

Case Study

BEST PRACTICES OF FACULTY IN FACILITATING ONLINE ASYNCHRONOUS DISCUSSIONS FOR HIGHER STUDENT SATISFACTION

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ABSTRACT

The importance of faculty interaction with students in online discussions has been emphasized upon in numerous studies earlier. However, few studies highlighted the best practices and modus-operandi of professors while facilitating asynchronous online discussions for better student satisfaction. In this study, the taxonomy proposed by one of the earlier researchers was utilized by including two more dimensions namely, the discussion board (DB) topics and length of the faculty postings to measure the teaching presence in four completed classes of the same subject facilitated by four different professors. This exercise helped in measuring the teaching presence of the four professors and linking the same to the student satisfaction scores obtained by them. The study provides insights into the best practices including the “dos” and “don’ts” for professors facilitating online asynchronous discussions to achieve higher student satisfaction.

Key Words: Best practices, faculty, online asynchronous discussions, student satisfaction.

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INTRODUCTION

The significance of faculty presence in online classes has been extensively debated in various studies during the last decade. According to¹, in complex learning environments the teacher is vital to any success and certainly cannot hide. Reference² lays out a conceptual framework that identifies the elements that are crucial prerequisites for a successful higher educational experience. These elements are: Cognitive presence, social presence and teaching presence. Reference³ as well as⁴ note that from a learner’s perspective, the interface with an instructor in online discussions, is the most important interface in online programs. There is a general view that faculty need to be “Seen” to be perceived as present in online learning communities⁵. This view is in part to prevent student isolation, according to⁶, a high level of faculty involvement will lead to a more successful course. Moreover, some view that instructor interaction with distance learners more generally is the critical predictor of learner satisfaction in distance education and learner satisfaction declines when instructors are perceived as “Absent”⁷.

The role of professors in the online courses is much more diverse compared to that of the traditional face-to-face courses. Online instructors should contribute advanced content knowledge and insights in addition to moderating the discussion⁸, should possess high interpersonal skills⁹, should conduct closure for the discussion, should provide ‘answers’ for the questions and conclusions for the issues discussed as experts¹⁰ and should

model the behaviour they expect from the students¹¹. Extensive faculty interaction with students in online classes results in higher retention rate¹², adds value to learner perception and satisfaction and may also positively impact actual learning outcomes as measured by student grades^{13,14}. There are some studies which undermine the importance of faculty-student interactions in the online component. A study⁵ found that more frequent delivery of personalized email from the professor to the students did not increase the amount of student participation in required discussion formats. While the issue of faculty interaction has been well discussed, there has been limited research into the amount, quality and value of such interaction in the online learning environment¹⁶. Reference¹⁷ reports a 7.76% improvement in student retention after one year through a number of measures including the quality of instructor’s online interaction with students. Research studies have shown that in discussion boards where the tutors are more involved, participants respond with more enthusiasm and regular participation¹⁸. A study¹⁹ involving a novice and an experienced online instructor to facilitate two separate groups demonstrated that the experienced instructor had a presence throughout and was following the groups activity very closely, building in supportive scaffolds at various points. This group had a higher and more equally spread-out participation rate as well as more stable connections between all its participants.

There are a few studies which provide the best practices and modus-operandi of the professors on the online asynchronous discussion board (DB) for better student satisfaction. This study attempts to fill this gap.

OBJECTIVES AND METHOD

The objectives of this study are:

1. To gauge the extent of “teaching presence” of the faculty on the online discussion boards (DBs).
2. To identify any trends in the level of student participation on the DBs.
3. To determine any relationships between the level of faculty participation and the corresponding level of student participation on the DBs.
4. To analyse if the type and length of faculty postings has impact upon student satisfaction.
5. To capture the best practices of faculty to provide better learning experience to the students on the online DBs resulting in higher student satisfaction.

Bright²⁰ reported about a work-in-progress project, which seeks to capture the impact on practice inherent in the collegial development of a theoretically informed framework which enables lecturers to monitor and analyse what they do to create an effective online teacher presence and thereby facilitate a productive online learning environment for their students. The present study utilizes the taxonomy proposed²¹ to categories the faculty postings (With academic content) into three categories namely, Corrective, Informative and Socratic. This taxonomy was preferred compared to that²², as it recommends each faculty posting to fall in any one of the proposed categories and the categories are more helpful in clearly guiding the actions of the faculty to manoeuvre their interactions with the students on the DB for different results. For example, a “Socratic” posting by faculty would pose some questions to the students and hence, encourage more participation. On the contrary, a “Corrective” posting by faculty may help in curbing a DB thread moving into an unnecessary dimension. “Informative” postings from faculty would be useful in providing new insights and in arousing the interest on part of students. Thus, such postings would also encourage more active participation from the students. In this paper, it is proposed that unless the measurement of “Teaching presence” is done on a per DB topic basis in an online class, it would not be useful to guide the actions of the professors facilitating the same. This is in contrast to the study²¹, who tried to arrive at faculty participation benchmarks by analysing the cumulative faculty postings for all the DB topics in a class and comparing the same with other classes. Secondly, in this paper, a new dimension about the “Length of faculty posting” is introduced in

order to gauge the “Substance” (Or “Meat”) in various types of faculty postings. The three categories utilized in this regard are—“1-2 Liners”, “3-5 Liners” and “6-10 Liners”. Apart from these three categories, a category called “Profoundly Insightful (P.I.)” is proposed, which includes postings more than 10 sentences and are used by the professors for “direct instruction”²² on specific topics requiring in-depth treatment. However, no attempt has been made to gauge the quality of academic content in the faculty postings in this study. The study considers faculty postings only with academic content and neglects all other types of postings by faculty on the DBs. It also does not consider other forms of faculty-student interactions like email, online chat, assignments and announcements. Four completed sections of the Operations Management subject of the online MBA programme were considered in this study. Table I shows the Student Evaluation of Faculty (SEF) scores of the four different professors (A, B, C and D), who facilitated these sections. The highest scores on various criteria are highlighted with yellow in this table. Tables II to V show the data pertaining to teaching presence of these four sections (Facilitated by professors A, B, C and D respectively) with appropriate graphs to aid in the analysis.

ANALYSIS & FINDINGS

The data and graphs in tables 1 to 4 reveal some interesting findings:

1. Prof. A made the lowest number of postings at 30, while Prof. D made the highest number at 502.
2. There were four DB topics in which Prof. A did not make any posting, while there was one DB topic in which Prof. B did not make any posting.
3. The number of Corrective postings by all the four professors was negligible.
4. The number of Socratic postings by professors A, B and C were negligible, but 33% of the postings made by Prof. D were Socratic.
5. There were no postings from Prof. A under the Profoundly Insightful (P.I.) category, while Prof. C had only one posting of this sort.
6. Prof. B made 8, while Prof. D made 12 profoundly insightful postings.
7. 1-2 Liners constitute a large proportion of faculty postings for professors B, C and D.
8. Professors A and C made only four 6-10 Liner postings each. About 14% of the postings by Prof. B and about 7% of the postings by Prof. C were 6-10 Liners.
9. The number of “students participated” on the discussion board remained more or less stable in the sections of all the four professors.
10. Interestingly, the total number of student postings was very high in the sections facilitated by Prof. A (who made the least postings) and Prof. D (who made the highest postings) compared to the sections facilitated by professors B and C.

Table 1: self scores of the four professors.

S. No.	Statement	Prof. A	Prof. B	Prof. C	Prof. D
A. Personal Attributes					
1	The professor was knowledgeable in his/her field.	4.22	5.00	4.68	4.86
2	The professor was enthusiastic.	3.74	4.88	4.58	4.91
3	The professor was helpful.	3.74	4.88	4.74	4.86
4	The professor was fair and unbiased.	3.87	4.94	4.68	4.59
5	The professor was well organized.	3.70	4.76	4.63	4.86
B. Learning Facilitation					
1	The professor added value to the subject matter, increasing my interest.	3.65	4.59	4.63	4.82
2	The professor encouraged students to think critically.	3.65	4.71	4.58	4.77
3	The professor encouraged students to interact with others using various learning tools (eg. discussion boards, instant messenger, team assignments).	3.78	4.59	4.42	4.82
4	The professor gave clear instructions for assignments and other activities.	3.87	4.71	4.63	4.82
5	The professor made clear what I needed to do to be successful in this subject.	3.78	4.65	4.63	4.73
6	The professor showed genuine concern for student progress and needs.	3.70	4.65	4.74	4.50
7	When called upon, the professor explained difficult topics and concepts in easily understood ways.	3.68	4.71	4.53	4.68
8	The professor created an environment conducive to learning.	3.78	4.76	4.58	4.77
9	The professor used a range of methods to improve student understanding.	3.61	4.59	4.42	4.68
C. Quality of Feedback					
1	The professor was receptive to student's views and feedback.	3.83	4.71	4.74	4.59
2	The professor provided feedback which was helpful and constructive.	3.74	4.76	4.58	4.68
3	The professor gave advice that met the individual needs of the students.	3.70	4.65	4.58	4.55
4	The professor responded to queries quickly and efficiently.	3.65	4.59	4.79	4.86
5	The professor suggested specific ways in which students might improve their academic performance.	3.65	4.65	4.58	4.45
D. Overall Rating					
6	Overall, how would you rate the performance of the professor in this subject	3.70	4.94	4.79	4.86
	No. of respondents in the survey	23	17	19	22
	Total no. of students in the class	30	22	22	27

Table 2: Teaching presence of professor a.

	Corrective					Informative					Socratic					Overall Total Faculty Postings	P.I.	Stu. Posts	Students Participated
	Total					Total					Total								
	1-2L	3-5L	6-10L	1-2L	3-5L	6-10L	1-2L	3-5L	6-10L	1-2L	3-5L	6-10L	1-2L	3-5L	6-10L				
DB 1	0	0	0	0	0	1	4	1	0	0	0	1	5	1	7	0	301	28	
DB 2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	232	25	
DB 3	0	0	0	1	2	0	1	2	0	3	0	2	4	0	6	0	162	25	
DB 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	20	
DB 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	298	25	
DB 6	0	1	0	0	4	0	0	1	0	1	1	5	1	7	0	165	22		
DB 7	0	0	0	0	1	1	0	0	0	0	0	1	1	2	0	198	25		
DB 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215	26		
DB 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	232	26		
DB 10	0	0	0	0	0	1	1	0	1	2	0	0	1	2	0	168	24		
DB 11	0	0	0	0	0	1	1	0	0	2	0	0	1	2	0	217	25		
DB 12	0	0	0	0	0	2	0	0	0	2	0	1	3	0	3	0	207	24	
Total	0	1	0	1	4	15	3	22	2	4	1	7	20	4	30	0	2515		

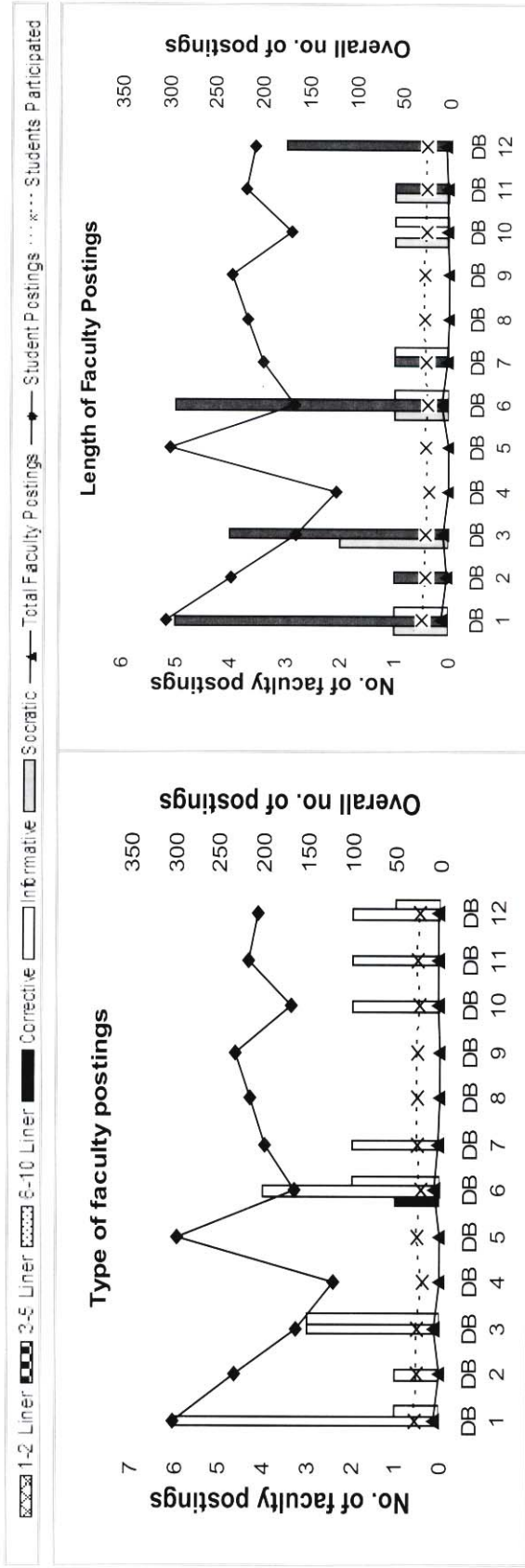
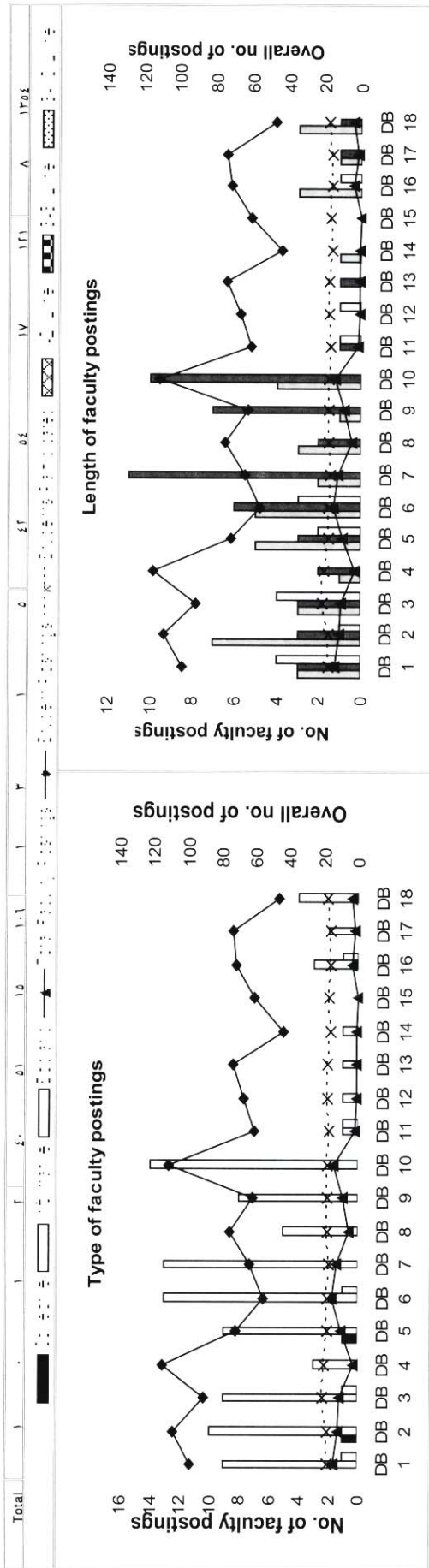


Table 3: teaching presence of professor b.

	Corrective			Informative			Socratic			Overall Total Faculty Postings				P.I.	Stu.	Stu.			
	1-2L	3-5L	6-10L	Total	1-2L	3-5L	6-10L	Total	1-2L	3-5L	6-10L	Total	Total	Posts	Partd,				
						L													
DB1	0	0	0	0	3	3	3	9	0	0	1	1	3	3	4	14	4	99	18
DB2	0	0	1	1	7	3	0	10	0	0	0	0	7	3	1	12	1	109	18
DB3	0	0	0	0	3	2	4	9	0	1	0	1	3	3	4	11	1	91	21
DB4	0	0	0	0	1	2	0	3	0	0	0	0	1	2	0	3	0	115	20
DB5	1	0	0	1	4	3	2	9	0	0	0	0	5	3	2	10	0	72	18
DB6	0	0	0	0	5	5	3	13	0	1	0	1	5	6	3	15	1	56	18
DB7	0	0	0	0	2	11	0	13	0	0	0	0	2	11	0	13	0	64	17
DB8	0	0	0	0	3	2	0	5	0	0	0	0	3	2	0	5	0	75	18
DB9	0	0	0	0	1	7	0	8	0	0	0	0	1	7	0	9	1	62	18
DB10	0	0	0	0	4	10	0	14	0	0	0	0	4	10	0	14	0	111	18
DB11	0	0	0	0	0	0	1	1	0	1	0	1	0	1	1	2	0	61	17
DB12	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	67	18
DB13	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	74	18
DB14	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	1	0	44	16
DB15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	17
DB16	0	0	0	0	2	0	1	3	1	0	0	1	3	0	1	4	0	72	16
DB17	0	0	0	0	1	1	0	2	0	0	0	0	1	1	0	2	0	74	16
DB18	0	0	0	0	3	1	0	4	0	0	0	0	3	1	0	4	0	47	18



- There is an overall declining trend of the number of student postings from the first to the last DB topic in the three classes apart from the class facilitated by Prof. D, in whose class the trend is of slightly increasing number of postings.

The above findings helped in identifying the best practices as well as bad practices of the faculty in facilitating online asynchronous discussions:

Professor A: Low level of faculty participation on the discussion board certainly impacts the satisfaction level of students. This impact is further strengthened if the faculty becomes completely absent on many DB topics. This is evident from the lower SEF scores of Prof. A compared to the other three professors. Less number of 1-2 Liner postings results in lower one-to-one feedback to the students, which deprives the students of individual attention from the professor. As 1-2 Liners require less effort on part of faculty compared to lengthier postings, it is always better to write one or two lines as a response to most of the student postings read by the professor. This provides assurance to the students that their postings are being read by the professor and the professor's comments may motivate them to perform better during the discussions. This also helps in enhancing the intimacy between the students and the professor. No posting from Prof. A in the "P.I." category and only four 6-10 Liner postings resulted in negligible "direct instruction"²² from the professor. Very high number of student postings perhaps resulted due to less control (through Corrective postings) exercised by the professor in truncating the discussion threads leading into vague directions.

Professor B: Demonstrated that it is feasible to achieve very high SEF scores with much less number of overall faculty postings compared to Prof. D. In fact, Prof. B scored higher on eight of the SEF criteria over Prof. D. His eight profoundly insightful postings and seventeen 6-10 Liners provided a glimpse of knowledge in the subject. Perhaps, this camouflaged his complete absence from one of the DB topics. His forty two 1-2 Liners and fifty four 3-5 Liners ensured that the students received one-to-one feedback from the professor. Only 5 Socratic and 2 Corrective postings indicate that a primary focus upon Informative postings may suffice to achieve high student satisfaction. The number of student postings in his section was also not very high, reflecting that the students tried to ape the professor in making value-adding postings and avoiding the unnecessary ones.

Professor C: Made only one profoundly insightful and four 6-10 liner postings. He did not provide enough evidence of his knowledge to the students through direct instruction. Though his 140 "1-2 Liners" and 66 "3-5 Liners" provided sufficient feedback to the students assuring them of sustained faculty presence in all the DB topics. His focus was primarily on Informative postings

Table 4: Teaching presence of professor c.

	Corrective				Informative				Socratic				Overall Total Faculty Postings				P.I.	Stu.	Students Participated			
	1-2L		3-5L		6-10L		Total		1-2L		3-5L		6-10L		Total							
	1-2L	Total	1-2L	Total	3-5L	6-10L	Total	6-10L	1-2L	Total	1-2L	Total	3-5L	6-10L	Total							
DB 1	0	0	0	0	22	18	2	42	1	0	0	0	0	0	1	23	18	2	43	0	117	19
DB 2	1	4	0	5	8	10	0	18	0	0	0	0	0	0	0	9	14	0	23	0	79	18
DB 3	0	0	1	1	12	4	1	17	1	0	0	0	0	0	1	13	4	2	19	0	73	19
DB 4	0	0	0	0	6	5	0	11	0	0	0	0	0	0	0	6	5	0	11	0	58	19
DB 5	0	0	0	0	16	3	0	19	2	0	0	0	0	0	2	18	3	0	21	0	71	19
DB 6	0	1	0	1	9	3	0	12	1	0	0	0	0	0	1	10	4	0	14	0	44	19
DB 7	0	0	0	0	9	5	0	14	1	0	0	0	0	0	1	10	5	0	15	0	85	20
DB 8	0	0	0	0	3	3	0	6	1	1	0	0	0	0	2	4	4	0	8	0	45	18
DB 9	0	0	0	0	16	2	0	18	2	1	0	0	0	0	3	18	3	0	22	1	57	19
DB 10	0	0	0	0	9	4	0	13	0	1	0	0	0	0	1	9	5	0	14	0	39	18
DB 11	0	0	0	0	8	1	0	9	0	0	0	0	0	0	0	8	1	0	9	0	56	19
DB 12	0	0	0	0	12	0	0	12	0	0	0	0	0	0	0	12	0	0	12	0	50	16
Total	1	5	1	7	130	58	3	191	9	3	0	0	0	0	12	140	66	4	211	1	774	

Corrective
 Informative
 Socratic
 Total Faculty Postings
 Student Postings
 Students Participated
 1-2 Linear
 3-5 Linear
 6-10 Linear

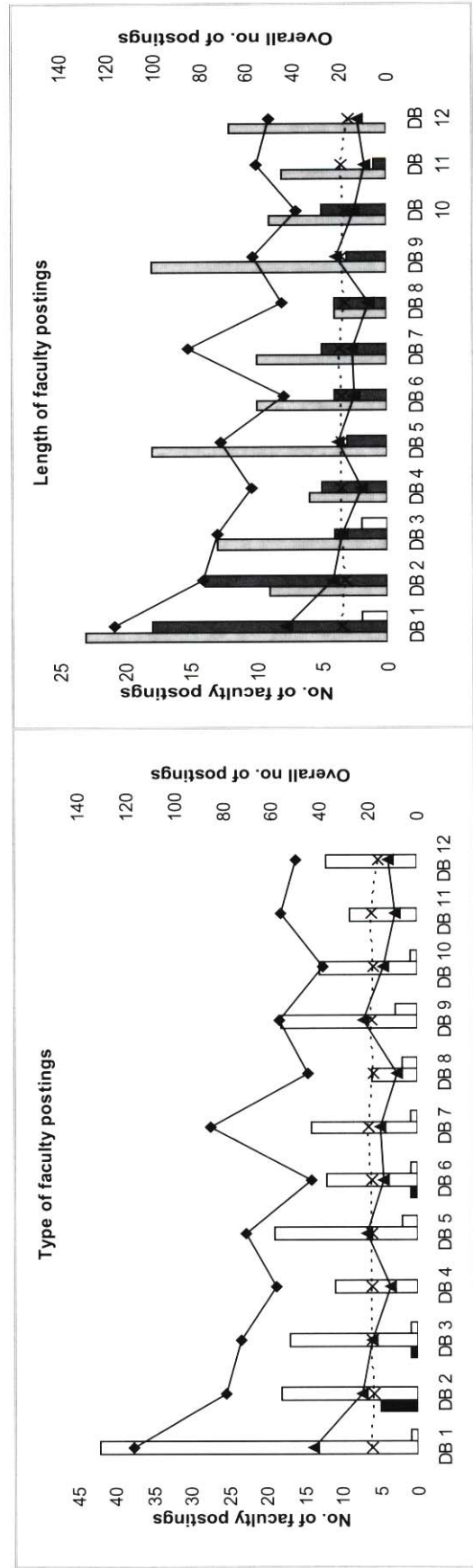
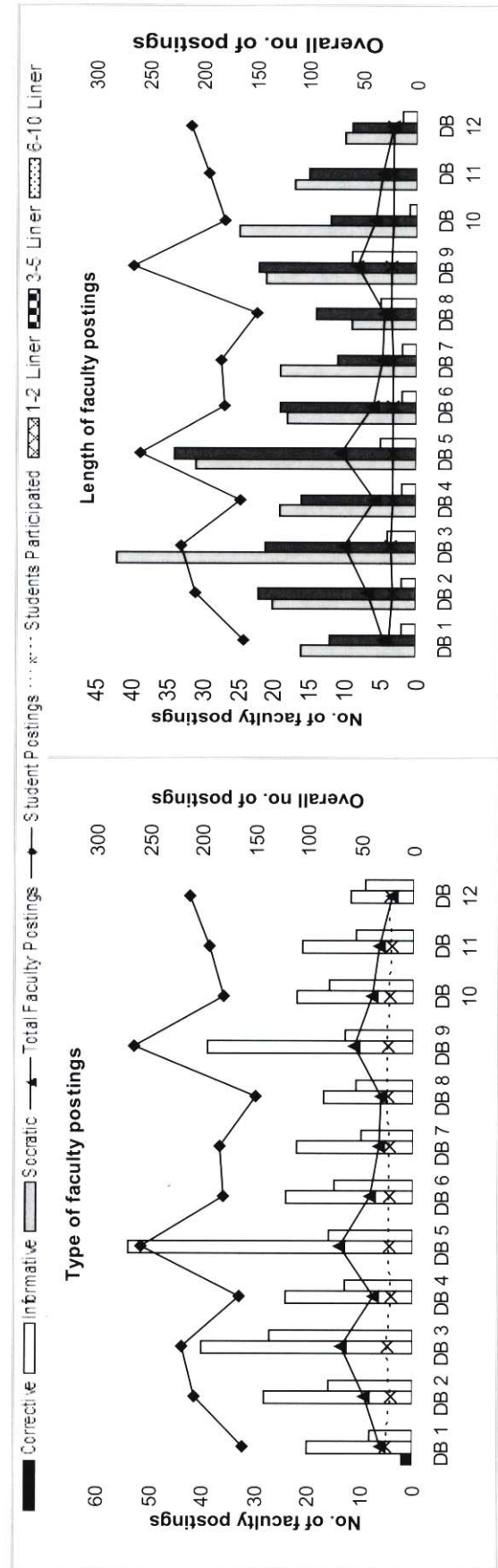


Table 5: teaching presence of professor d.

	Corrective					Informative					Socratic					Overall Total Faculty Postings				P.I.	Stu. Posts	Students Participated		
	1-2L		3-5L		6-10L		1-2L		3-5L		6-10L		1-2L		3-5L		6-10L		Total				Total	Total
	1-2L	Total	1-2L	Total	1-2L	Total	1-2L	Total	1-2L	Total	1-2L	Total	1-2L	Total	1-2L	Total	1-2L	Total						
DB 1	0	2	0	0	0	1	20	3	4	1	8	16	12	2	30	0	161	25						
DB 2	0	0	0	0	0	0	28	6	8	2	16	20	22	2	46	2	206	21						
DB 3	0	0	0	0	1	40	15	9	3	3	27	42	21	4	67	0	219	24						
DB 4	0	0	0	0	1	24	5	7	1	13	19	16	2	38	1	164	21							
DB 5	0	0	0	0	5	54	4	12	0	16	31	34	5	70	0	258	22							
DB 6	0	0	0	0	1	24	5	9	1	15	18	19	2	41	2	179	22							
DB 7	0	0	0	0	2	22	5	5	0	10	19	11	2	32	0	183	22							
DB 8	0	0	0	0	2	17	3	5	3	11	9	14	5	30	2	150	23							
DB 9	0	0	0	0	7	39	3	8	2	13	21	22	9	56	4	264	23							
DB 10	0	0	0	0	0	22	11	4	1	16	25	12	1	39	1	179	22							
DB 11	0	0	0	0	0	21	2	9	0	11	17	15	0	32	0	194	21							
DB 12	0	0	0	0	2	12	4	5	0	9	10	9	2	21	0	212	22							
Total	0	2	0	2	181	323	66	85	14	165	247	207	36	502	12	2369								



rather than Corrective and Socratic Postings. In his class, the students seemed to have aped the professor in focusing upon quality and not the quantity of postings. That is why, Prof. C could secure quite high SEF score, though lesser than that of professors B and D.

Professor D: The 500 odd postings made by this professor are indicative of the highest effort put in compared to the other three professors. She secured higher SEF grades on ten criterion over her closest competitor, Prof. B. Her modus-operandi on the DB is to focus upon Informative as well as Socratic postings. Thus, in many of her postings one comes across various questions posed by her to the students on many dimensions of the DB topic. Thus, she indeed provides opportunities to the students to think critically about a DB topic (one of her highest scoring criteria in the SEF). Her 12 profoundly insightful and 36 “6-10 Liners” provided the students with enough evidence of her knowledge and passion for the subject, while her 247 “1-2 Liners” and 207 “3-5 Liners” were perhaps overwhelming for proper feedback to the students and for establishing intimacy with them. It was observed that there were typos, grammatical errors and incomplete sentences galore in this professor’s postings, indicating the frantic pace at which the postings were created. However, 2369 student postings is perhaps too high a number for a class of 27 students to allow proper reflection on part of students, who possibly aped their professor to match her level of participation. The professor should have increased her Corrective postings to curtail discussion threads progressing in vague directions. Nevertheless, apart from her high SEF scores, she commanded critical acclaim from students in their subjective comments in the SEF.

CONCLUSION AND RECOMMENDATIONS

The importance of “teaching presence” in online classes has been stressed upon and the ways of measurement of the same have been proposed in earlier researches. In this study, the best practices of online professors in facilitating the online DBs have been identified. The study utilized the taxonomy proposed²¹, however the data of faculty postings was further segregated on two new dimensions namely the DB topics and the length of faculty postings. Several best practices were identified in the study as under:

High level of faculty postings is always desirable for high student satisfaction. The term ‘high level’ is relative, though the optimum level of faculty postings should be enough to provide regular one-to-one feedback on student postings (Informative postings), to incite critical thinking on part of students (through the inquisitive Socratic postings), to provide the right direction to the discussion (Through Corrective Postings) and to provide direct instruction (Through Profoundly Insightful postings) for topics requiring special treatment.

“1-2 Liner” and “3-5 Liner” faculty postings should be used in ample quantities to provide continual feedback to the students. Such postings, though requiring lesser effort on part of faculty compared to lengthier postings, serve as important mechanisms for assuring the students that their postings have been read by the professor and also for motivating them (resulting in higher student satisfaction). The best strategy here is to reply to the student immediately after reading her/ her posting (through “1-2 Liners” or “3-5 Liners”, if not through “6-10 liners” or “Profoundly Insightful.” postings).

“6-10 Liners” and “Profoundly Insightful” faculty postings require much more effort on part of faculty, but are imperative to showcase the academic mettle of the professor. Such postings may be much lesser in numbers compared to “1-2 Liners” and “3-4 Liners” and the faculty may like to reuse such “knowledge objects” into subsequent sections facilitated by them.

A high focus on “Informative” postings is a must for higher student satisfaction, though Socratic postings should be used extensively in classes where the student participation is relatively low. Similarly, Corrective postings should be utilized by the professors to curtail discussion threads growing in irrelevant dimensions of the discussion topic.

Students have an inherent tendency to ape the modus-operandi of their professor. Therefore, it is important that the professor demonstrates quality (and not haste, resulting in typos, grammatical mistakes and incomplete sentences) and value-addition in her/ his postings.

The limitation of this study is the consideration of only four classes and four professors pertaining to the Operations Management subject in an online MBA programme. It is highly likely that if more subjects and professors are considered in future studies, best practices of more professors could be identified in the subject-specific context. Another limitation is the complete focus of the study on student satisfaction while overlooking the student learning outcomes. It is highly likely that in their vein to satisfy the student expectations, professors might have neglected the importance of the overriding objective of achieving higher student learning outcomes.

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