knowledge and competence.

OBJECTIVES

1. To develop a prelecture assignment validated by topic experts.
2. To determine impact of prelecture assignment as a teaching learning tool for phase 2 MBBS students in a flipped classroom.
3. To assess the perception of students and faculties through feedback questionnaire.

MATERIALS & METHODS



OBSERVATIONS & RESULTS

Table 1. Comparison of pre and post test scores in traditional learning method (n=218)

TRADITIONAL LEARNING	Mean	Standard Deviation	p-value*
Pre-test	2.37	1.451	<0.001
Post-test	4.19	0.969	

* p-value <0.05, highly statistically significant.

Table 2. Comparison of pre and post test scores in flipped class learning method (n=218)

FLIPPED CLASSROOM	Mean	Standard Deviation	p-value*
Pre-test	2.50	1.275	<0.001
Post-test	3.93	1.092	

* p-value <0.05, highly statistically significant.

Table 3. Comparison of post test scores in traditional learning and flipped classroom method (n=218)

	Traditional learning		Flipped Classroom		p-value*
	Mean	Standard Deviation	Mean	Standard Deviation	
Post test	4.19	0.969	3.93	1.092	0.007

*p-value < 0.05, statistically significant.

Figure 1: Perception of Students Regarding Impact of Flipped Classroom Teaching

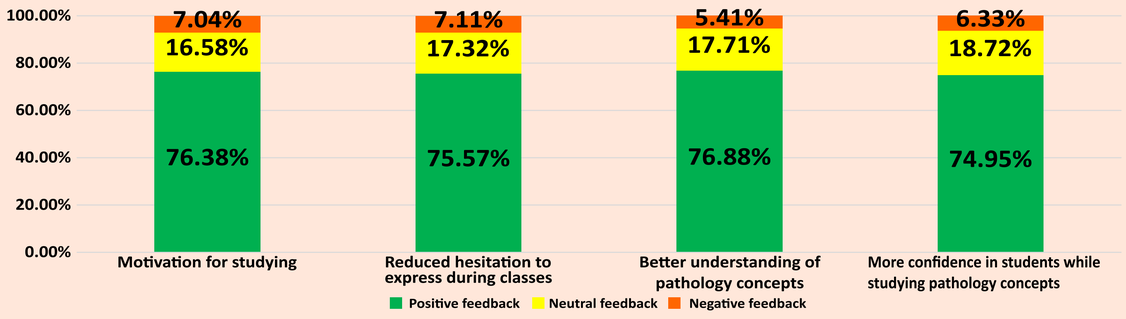
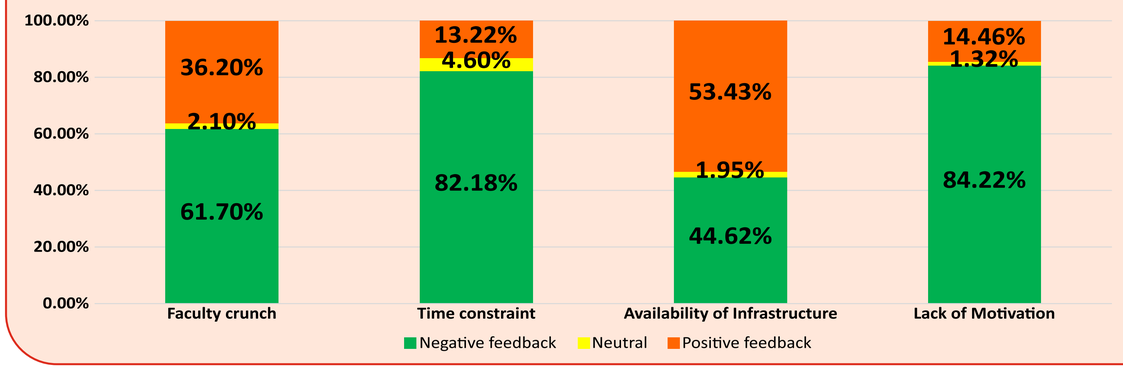


Figure 2: Faculty feedback regarding Impact of Flipped Classroom Teaching with PLA



DISCUSSION

Kolari and Ranne[1] observed that the Flipped classroom with PLA helped the students to follow the lecture, actively participate, better concentrate and a learning environment was created. In our study, statistically significant difference was observed in Pre and Post test scores of flipped classroom with PLA with that of traditional lecture scores. Students gave feedback that PLA motivated them to read and come for class, thus improving their understanding.

Our study shows statistically significant difference in post test scores of both methods. Similarly, a study in **University of Maryland, USA**[3,4] observed that PLA significantly improved the exam scores and pre-lecture preparedness of students.

In our study, students felt that understanding of topic was better when a teacher clears the concept in traditional class, but **Ahsan and Mallick**[2] observed that simple PLA increased comprehension, analysis and active e-learning skills and Flipped classroom were more student-centric. We feel that traditional lectures and conventional methods still hold a place in delivering vast amount of knowledge to large groups.

CONCLUSIONS

1. Flipped classroom with PLA is a newer teaching methodology and gives opportunity to students for interaction and concept clearing with help of problem-solving exercises and case discussions.
2. PLA also increases pre-lecture preparedness in students and motivates them to read the topic
3. Flipped classroom with PLA increased attention span during classes and resulted in increased performance in assessments.
4. Traditional lectures still hold a place in student learning process, as students become more confident and understand better when a teacher explains concepts and clears doubts with interaction.
5. Resource faculty crunch, time constraints, infrastructure unavailability are few limitations for effective implementation of such newer methodologies as per faculty feedback.
6. We feel, both methodologies should be part of curriculum and faculties shall introduce newer methodologies according suited best for understanding the topic.

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