Original Article

Study of Loss of Attendance in Engineering Institutions due to Holidays and Conferences

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ABSTRACT

In the present academic scenario, technical education has a vital importance and it is made available by the Engineering colleges of both Governmentand Private sector through a four year degree course- B.Tech. It is perfectly a professional course which requires hard work and regularity for success outcome. It is the presence of students in classrooms which makes them cope with academics in a better way and create understanding of the subjects to produce proper results. Attendance in each period is taken systematically and the attendance of the first lecture is communicated to the Director (campus) for the execution of prolific policies. In the analysis of the first period attendance data of Poornima College of Engineering for the year 2012, drop in variation has been found before and after various festivals and co-curricular activities. During this time, there is a fall in attendance which has been confirmed by the data analysed below. The festivals during the season have been Makar-Sakranti, Holi, Rakshabandhan, Dushehra, Diwali, Eid, Aarohan&various conferences. Report is purely based on the data that has been collected. The study gives an insight into dynamic nature of attendance which implies that the attendance of the mass deviates from average during the festive season and cultural events. The average attendance just before and after the festivals has been compared with general average attendance and the loss of attendance is calculated. In addition, there are cultural and sports events which are essential for the overall development of students.Conferences are also held by the departments and similar pattern is observed; but at smaller scale. A comparative study of such attendance losses has been done and reported in this paper. The nut-shell evaluation reveals an additional loss of 0.61 day against each holiday.
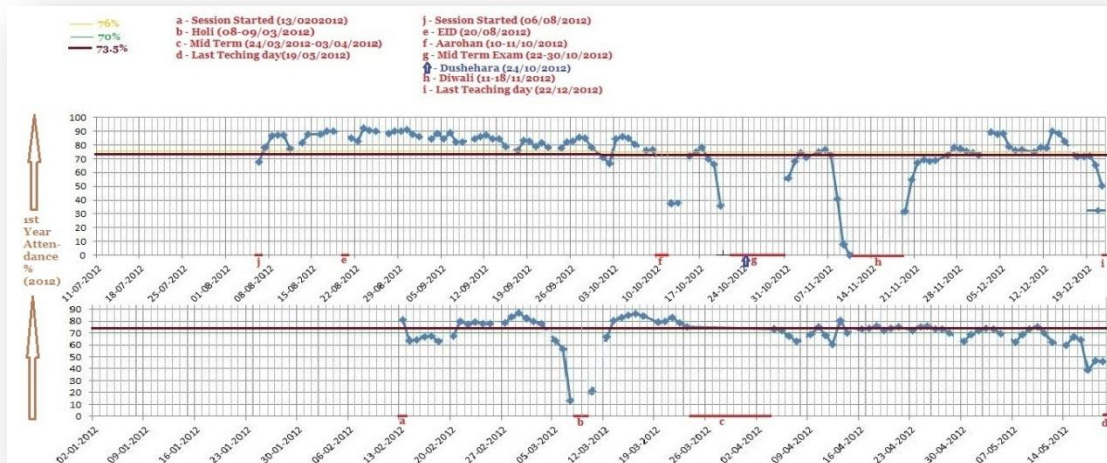*Key words: Attendance, Holi, Diwali, Dushehra, Rakshabandhan, Eid*

INTRODUCTİON

From the day to day graph, days of festival holidays were marked. Attendance a few days before (approx. 3 days) and a few days after was checked and drop in % attendance was added up. This cumulative % drop in attendance was divided for the average % attendance during the period and number of days loss was calculated for each occasion and for each class (B.Tech course is a four year course, and all four years classes are running simultaneously in the college .This exercise has been suspended for campus placement activity, conferences also.

ANALYSIS

Percentage attendance of each day & each class was tabulated with date & month along X-axis and % attendance along y-axis. On Sundays& Holidays, attendance remained nil. Attendance on extra days is always more than 95%, hence it has been ignored. Various Parameters that have been considered for plotting this graph are as follows:

- Day to day attendance of the mass;
- Separate graph for even and odd semester;
- Deviation during important festivals (MakarSakranti, Holi ,Dushehra, Diwali, Eid etc.)
- Deviation during academic and cultural activities (Exams, Aarohan, Placement activities, conferences etc.)

2.1 Following graph shows Iyear daily attendance. Here the graph is discontinuous in nature and the reason for discontinuity is marked below*[1].*If there is no mark and still no attendance available then that day must be Sunday[5].

Similarly remaining graph (2ndyr, 3rdyr& 4thyr) has been plotted and obtained data has been given below [6].

Year wise analysis of academic loss :

Method for calculating academic loss (in days): The loss has been calculated with the help of following procedure:

The Formula used is:

Academic loss per day = (Average attendance – Particular day'sattendance)/ Exact attendance

- **Average attendance** is calculated by dividing the sum of attendance by the number of days for which the attendance has been added.
- **Particular day's attendance**: It is the days before and after the holiday where the attendance falls below from the average attendance, also the days must be consecutive in nature (Sunday excluded).

First year:1st year holidays are Holi, Aarohan, Dushehra, Diwali and Eid. Other than this the attendance also varies in significant amount just before and after exams. Such a loss in academic time is given below in respect of various holidays*[2[3][4]*.

AAROHAN: Aarohan is an activity spreading over 3~4 days. It is PCE's annual technical& cultural festival. Due to this festival, extra day lost was 0.97*.

DIWALI: It is popularly known as the "**festival of light"** and is celebrated all over the country. Diwali holidaysremainsapproximately of a week.Especially students from outstation leave earlier to reach their respective homes in time. Extra day lost were 3.35 due to these holidays*.

DUSHEHRA AND MID-TERM EXAMINATION: Dushehra is one of the most important Hindu festivals celebrated in various forms across India and has 1 day holiday. I mid-term lasted about 8 days. Due to these holidays, extra day lost was 1.

HOLI: Holifalls in springand is celebrated as a festival of colours. It is a religious festival of Hinduswhich has also become popular with people of other communities. The holidays for this festival are about 2 days. Due to these holidays, extra days lost were 1.98.

Table 1: LOSS OF ATTENDANCE BEFORE & AFTER HOLIDAYS (January – December, 2012)

	Holi + Mid Term (Day lost/total available Holidays)	Aarohan (Day lost/total available Holidays)	Dushehra + Mid- Term (Day lost/total available Holiday)	Diwali (Day lost/total available Holidays)	EID (Day lost/total available Holiday)	Overall (Day lost/total available Holidays)
I Year	1.98/2	0.97/2	1.00/1	3.35/8	0/1	7.3/14

Second year:

II year holidays are Holi, Aarohan, Rakshabandhan, Dushehra, Diwali and Eid. Other than this, the attendance also varies in significant amount just before and after exams. So, loss in academic time is given below with respect to various holidays*[2[3][4]*.

- **MID-TERM EXAMINATION:** Mid-term lastedaround 6 days. Students start missing from 3~4 day earlier to the exam and also take 1~2 days rest after the exam which causes loss in attendance. Due to Mid-Term extra days lost were 1.84 days.
- **RAKHI:** Rakshabandhan is a Hindu festival primarily observed in India, which celebrates the relationship between brothers, cousins and sistersand has 1 day holiday. Due to this, extra day lost was 0.52.
- **HOLI AND MID TERM:**Holi is a spring festival celebrated as a festival of colours. It is a Hindu religious festival which has also become popular with people of other communities. The holiday for this festival is about 2 days. Mid-term last for about 8 days. Due to these holiday period extra day lost was 0.82.

Table 2: LOSS OF ATTENDANCE BEFORE & AFTER HOLIDAYS (JANUARY-DECEMBER, 2012)

	Holi + Mid Term (Day lost/total available Holidays)	Aarohan (Day lost/total available Holidays)	Rakhi (Day lost/total available Holiday)	Dushehra + Mid Term (Day lost/total available Holiday)	Diwali (Day lost/total available Holidays)	EID (Day lost/total available Holiday)	Overall (Day lost/total available Holidays)
II year	0.82/2	1.55/2	0.52/1	0.14/1	2.51/8	0/1	5.54/15

Third year:III year holidays are Makar-Sakranti, Holi, Aarohan, Rakshabandhan, Dushehra and Eid. Other than this the attendance also varies in significant amount just before and after exams. So loss in academic time is given below with respect to various holidays.
- **DUSHEHRA:**Dushehra is one of the most important Hindu festivals celebratedacross Indiain various forms, and has 1 day holiday. Due to this, extra day lost was 0.32*[2[3][4]*.
- **MAKAR SAKRANTI: MakarSankranti** is one of the most auspicious occasions for the Hindus, and is celebrated in almost all parts of India in myriad cultural forms with great devotion, fervour, and gaiety. It has 1 day holiday. Due to this extra day lost was 0.42.

Table 3: LOSS OF ATTENDANCE BEFORE & AFTER HOLIDAYS (January-December, 2012)

	MakarSakranti (Day lost/total available Holiday)	Holi + Mid Term (Day lost/total available Holidays)	Aarohan (Day lost/total available Holidays)	Rakhi (Day lost/total available Holiday)	Dushehra + Mid Term (Day lost/total available Holiday)	EID (Day lost/total available Holiday)	Overall (Day lost/total available Holidays)
III year	0.42/1	1.15/2	1.3/2	0.80/1	0.32/1	0/1	3.99/8

Fourth year:IV year holidays are MakarSakranti, Holi, Aarohan, Rakshabandhan, Dushehra and Eid. Other than this, the attendance also varies in significant amount just before and after exams, Placement activity, Conferences and Workshops. So, loss in academic time is given below in respect of various holidays*[2[3][4]*.
- **L & T CHENNAI:** Two days activity (04/03/2012 & 06/03/2012) and the extra days lost were 1.81.
- **DAFFODILS SOFTWARE:** One day activity (17/03/2012) and the extra days lost were 1.12.
- **HEXAWARE TECHNOLOGIES:** One day activity (18/01/2012) and the extra day lost was 0.64.
- **BAL KRISHNA TYRES:** One day activity (22/02/2012) and the extra days lost were 1.27.
- **OILCO SERVICE LIMITED:** One day activity (28/03/2012) and the extra days lost were 1.14 days.

- **SMART BRIDGE:** Two days activity (30-31/03/2012) and the extra days lost were 1.32.
- **SECURE METERS:** Two days activity (23-24/01/2012) and the extra days lost were 2.45.
- **UTTAM GALVA STEELS:** One day activity (28/01/2012) and the extra day lost was 0.24.
- **HCL TECHNOLOGIES:** One day activity (12/10/2012) and the extra days lost were 1.8.
- **INDIAN ARMY:** One day activity (18/10/2012) and the extra day lost was 0.03.
- **NAGARO SOFTWARE LTD. AND PRECITION AUTOMATION:** Two days activity (29/10/2012 & 31/10/2012) and the extra day lost were 1.79.
- **NATIONAL CONFERENCE ON "NUMERICAL AND MATHEMATICAL MODELING IN**
- **ELECTRICAL ENGINEERING AND APPLIED SCIENCES – 2012":** One day activity (21/01/2012) and the extra days lost were 2.86.
- **IBM RAD WORKSHOP:** Four days activity (12-15/03/2012) and the extra day lost were 0.6.
- **NATIONAL WORKSHOP ON "RESTRUCTURING OF POWER SYSTEM AND RECENT ELECTRICAL METHODS":** One day activity (15/09/2012) and the extra day lost was 0.46.

LOSS OF ATTENDANCE BEFORE & AFTER HOLIDAYS (JANUARY-DECEMBER, 2012)

	MakarSakranti (Day lost/total available Holiday)	Holi + Mid Term (Day lost/total available Holidays)	Aarohan (Day lost/total available Holidays)	Rakhi (Day lost/total available Holiday)	Dushehra + Mid Term (Day lost/total available Holiday)	EID (Day lost/total available Holiday)	Overall (Day lost/total available Holidays)
4th year	**0.28/1**	**1.98/2**	**1.78/2**	**0.80/1**	**0.29/1**	**0/1**	**5.13/8**

SUMMARY

> In I year due to **14 days holiday** extra day lost were**7.3** that is **0.52 day**was **lost for each day of interruption.**
> In II year due to **15 days holiday** extra day lost were**5.54** that is **0.37 day** was **lost for each day of interruption.**
> In I year due to **8 days holiday** extra day lost were**3.99 that** is **0.50 day** was **lost for each day of interruption.**
> In IV year:
>   - Due to **8 days holiday** extra day lost were**5.13** that is **0.64 day**was **lost for each day of interruption.**
>   - Due to **15 days placement activity** extra day lost were**13.61** that is **0.91 day**was **lost for each day of interruption.**
>   - Due to **5 days conference and workshop activity** extra day lost were**3.92** that is **0.78 day**was **lost for each day of interruption.**
>   - Overall due to **28 days period** (holiday + activity) extra day lost were**22.67** that is**0.81 day** was **lost for each day of interruption.**

Tabale 4: COMPARISON OF LOSS IN ATTENDANCE DUE TO ACADEMIC AND NON-ACADEMIC ACTIVITIES AND HOLIDAYS (JANUARY-DECEMBER, 2012)

	Holidays due to Festivals (day lost/total holidays)	Holidays due to college function(Aarohan) (day lost/total holidays)	Placement activity (day lost/total involved day)	Conference and Workshops (day lost/total involved day)	Total (day lost/total involved days)	Avg. (Day lost/day)
I year	6.33/12	0.97/2	NA	NA	7.3/14	0.52
II year	3.99/13	1.55/2	NA	NA	5.54/15	0.37
III year	2.69/6	1.3/2	NA	NA	3.99/8	0.50
IV year	3.36/6	1.78/2	13.61/15	3.92/5	22.67/28	0.81
Total (day lost/day)	16.37/37(0.44)	5.6/8(0.7)	13.61/15(0.91)	3.92/5(0.78)	39.5/65(0.61)	0.61

CONCLUSİON

Due to 45 days holiday, 15 days conference period & 5 days workshop period, extra dayslost were 21.96, 13.61& 3.92 respectively; means for 65 days activity,extra dayslost were39.5, that is 0.61 day was lost for each day of interruption. Thus, it can be concluded that any interruption in academics gets multiplied by 1.6 times. Due consideration has to be given about the factor while planning for academics.

The reason for over staying after a planned holiday has been varying from year to year. The first year students are affected by home sickness and they want to spend a little more time with their family;higher classes get physically exhausted by the hectic academic schedule and want to release a bit so they can stretch their planned holidays. The students run on a relaxed time log and do not understand the loss occurred due to waste of academics. It is due to the lack of awareness andcompetitiveness. This is also a form of cultural drop. The only way to minimise the associate loss is to sensitise students about worth of academic gains. But this is a difficult task. However organisation can make their own strategies depending upon the mental set up of the students.

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