

# A Study on Effective Teaching, Correlation between Regularity of Students in Mathematics and Performance Using Model Time Table

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## ABSTRACT

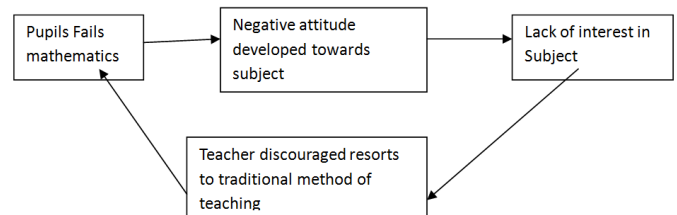
A teacher's primary responsibility is to facilitate learning through time table. The research literature on teacher effectiveness gives excellent tips for doing the job of teaching well. The Four parameters of Effective Teaching (outcomes, clarity, engagement, and enthusiasm) assist in bringing good result. The parameters represent principles that, when systematically implemented through time table, can enhance student learning and be used as a vehicle for continual self-examination to improve your instructional effectiveness. One of the important factors in realizing educational objectives in mathematics as a subject is the role of the teachers` motivation within the educational set up. The negative performance of student towards an educational aims and objectives could be associated to the low motivation of teachers most especially in the area of mathematics. With the help of a model time table and based on regularity of students we have to take care of students and teachers gets more time to interact with each other and prepare them for conceptual knowledge in Mathematics subject.

**Keywords :** Effective Teaching, Regularity, Model Time Table, Outcome, Engagement And Effectiveness.

## I. INTRODUCTION

The purpose of this study was to determine the correlation between availability of teaching and learning resources and effective classroom management and content delivery in colleges of New Delhi affiliated to GGSIPU. This is the study to correlate effective teaching and student's regularity in model time table to change teaching with conventional type of time table and unexpected result (outcome). Conventional time tables are tedious and stress full for students as well as for teachers. Student are fad up to take 5-6 lectures of different subjects on daily bases and these lectures are not much related to each other. Students get only one hour or less to understand concept of application. Even its very tough to change mind immediately after some minutes that basically affect students efficiency catching or gripping power. Even these types of conventional time table affect teaching quality and speed of teachers. Through this paper we will present a model time table and comparison between effective teaching and students regularity which will help teachers and students to interact more on a subject and will increase their knowledge without stress and able to produce good result (outcome).

## Factors affecting teaching and learning of Mathematics: Source Aremu (1998)



## Changing scenario in student's behavior:

Research indicates that now a day's student's regularity and seeking their attention are big challenges in academics. Most of the organizations took strict action against them these strict actions are more over affect students performance and moral. Ultimately students lose their marks in examination which is the only parameter for judging students performance.

Showing students attendance of some reputed colleges (GGIPU) in mathematics that will show how students are losing their interest in taking lecture because of conventional type of time table.

**Table 1: Attendance of BBA students in ODD semester**

Month	IITM (%)	JIMS (%)	ViPS (%)	MSI (%)	IINTM(%)
Aug	84	85	80	90	83
sep	78	82	85	83	80
Oct	70	75	64	76	71
Nov	65	60	65	68	68
total	297	302	294	317	302
Average	74.25	75.5	73.5	79.25	75.5

**Table 2: Attendance of BBA students in EVEN semester**

Month	IITM (%)	JIMS(%)	ViPS(%)	MSI(%)	IINTM(%)
Jan	80	88	75	88	80
Feb	73	77	82	80	80
March	65	75	68	77	78
April	62	59	61	60	58
Total	280	299	286	305	296
Average	70	74.75	71.5	76.25	74

**Table 3: Attendance of BCA students in ODD semester**

Month	IITM (%)	JIMS(%)	ViPS(%)	MSI(%)	IINTM(%)
Aug	85	85	88	86	53
sep	77	80	81	75	81
Oct	77	70	66	78	70
Nov	70	65	75	68	65
total	309	300	310	307	269
Average	77.25	75	77.5	76.75	67.25

**Table 4: Attendance of BCA students in EVEN semester**

Month	IITM (%)	JIMS(%)	ViPS(%)	MSI(%)	IINTM(%)
Jan	81	86	82	88	83
Feb	75	80	82	85	85
March	75	78	69	75	75
April	68	62	66	62	68
Total	299	306	299	310	311
Average	74.75	76.5	74.75	77.5	77.75

Statistics generated from official website attendance portal which shows the average attendance of 5 reputed colleges affiliated to GGSIPU. Table 1 & 2 shows attendance of BBA in ODD and EVEN semester respectively. Similarly table 3 & 4 shows attendance of BCA in ODD and EVEN semester respectively.

**Changing scenario in student's Performance:**

Student performance of five reputed colleges affiliated to GGSIPU is given below for BCA & BBA in ODD and EVEN semester respectively.

**Table 5: Result of BBA students in ODD semester**

Result	IITM (%)	JIMS (%)	ViPS (%)	MSI (%)	IINTM(%)
Average	98.07	89.79	88.67	100	91.03

**Table 6: Result of BBA students in EVEN semester**

Result	IITM (%)	JIMS (%)	ViPS (%)	MSI (%)	IINTM(%)
Average	90.56	87.03	90.09	89.83	84.74

**Table 7: Result of BCA students in ODD semester**

Result	IITM (%)	JIMS (%)	ViPS (%)	MSI (%)	IINTM(%)
Average	100	85.9	90.7	94.9	91.6

**Table 8: Result of BCA students in EVEN semester**

Result	IITM (%)	JIMS (%)	ViPS (%)	MSI (%)	IINTM(%)
Average	95.83	80.76	85	96.29	90.47

Above result is compiled from the result declare in University website for the session Aug. to Dec. 2016 (for odd semester) and Jan. to May. 2016 (for Even Semester). Here IITM: Institute of Information Technology and Management, New Delhi; JIMS: Jagannath Institute Management Studies, New Delhi; ViPS: Vivekanand Institute of Professional Studies, New Delhi; MSI: Maharaja Surajmal group of Institutions, New Delhi; IINTM: Institute of Innovation Technology and Management, New Delhi; GGSIPU: Guru Govind Singh Indrapastha University, New Delhi.

**Correlation between Attendance and Result:**

Correlation is a statistical tool to calculate relation between the variable. To calculate it we need to check coefficient of correlation i.e. (r), which lies between +1 to-1. If coefficient of correlation is negative that means correlation is negative i.e. variable has opposite nature. Else if coefficient of correlation is positive that means correlation is positive i.e. variable has same nature or they are rising in same direction. We have mainly two methods to calculate it out of these two we are using Spearman's Rank method which state that

$$r = 1 - \frac{6\sum D^2}{N^3 - N}$$

here D is difference between ranks of variable and N is number of observation.

**Table 9: Coefficient of Correlation between Attendance and Result College wise**

Attendance→ Result↓	IITM	JIMS	ViPS	MSI	IINTM
IITM	<b>+0.80</b>				
JIMS		<b>-0.40</b>			
ViPS			<b>-0.40</b>		
MSI				<b>+1.0</b>	
IINTM					<b>-0.40</b>

**Table 10: Coefficient of Correlation between Attendance and Result Course wise**

Attendance→ Result↓	BBA (Odd)	BBA (Even)	BCA (Odd)	BCA (Even)
BBA (Odd)	<b>+0.675</b>			
BBA (Even)		<b>-0.6</b>		
BCA (Odd)			<b>+0.20</b>	
BCA (Even)				<b>+0.225</b>

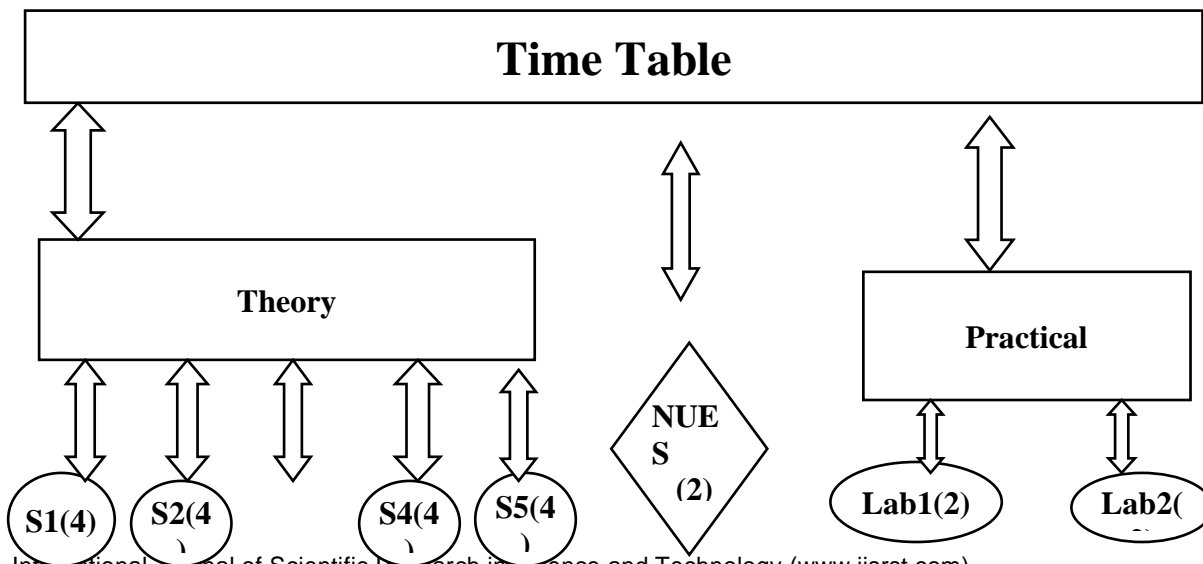
Above tables are indicating college wise and course wise analysis of correlation respectively. Here IITM and MSI colleges have positive correlation and JIMS, VIPS and IINTM colleges have negative correlation means IITM and MSI students are regular in classes and they have above 75% attendance so they score good result i.e above. 90% similarly in JIMS, VIPS and IINTM students rather regular i.e less than 75% so they didn't achieve expected result. In course wise analysis we got positive correlation that shows regularity and result are directly proportionate so if we increase regularity, result will also increase.

**Proposed Model Time Table:**

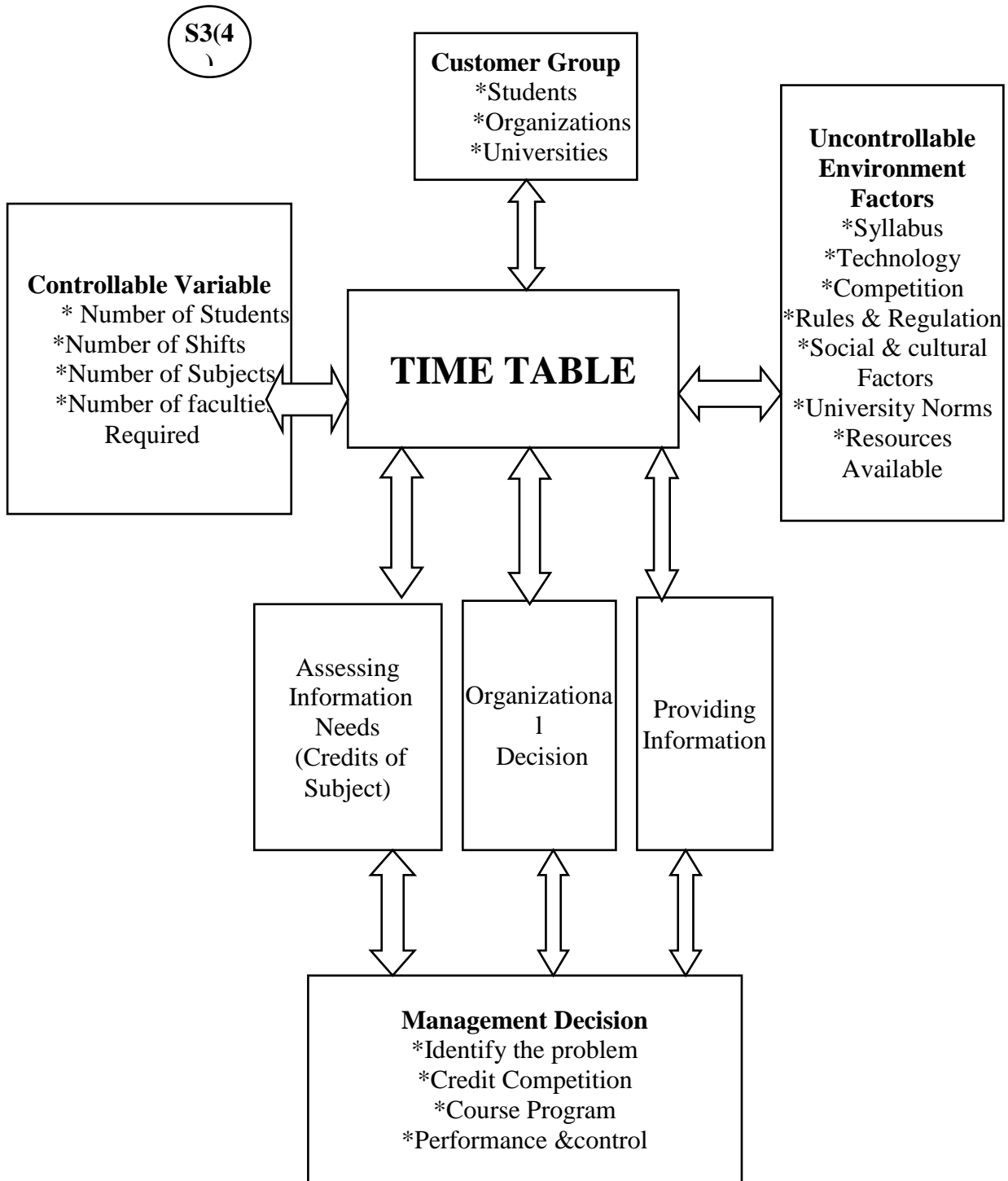
Days/Time	Lecture 1 (8:00 to 10:00am)	Lecture 2 (Lab) (10:00 to 11:00am)	Break (11:00 to 11:30am)	Lecture 3 (11:30 to 1:30pm)
<b>Monday</b>	S1(Theory)	S1(Lab)	<b>B</b>	S2(Theory)
<b>Tuesday</b>	S3(Theory)	S3(Lab)	<b>R</b>	S4(Theory)
<b>Wednesday</b>	S5(Theory)	NUES	<b>E</b>	S2(Theory)
<b>Thursday</b>	S1(Theory)	S1(Lab)	<b>A</b>	S4(Theory)
<b>Friday</b>	S3(Theory)	S3(Lab)	<b>K</b>	S5(Theory)

S1: Subject 1 practical paper with credit 4 theory+2 lab; S2: Subject 2 theory paper with credit 4 theory; S3: Subject 3 practical paper with credit 4 theory+2 lab; S4: Subject 4 theory paper with credit 4 theory; S5: Subject 5 theory paper with credit 4 theory; Nues: Presentation paper.

**Structure Of Time Table:**



S3(4)



**Advantage:**

- Faculties will get more time to Prepare lectures.
- Conceptual and continuity in teaching each subject.
- Less load and stress of study for students.

**Limitations:**

- Swapping of Lectures.
- Rules and regulation of university.
- E- Learning.
- Attendance Mandatory.

## II. CONCLUSION

This paper will change teaching with conventional type of time table. Student will get sufficient time to get knowledge from teachers and will be able to understand the concept of subjects deeply with practical in continuation. Using model time table students will get the environment of same subject for three hours at stretch so that they can discuss more queries with teachers and improve their concept very easily. This will help students to improve efficiencies. Even model time table also increase regularity of student that is directly proportionate to Result. that make teaching efficient and improve quality and speed of teachers. Through this paper we will put on some facts and problems of students those are generally ignored because of limitations of courses and curriculum of universities model time table which will help teachers and students to interact more on a subject and will increase their knowledge without stress. It also help absentees because through this model time table absentees needs to study only one paper a day rather than all together.

## III. Recommendation

From all views, discussed in the research paper, some of the suggestions can motivating students to learn are:

- make mathematics teaching interesting.
- Individual differences in ability, background and attitude must be taken into consideration.
- Enhance learners feeling of esteem by arranging varieties of learning experiences according to Biehler and Snowman (1986);

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