

Research Article

**Role of Industrial Visits in Enhancing Learning Quality of Commerce and Business Students**

Dr.Renu Gupta<sup>1</sup>, Prof. (Dr.) Sima Kumari<sup>2</sup>, Ms. Hersheen Kaur<sup>3</sup>

**Abstract**

Quality education is fundamental right of every student especially in higher education when a paradigm shift is going to take place in a student's life as he is preparing himself to become capable enough to earn a decent livelihood for himself and his family. Traditional teaching pedagogy has its own role in imparting basic knowledge but practical exposure and real-life industry experience play a vital role in preparing the students to understand the demands and challenges of real work environment. This fact has already been established in case of students pursuing science and engineering courses that industrial visits and talks are very crucial for them to grasp the job requirements. Though, role and importance of industrial visits is still needed to be established in case of students of commerce and business.

Therefore, the present paper attempts to ascertain the significance of industrial visits for commerce and business students with the help of a survey carried out to determine the value of industrial visits as compared to theoretical knowledge imparted in the classrooms. To serve the purpose, views of students pursuing B Com (H) and BBA from Delhi School of Professional Studies and Research, Guru Gobind Singh Indraprastha University have been examined in terms of significance of industrial visits.

Results indicate that students acknowledge the role and importance of industrial visits in facilitating better knowledge and learning as regards to practical exposure and real-life industry experience in comparison of theoretical knowledge imparted in the classrooms. Moreover, they also acknowledge the fact that learning obtained via industrial visits has far-reaching impact and is long-lasting. Thus, the present study remains successful in establishing the role and importance of industrial visits in case of commerce and business students as well.

**Key Words:** Quality Learning, Industrial Visits, Higher Education, Commerce and Business Students, Practical Exposure and Real-Life Industry Experience.

---

<sup>1</sup>Associate Professor., Commerce Department Sri Guru Gobind Singh College of Commerce, University of Delhi, Delhi, India. Email: renuguptadu@gmail.com Contact no.: +91- 9999332969

<sup>2</sup>Dean, Delhi School of Professional Studies and Research (DPSR) Affiliated to Guru Gobind Singh Indraprastha University, Delhi, India. Email: Simasingh18@gmail.com  
Contact no.: +91-9654250004

<sup>3</sup>Assistant Professor., Sri Guru Gobind Singh College of Commerce, University of Delhi, Delhi, India. hersheenkaur@srgscc.ac.in 8802317813

## **I. Introduction**

Today is the age of competition. Securing a good job with handsome salary and minimum required perquisites has become very challenging only on the basis of some qualified degrees/diplomas in hands without practical exposure and understanding of job requirements. Therefore, it has become essential for institutions to impart quality learning to students comprising of theoretical knowledge and practical exposure both. Moreover, quality education is fundamental right of every student especially in higher education when a paradigm shift is going to take place in a student's life as he is preparing himself to become capable enough to earn a decent livelihood for himself and his family. Traditional teaching pedagogy has its own role in imparting basic knowledge but practical exposure and real-life industry experience play a vital role in preparing the students to understand the demands and challenges of real work environment.

This fact has already been established in case of students pursuing science and engineering courses that industrial visits and talks are very crucial for them to grasp the job requirements. However, role and importance of industrial visits is still needed to be established in case of students belonging to other streams like arts, commerce and business etc. The present paper has made an attempt to ascertain the significance of industrial visits for commerce and business students with the help of a survey carried out to determine the value of industrial visits as compared to theoretical knowledge imparted in the classrooms. To serve the purpose, views of students pursuing B Com (H) and BBA from Delhi School of Professional Studies and Research, Guru Gobind Singh Indraprastha University have been examined in terms of significance of industrial visits.

The study has remained successful in acknowledging the role and importance of industrial visits in facilitating better knowledge and learning as regards to practical exposure and real-life industry experience in comparison of theoretical knowledge imparted in the classrooms. In addition, it is also revealed the fact that learning obtained via industrial visits has far-reaching impact and is long-lasting. Hence, the role and importance of industrial visits in case of commerce and business students has also been recognized with the help of the present study.

After this introductory Section, rest of the paper is divided into eight Sections. Section II reveals literature review. Objectives of the study and hypothesis have been presented in Section III and Section IV respectively. Research methodology comprising of profile of respondents and research design is given in Section V. Empirical analysis of the responses is made in Section VI. Conclusion, recommendations and scope for further research have been finally mentioned with the help of Section VII, Section VIII and Section IX respectively.

## **II. Literature Review**

Some studies have been identified highlighting importance of industrial visits and talks in case of science and engineering students produced as below:

Hitchings, M.G. (2016) examined college efforts to connect design students with industry, and highlighted the challenges faced by students of public colleges of New York City within college and after graduation while establishing careers. For this purpose, representatives from

five colleges were contacted and were asked six questions relating to what their schools do to connect students with industry. It is revealed that other than fulfilling their teaching responsibilities, the faculties of five design institutions in New York City face difficulties in providing ties to industry that improves the learning process for their students. However, role of industry exposure for design students is duly acknowledged by the author.

Bellafante (2014, 2011) emphasized that There are significant costs involved in providing students with a viable, competitive and relevant design education. In a series of articles appearing in the New York Times, Ginia Bellafante (2014) has been pointing out private research colleges spend three times as much per student as public community colleges While 45 percent of the nation undergraduates are enrolled in public institutions, in the past five years these colleges have felt a steady decline in revenues spent per student. And still enrolment continues to grow.

Markum, M., Abdulla, R.S., and Mohamad, A.B. (2011) mentioned the strengths, weaknesses, opportunities for improvement and preliminary findings on the indirect assessment of industrial visits and talks being organized by the Department of Chemical and Process Engineering (JKKP). This paper suggests that a good coordination and a proper assessment method, selection of industrial sites for visit as well as speakers or topics for talks are important for enhancing students' practical learning.

Embi 2010; Nor et al. 2005; heywood1997; palmer et al. 2008) examined various approaches developed by FKAB in the teaching and learning process to meet the targeted program outcomes (POs). One of the approaches is the implementation of industrial talks and visits. The goals of this program is to give exposure to the undergraduate students on the engineering technology and practices that is used by the industry as well as another mechanism the reduced hours on the industrial exposure from the industrial attachment program for the third year students, which has been shortened from 20 weeks to 12 weeks.

Shamel, M., Chung, E., Pillai, T.N., Mahdi, A.S., (2006) presented an attempt to make the industrial visits an essential part of the course by identifying learning outcomes and a suitable industrial site, that was a thermal plant visited by chemical, electrical, electronic and mechanical engineering students in first year. They also stated that real life industries are important in chemical engineering and curriculum as one aspect of active learning. Students learning should go beyond academics where they can develop insights, critical mind and obtain practical knowledge as well as theoretical application. Furthermore, students are able to improve on the cognitive complexity, intrapersonal/interpersonal relationship and practical competence.

Smith et al. (2005) stated that varieties in active learning can provide unanticipated roles for the future engineers, capable of solving challenging engineering problems of the 21<sup>st</sup> century and reported that five benchmarks to encourage student engagement in learning are; level of academic challenges, active and collaborative learning, student-faculty interaction, enriching educational experiences and a supportive campus environment. Brown et al. (2005) specified that undergraduate student exposure to industry was first suggested by external assessors for both the Chemical and Biochemical Engineering programs. Since 2006, the department has

regularly planned and implemented the activities of visit to industry and talks given by invited speakers from the industry. It has been realized that the activities can contribute to various essential learning outcomes, as have been implicitly stated in the Program Outcomes (PO) for the two JKKP programs. Recently, the Faculty of Engineering and Built Environment requires each batch of students have at least two talks and one visit per academic year. It is to ensure that students gain benefits from the activities as early as in the first year of study. Fitzpatrick, k (1995) highlighted that several universities routinely conduct industrial visit as a part of their curriculum. The validity of visit as an instrument to measure program effectiveness depends on several factors.

Aforesaid studies emphasise the need of industrial visits in case of science and engineering students. Present study attempts to ensure the role and significance of practical exposure and real-life industry experience in case of commerce and business students as well.

### **III. Objectives of the Study**

The main objective of the study is to ascertain the role and importance of industrial visits in ensuring quality learning for commerce and business students. Specific objectives have been mentioned as under:

1. To ascertain that industrial visits enhance clarity to management concepts;
2. To examine that industrial visits help identifying prospective area of work life;
3. To prove that industrial visits provide platform to enhance interpersonal skills;
4. To check that industrial visits develop understanding of the real-life work experience;
5. To determine that learning via industrial visits is long-lasting; and
6. To prove that industrial visit facilitates better leanings compared to a lecture.

### **IV. Hypotheses**

On the basis of aforesaid objectives; following hypotheses have been drawn:

- H01: Industrial visits do not enhance clarity to management concepts;  
H02: Industrial visits do not help identifying prospective area of work life;  
H03: Industrial visits do not provide platform to enhance interpersonal skills;  
H04: Industrial visits do not develop understanding of real-life work experience;  
H05: Learning via industrial visits is not long lasting; and  
H06: Industrial visits do not facilitate better learning as compared to lectures.

### **V. Research Methodology**

This study aims at identifying the role and importance of industrial visits in case of commerce and business students carried out with the help of structured questionnaire containing open and close ended questions. Questionnaire was sent to hundred students of B Com (Hons.) and BBA of Delhi School of Professional Studies and Research, Indraprastha University of India. Out of hundred questionnaires, eighty-six questionnaires are duly filled and submitted. Hence, analysis has been made on the basis of views of eighty-six participant students that constitute 86 percent response.

#### ***V.1 Profile of Respondents***

The study considers responses of students pursuing both B. Com (Hons.) and BBA courses who have attended at least one of the industrial visits organised by DSPSR in session 2018-

19<sup>1</sup>. Out of total 86 students, 48 are males and 38 are females that is approximately, 56 percent and 44 per cent respectively. On the other hand, out of 86 students participated in the study, 28 belong to BBA and 58 belong to B. Com (Hons.) indicating nearly, 33 per cent are doing BBA and 67 percent are doing B. Com (Hons.). They belong to same age groups and studying in the same institution.

## V.2 Research Design

The present paper is purely based on primary information collected with the help of structure questionnaire. Hence, no secondary data has been used. Furthermore, data has been collected through random as well as convenience sampling. Information has been collected through internet via Google form. Analysis of the responses has been made on the basis of simple aggregative and percentages with the help of Microsoft excel worksheet. Therefore, no statistical tool has been applied. Still, it fairly serves the purpose of the study.

## VI. Empirical Analysis

### VI.1 Empirical Analysis of Close-Ended Questions

Students have been asked ten questions out of which nine questions are close ended that is, participants are required to give their response on 5-point scale. Empirical results as regards to close-ended questions in absolute figures and percentage terms have been produced with the help of Table 1.1 and Table 1.2 respectively shown as under<sup>2</sup>:

**Table 1.1: Responses on Learning via Industrial Visits (In Figures)**

Responses on Learning	SD	D	N	A	SA	Total
1 Clarity	4	8	24	21	29	86
2 Practical Learning	6	5	24	22	29	86
3 Asking Questions	4	8	24	28	22	86
4 Prospective Area	3	8	27	23	25	86
5 Interpersonal Skills	4	9	22	27	24	86
6 Best Practises	4	10	21	26	25	86
7 Adding Knowledge	5	5	24	29	23	86
8 Still Remember	4	7	27	26	22	86
9 Always Remember	5	11	20	26	24	86

**Table 1.2: Responses on Learning via Industrial Visits (in percent)**

Responses on Learning	SD	D	N	A	SA	Total
1 Clarity	4.65	9.30	27.91	24.42	33.72	100
2 Practical Learning	6.98	5.81	27.91	25.58	33.72	100

<sup>1</sup> The list of industrial visits organized by industrial visits management team of DSPSR in session 2018-19 has been given in the end in Appendix-I.

<sup>2</sup> In Table 1.1 and Table 1.2, SD stands for Strongly Disagree, A for Agree, N for Neutral, D for Disagree and SD for Strongly Disagree.

<b>3 Asking Questions</b>	4.65	9.30	27.91	32.56	25.58	100
<b>4 Prospective Area</b>	3.49	9.30	31.40	26.74	29.07	100
<b>5 Interpersonal Skills</b>	4.65	10.47	25.58	31.40	27.91	100
<b>6 Best Practises</b>	4.65	11.63	24.42	30.23	29.07	100
<b>7 Adding Knowledge</b>	5.81	5.81	27.91	33.72	26.74	100
<b>8 Still Remember</b>	4.65	8.14	31.40	30.23	25.58	100
<b>9 Always Remember</b>	5.81	12.79	23.26	30.23	27.91	100

Empirical Results shown by Table 1.1 and Table 1.2 have been interpreted as follows:

1. *Clarity:* When respondents were asked if industrial visits bring clarity to managerial concepts then nearly three-fifths (58.14 percent) of the students were either agree or strongly agree to it. However, nearly, one-eighth (13.95 percent) of the student participants had not confirmed the statement and rest of them were neutral to it. Thus, majority of students believe that industrial visits bring clarity to managerial concepts.
2. *Practical Learning:* Approximately, three-fifths (59.30 percent) of the student participants stated that industrial visits help in bridging the gap between classroom study and practical learning in a real-life experience including more than one-third students who strongly approved it. Although, not more than one-seventh (12.79 percent) of the participants did not give their consent to it and rest of the students were neither agree and nor disagree to the statement. Thus, majority of the respondents acknowledge role of industrial visits in providing practical knowledge or learning.
3. *Asking Questions:* Almost three-fifths (58.14 percent) of the students accept that industrial visits provide opportunity to ask questions related to their subject while not more than one-seventh (13.95 percent) of the students are against it.
4. *Prospective Area:* Nearly three-fifths (55.81 percent) of the respondents are of the view that industrial visits help in identifying prospective area of work life such as, finance, marketing, logistics etc. Almost one-third (31.40 percent) of the students remain indifferent to it. However, more than one-eighth (12.71 percent) either disagreed or strongly disagreed to it.
5. *Interpersonal Skills:* When students were asked to express their views on whether industrial visits provide platform to enhance interpersonal skills; around three-fifths (59.30 percent) of the students acknowledged it. Whereas, about one-fourth (25.58 percent) of the participants shown indifference and not more than one-sixth (15.12 percent) of respondents did not acknowledge the statement. Still, majority of them claim that interpersonal skills are improved via industrial visits.
6. *Best Practices:* Though, nearly one-fourth (24.42 percent) of the students remained neutral but approximately, three-fifths (59.30 percent) of the students asserted that they get to see best practices adopted by different companies for similar work with the help of industrial

visits. On the other hand, about one-sixth (16.28 percent) of the participants either disagreed or strongly disagreed to it.

7. *Adding Knowledge:* Majority of students, that is, more than three-fifths (60.47 percent) submitted that industrial visits add to their knowledge as regards to the companies visited. Hardly, one-tenth (11.63 percent) of the respondents rejected or strongly rejected it. And more than one-fourth (27.91 percent) were undecided.

8. *Still Remember:* Nearly, three-fifths of the participants (55.81 percent) claim that they still able to remember what they learnt via industrial visits but approximately, one-eighth (12.79 percent) of the students not supported it and about (31.40 percent) remained neutral.

9. *Always Remember:* When students were asked if the learning via industrial visits always remain on their mind; about one-fourth (23.26 percent) of the student participants were not able to answer while around one-fifth (18.90 percent) of them did not approve this. However, nearly, three-fifths (58.14 percent) of the students were of the view that learning obtained through industrial visits will always remain on their mind.

The points discussed above specify that majority of students (nearly three-fifths or even more than three-fifths) acknowledge that industrial visits not only bring clarity to managerial concepts but also help bridging the gap between classroom study and practical learning in a real-life experience. Thus, the hypothesis that industrial visits do not bring clarity to managerial concepts is rejected. Almost, the similar number of students also admit that industrial visits give opportunity to ask questions related to subject and provide a platform to enhance interpersonal skills as well. Therefore, the hypothesis that industrial visits do not provide platform to enhance interpersonal skills is also refuted. Majority of students also claim that industrial visits help to identify prospective area of work life like marketing, finance and logistics and so on. Thereby, the hypothesis contrary to this statement is also not vindicated.

Similarly, most of the students also confirm that they are able to see the best practises opted by different companies for doing similar work via industrial visits and their knowledge as regards to companies visited is enhanced significantly. Hence, the hypothesis that industrial visits do not develop understanding of real-life work experience is also rejected. The above analysis also reveals that most of the student participants were able to still able to remember what they learnt through industrial visits rather the learning attained by them will always remain on their mind. It proves that learning obtained through industrial visits is long-lasting and thus, the hypothesis that learning via industrial visits is not long-lasting is not accepted.

## ***VI.2 Empirical Analysis of Open-Ended Responses***

*Difference Between Lecture and Industrial Visit:* When students were asked how different it would be if they had only attended lectures instead of visiting the companies openly then 55 out of 86 students response in favour of industrial visits and 17 out of 86 students in favour of theoretical lecture and 14 students neither prefer industrial visits nor theoretical or industrial talk. Responses are shown with the help of Table 2 as under.

**Table 2: Better Learning via Industrial Visit or Theoretical Lecture**

<b>Responses</b>	<b>Number of Respondents</b>	<b>Percent</b>
1. Industrial Visit	55	63.95
2. Can't Say	14	16.28
3. Lecture	17	19.77
<b>Total</b>	<b>86</b>	<b>100.00</b>

Thus, Table 2 shows that more than three-fifths (63.95 percent) students spoke in favour of industrial visits and about one-fifth (19.77 percent) of the student participants spoke in favour of theoretical lecture or spoke against industrial visits whereas approximately, one-sixth (16.28 percent) of the students were confused and could not say anything.

Some of the arguments rendered by students in favour and against of industrial visits and lectures are given as follows:

***1. Arguments in Favour of Industrial Visits and Against Lectures:***

- i. Lectures are less useful and less knowledgeable whereas industrial visits are better.
- ii. I would not be able to experience theory without practical experience.
- iii. Skill development will not happen in lecture and industrial visits are different because they help in more skill development.
- iv. Lectures are not much effective.
- v. By attending lecture, we are only able to apply our skills and knowledge theoretically but by visiting company, we apply such things practically.
- vi. There is difference between theory and practical knowledge.
- vii. We will not able to get information about company clearly.
- viii. Industrial visit brings value addition to knowledge of students.
- ix. It would have been difficult to learn the concepts since theoretical knowledge is not enough.
- x. Industrial visits give us knowledge related to working of company and more clarity to students.
- xi. We will not able to learn everything through theory. So, it is important to visit the company to gain practical and real-life knowledge.
- xii. These industrial visits are very helpful as they provide us exposure as students and also help us to understand the topic better.
- xiii. Very difficult to understand lecture and both (industrial visit and lecture) are very different.
- xiv. Industrial visits are very nice for our future point of view.
- xv. I would not have gained any practical knowledge as lecture will not help me in practical aspect.
- xvi. I think that lecture does not clear the practical concept of management about running the business.
- xvii. Only knowing the theory like how does a company works is not enough. If we see and learn, it is much better.
- xviii. Industrial visit is totally different from lecture because it is the opportunity to understand the dynamics of the company or organisation.
- xix. Talk about connecting people and self-development.



- xx. Lectures can give us more knowledge about the company but the real task and eye catching and identification of concepts are different and being management students; we all are market researchers, not like a book worm to cram the concepts. Thanks, DSPSR for the Quarterly Industrial Visits.
- xxi. Lecture will become a theory only. Practical knowledge will help in corporate sector.
- xxii. Learn new things but practical knowledge is must.
- xxiii. Lecture cannot be remembered for a long time.
- xxiv. Lectures are very boring and Industrial visits are very interesting.
- xxv. I wouldn't be able to identify the things told in the industrial lecture.
- xxvi. We won't be able to contact to the actual world of knowledge without industrial visit.
- xxvii. We cannot get the experience in lecture; only theoretical knowledge will be there.
- xxviii. Practically seeing and understanding things would itself be different rather than the lectures.
- xxix. Not get too much experience of practical management.
- xxx. There should not be a gap between the reality and what we are learning
- xxxi. It would be totally different as some things can't be done orally or theoretically. They are needed to be done practically for better learning.
- xxxii. Concepts are clearer in industrial visits.
- xxxiii. The results would be more different in actual learning phenomenon.

## **2. *Arguments in Favour of Lectures and Against Industrial Visits***

- i. Lectures are much effective.
- ii. In industrial visit, voice of speaker who explain us is not clear because of sound in industry.
- iii. Lecture will give detailed knowledge.
- iv. Industrial visit is not a good idea.
- v. Lectures can give more knowledge and help us learn new things but lack experiencing the visit.

Thus, arguments in favour of industrial visits are many as against lectures and vice versa. On the one hand, industrial visits are praised for their usefulness, better concept clarity, enabling skill development, providing practical real life experience, clear information about the company, value addition, better understanding and exposure, eye catching, interesting, help identifying management concepts, self-development, future oriented, long lasting memory and ensuring quality learning; on the other hand, lectures are just admired for their effectiveness, providing detailed and new learning or knowledge. Industry visit is only criticised for noise because of which voice of the speaker is not audible or clear while lectures are considered to be more theoretical, boring, less useful and missing all the merits of industrial visits especially practical knowledge and exposure. Therefore, aforesaid discussion proves that industrial visits facilitate better learning as compared to theoretical or industrial lecture. This enables us to reject hypothesis that industrial visits do not facilitate better or quality learning along with other hypotheses already rejected in previous discussion.

## **VII. Conclusion**

This paper was aimed to establish role and importance of industrial visits in case of commerce and business students with the help of primary survey conducted on 86 students pursuing B Com (Hons.) and BBA from DSPSR affiliated by Guru Gobind Singh Indraprastha

University. Results show that approximately three-fifths of the students participated in the survey believe that industrial visits brings clarity to managerial concepts, bridges gap between classroom study and practical learning in a real life learning experience, provide opportunity to ask questions related to subject, help to identify prospective area of work life like marketing, finance, logistics and so on, give a platform to enhance interpersonal skills, get to see best practises opted by different companies for similar work, add to knowledge as regards to companies, help to retain learning for long and actually different from classroom study either inform of theoretical or industrial lecture.

Moreover, value of industrial visits is acknowledged for their usefulness, better concept clarity, enabling skill development, providing practical real life experience, clear information about the company, value addition, better understanding and exposure, eye catching, interesting, help identifying management concepts, self-development, future oriented, long lasting memory and ensuring quality learning; while lectures are merely acknowledged for their effectiveness, providing detailed and new learning or knowledge. However, industrial visit is also accused for noise because of which voice of the speaker is not audible or clear. On the contrary, lectures are perceived to be more theoretical, boring, less useful and missing all the merits of industrial visits particularly practical knowledge and exposure.

To conclude, role of basic education via classroom study can never be denied but periodical industrial visits can facilitate better learning by ensuring practical exposure and real-life industry experience.

### **VIII. Recommendations**

An attempt has been made in this Section to give some operational suggestions to enhance significance of industrial visits as under:

\$ Provision of periodical industrial visits should be made mandatory in course curriculum of commerce and business students.

\$ Substantial funds should also be allocated to the institutions by the affiliating universities in this regard.

\$ Industries should also be instructed to allow educational trips or visits for students.

\$ Proper arrangements should also be made by the industries to facilitate best results of the industrial visits, i.e., ensuring that voice of speaker is audible and he delivers the content in an effective manner and so on.

\$ Students should also be encouraged to participate in industrial trips or visits whole heartedly to achieve maximum results.

\$ Students should be asked to fill feedback forms after visiting any company.

\$ Faculty of the institutions should also be motivated to come forward and render their services actively to serve the purpose of industrial visits.

\$ Last but not least, management or higher authorities should also be encouraged to adapt the culture of industrial visits in their institutions.

### **IX. Scope for Further Research**

The present study has made an attempt to ascertain the significant role of industrial visits in case of commerce and business students. Similar attempt could be made in terms of students pursuing other stream of courses such as arts, psychology, history and so on. Further research

can also be carried out with large number of students belonging to different institutions applying sophisticated statistical tools. Other stakeholders like teaching faculty, industrialists, management of the institutions, policymakers and government authorities could also be involved to further delve into the issue and find out pros and cons on their part.

### References

1. Ballafante, G. (2014, 2011). Community college student face a very long road to graduation. New York Times (October 3, 2014) and presented at 2<sup>nd</sup> International Conference on Higher Education Advances, HEAD'16, 21-23 June, 2016, Valencia, Spain.
2. Brown et al. (2005). Benefits of industrial talk and visit for students in higher education. Congress Pengajaran Dan Pembelajaran UKM, 2010. 89(5); 779-802.
3. Embi (2010). Preliminary study on the impact of industrial talks and visit. Kebangsaan University Malaysia, 2011 published by Elsevier Ltd.
4. Fitzpatrick, k. (1995). Leadership challenges of outcome-based education. Education Digest, 60, 13-16.
5. Heywood (1997). Outcome based education of engineering students, 2011 published by Elsevier Ltd. Selection and under responsibility of the UKM teaching and learning congress, doi:10.1016.
6. Hitchings, M.G. 2016. Career opportunities: connecting design students with industry. Presented at 2nd International Conference on Higher Education Advances, HEAD'16, 21-23 June, Valencia, Spain.
7. Markum, M., Abdulla, R.S., and Mohamad, A.B. (2011). Industrial talk and visit for students. Sciencedirect Procedia, Social and Behavioral Sciences, 674-682. Available online at [www.sciencedirect.com](http://www.sciencedirect.com)..
8. Palmer (2008). Improving outcomes- based engineering education in Australia. Australasian Journal of Engineering Education, 14(2), 91-104.
9. Shamel, M., Chung, E., Pillai, T.N., Mahdi, A.S., (2006) Use of industrial visit to enhance learning at engineering courses. School of Engineering, Taylor's University College, Subang Jaya Malaysia, 9(3), 339-351.
10. Smith et al, (2005). Industrial talk and industrial visit program outcomes practical learning, pedagogies of engagement. Journal of Engineering Education, 94(1); 1-15.

### Appendix-I

#### Industrial Visits Organised by Industrial Visits Management Team of DSPSR (July 2018-June 2019)

Sl. No.	Date of Visit	Name of the Organization
1	April 12, 2019	Relaxo Footwears Limited
2	March 15, 2019	Pearl Academy, New Delhi
3	March 8, 2019	Escorts Ltd., Faridabad
4	February 18, 2019	Yakult Danone India Pvt. Ltd., Sonapat
5	February 14, 2019	The Lalit, New Delhi

## Role of Industrial Visits in Enhancing Learning Quality of Commerce and Business Students

6	January 13, 2019	DD News programme 'Charcha Mein' on the topic 'Mahatma Ke Mantra'
7	November 2, 2018	Bureau of Parliamentary Studies and Training, Lok Sabha Secretariat, New Delhi
8	18th October to 22nd October, 2018	Wah Tea Estate, Kangra, Himachal Pradesh