### Summary

This report contains data extracted from the Medmoodle platform between 31t March 2020 and 17<sup>th</sup> May 2020, i.e. first seven weeks of online delivery of the MBBS programme at faculty of Medicine, university of Peradeniya, during the university closure due to Covid 19 pandemic.

On average 150 or more students from each batch log in to Medmoodle at least once per week (Monday to Sunday). There is a batch variation in login data and all batches except 2013 shows a small trend of declining the number (of students log in at least once during a given week) over the first six weeks.

Individual student action data shows much diversity. Total number of students who never logged into Medmoodle at the end of sixth week was 24 and end of seventh week was 14. This rises to 84 when only 4<sup>th</sup> to 6<sup>th</sup> week period was considered. Total actions of a single student during the first seven weeks ranged between 'o' to 3627. There is a clear batch variation in the average total actions, which ranged between 260 (2017/18) to 756 (2018/19).

Based on number of actions performed weekly by a given student, a list of students from each batch with 'poor' medmoodle activity has been identified. They have shown zero activity during all weeks , most of weeks or three weeks immediately prior to this report was drafted.

It is possible that at least some of the students with poor Medmoodle activity do have access to learning material shared by their peers through means other than Moodle, but the faculty currently unaware of the extent and coverage of such informal support activities operating among students. Despite faculty endeavors to address financial and psychological issues through faculty mechanisms, circumstances of student may change over time and new challenges may have emerged which affect their learning.

Since the faculty endeavor not to repeat lessons conducted online, it is prudent to proactively explore reasons behind the poor medmoodle activities of identified students. Potential support actions could be re-designed based on actual challenges, identified.

### Introduction

This report looks at the weekly login statistics and login trends of different batches between 30<sup>th</sup> March and 17<sup>th</sup> May 2020. This duration covers the *first seven weeks* of scheduled online delivery of MBBS programme at the Faculty of Medicine, University of Peradeniya.

The faculty uses the Moodle (Termed as Medmoodle) as the official learning management system. Once a formal decision was made to deliver MBBS programme online, the Moodle platform was re-structured with a week and then was upgraded from version 2.7 to 3.8 within next six weeks.

The platform records almost all actions of its users and this report is based on student data on logins and other actions thus, recorded and extracted.

### **Login statistics**

Number of students logged in at least once a week during last six weeks is around or above 150 in all batches (Table 1). 2018 batch shows consistently high login statistics, highest being 210 and lowest being 186 per week during the second week. Close to 175 students or more logged in weekly from 2015, 2016 and 2017 batches except during the week four, during which there were frequent disturbances to Moodle login due to technical failures. Login numbers of the 2013 (Final year) batch remains between 150 and 180.

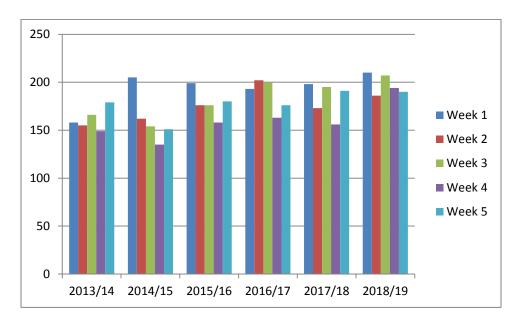


Figure 1 – Numbers logged-in at least once during a week between 30<sup>th</sup> March and 10<sup>th</sup> May, 2020

#### **Trends**

All batches, except 2013 showed the highest number of logins during the first or the second week. There appears to be a small trend of lowering the numbers of login by the week (Graph 1 & table 1), except for the 2013 batch. Although a slight reduction in login over the time could be a normal phenomenon, this reduction is marked in the 2014 batch. Moreover, this statistic only looks at a single login per week. As such, it would also be meaningful to look at the variations in logins per week at the level of individual students.

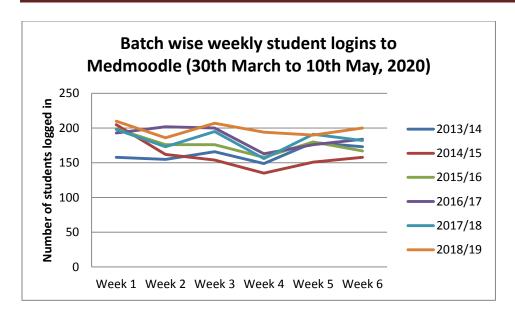


Figure 2 – Trends in numbers logged-in at least once during a week between 30<sup>th</sup> March and 10<sup>th</sup> May, 2020

Table 1 – Number of students logged at least once per week and the linear trend of each batch

Batch	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Linear Trend
2013/14	158	155	166	149	179	173	3.7
2014/15	205	162	154	135	151	158	-8.2
2015/16	199	176	176	158	180	167	-4.7
2016/17	193	202	200	163	176	184	-4.6
2017/18	198	173	195	156	191	182	-1.9
2018/19	210	186	207	194	190	200	-1.5

### Login details at the level of individual students

Table 2 below, shows summary details of individual student actions. The number of zero logins per week increases over time as shown by the increased number of zero logins during the last three weeks compared to number who never logged in to Medmoodle. This may indicate that increasing number of students is facing challenges to access Medmoodle over time.

Individual student data of Medmoodle activity demonstrates a wide variation between batches as well as individual students within respective batches. The total number of activities by a student range between 0 and 3627. There is a clear batch variation in the average total actions, as shown in table 3.

Annexure contains batch wise lists of students from each batch with 'poor' medmoodle activity. These students have shown zero activity during all weeks, most of weeks or three consecutive weeks immediately prior to this report was drafted.

Table 2 – Batch wise summary login details of individual students

	2018/19	2017/18	2016/17	2015/16	2014/15	2013/14
Average number of logins per week per student	10	5	7	5	4	5
Range of Average number of logins per week per student	0-25	0-19	0-29	0-24	0-33	0-27
No. of students who never logged into Moodle during first 6 weeks	0	1	5	3	5	10
No. of students with zero average logins during last three weeks	3	11	17	19	25	9

Table 3 – Batch wise summary of total number of individual student actions during first seven weeks

	2018/19	2017/18	2016/17	2015/16	2014/15	2013/14
Range of Total number of actions	10 -3112	3-1647	0-2571	0-2556	0-3627	0-3184
Average of total number of logins	756	260	473	411	379	466

### **Discussion**

Moodle based activity cannot directly predict the quality of learning of individual students, nevertheless, very poor Medimoodle activity identified by this report may indicate challenges faced by some students in accessing online material. It is possible that at least some students receive peer support to access material and some others use alternative means to continue their learning. Nevertheless, faculty is unaware of the extent and coverage of such effective alternatives adopted by students. It is important that faculty understands full circumstances behind poor Medmoodle activity, and address adverse issues faced by students wherever possible. This will enable the faculty to further harness student support in its endeavor to make online teaching programme a successful one.

#### Recommendations

It is prudent that faculty make a dedicated attempt to contact ALL students with poor Medmoodle activity and explore reasons behind their poor activity. It is advisable that we collect their information systematically (i.e. structured questionnaire, self-administered or interviewer administered via telephone, annexure 2) and keep records on how the faculty responded to these concerns.

#### Dr. Sisira Dharmaratne (Head/E-Library)

Annexure 1
2014/ 15 Batch (Batch average of total Medmoodle actions – 379)

		No of A	ctions							Telephone Number
	Reg_No	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week	7th Week	Total	
1	M/14/040	0	0	0	0	0	0	0	0	
2	M/14/FQ/006	0	0	0	0	0	0	0	0	
3	M/14/014	2	0	0	0	0	0	0	2	
4	M/14/064	3	0	0	0	0	0	0	3	
5	M/14/134	3	0	0	0	0	0	0	3	
6	M/14/021	4	0	0	0	0	0	0	4	
7	M/14/FQ/004	7	0	0	0	0	0	0	7	
8	M/14/112	8	2	0	0	0	0	0	10	
9	M/14/164	10	0	0	0	0	0	0	10	
10	M/14/150	11	0	0	0	0	0	0	11	
11	M/14/177	12	0	0	0	0	0	0	12	
12	M/14/FQ/005	12	0	0	0	0	0	0	12	
13	M/14/081	3	0	4	0	0	0	9	16	
14	M/14/065	14	1	3	0	0	0	0	18	
15	M/14/FQ/007	19	0	0	0	0	0	0	19	
16	M/14/056	10	2	0	0	9	0	3	24	
17	M/14/074	7	18	0	0	0	0	0	25	
18	M/14/102	24	0	0	1	0	0	0	25	
19	M/14/144	4	0	0	0	0	22	0	26	
20	M/14/066	14	6	7	0	0	0	0	27	
21	M/14/075	29	0	0	0	0	0	0	29	
22	M/14/068	33	0	0	0	0	0	0	33	
23	M/14/019	28	0	0	0	0	7	0	35	
24	M/14/059	26	9	0	0	0	1	0	36	
25	M/14/188	0	0	0	0	0	0	44	44	
26	M/14/141	25	15	0	5	0	0	0	45	
27	M/14/161	18	0	13	0	17	0	0	48	
28	M/14/013	22	0	29	0	0	0	0	51	
29	M/14/001	13	32	0	15	0	0	0	60	
30	M/14/032	29	33	19	0	0	6	0	87	

# 2015/16 Batch (Batch average of total Medmoodle actions – 411)

	No of Ac	tions							
Reg_No	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week	7th Week	Total	Telephone Number
M/15/004	0	0	0	0	0	0	0	0	
M/15/FQ/006	0	0	0	0	0	0	0	0	
M/15/FQ/007	0	0	0	0	0	0	0	0	
M/15/128	0	0	1	0	0	0	0	1	
M/15/FQ/004	0	0	0	0	3	0	0	3	
M/15/170	4	0	0	0	0	0	0	4	
M/15/122	0	0	0	0	6	0	0	6	
M/15/119	2	0	15	0	0	0	0	17	
M/15/164	18	0	0	0	0	0	0	18	
M/15/103	0	0	18	0	2	0	0	20	
M/15/181	14	2	0	0	4	0	0	20	
M/15/FQ/001	17	0	0	1	3	0	0	21	
M/15/205	0	9	0	0	14	0	0	23	
M/15/112	0	0	24	0	0	0	0	24	
M/15/083	0	0	0	27	2	0	0	29	
M/15/147	14	0	0	0	0	0	15	29	
M/15/135	6	10	5	5	4	0	0	30	
M/15/129	15	0	17	0	0	0	0	32	
M/15/187	32	0	0	0	0	0	0	32	
M/15/180	0	0	21	0	15	0	0	36	
M/15/013	9	0	8	0	3	0	18	38	
M/15/183	24	7	6	0	5	0	0	42	
M/15/018	2	0	43	0	0	0	0	45	
M/15/101	2	0	63	0	0	0	0	65	
M/15/043	36	0	27	3	0	0	0	66	
M/15/126	1	2	44	0	9	4	9	69	
M/15/194	9	0	44	7	0	10	0	70	
M/15/099	4	9	56	0	2	0	0	71	
M/15/089	33	3	40	0	0	0	0	76	

### 2016/17 Batch (Batch average of total Medmoodle actions – 473)

	No of Ac	tions							
Reg_No	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week	7th Week	Total	Contact Number
M/16/076	0	0	0	0	0	0	0	0	
M/16/151	0	0	0	0	0	0	0	0	
M/16/204	0	0	0	0	0	0	0	0	
M/16/065	0	0	0	0	0	1	0	1	
M/16/141	1	0	0	0	0	0	3	4	
M/16/FQ/003	0	0	0	0	0	0	5	5	
M/16/FQ/005	0	0	0	0	0	0	6	6	
M/16/132	0	0	8	0	0	0	0	8	
M/16/035	0	77	29	0	0	0	0	106	
M/16/058	0	0	9	0	0	0	0	9	
M/16/083	0	0	24	0	0	0	0	24	
M/16/193	0	27	9	0	0	0	0	36	
M/16/140	3	28	7	0	0	0	0	38	
M/16/108	11	20	8	0	0	19	0	58	
M/16/041	0	52	10	0	0	0	0	62	
M/16/084	6	59	26	0	0	0	0	91	
M/16/028	43	8	0	0	0	0	43	94	
M/16/037	3	63	15	0	0	0	41	122	
M/16/176	0	35	48	0	0	0	40	123	

# 2017/18 batch (Batch average of total Medmoodle actions – 260)

	No of A	ctions							
Reg_No	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week	7th Week	Total	Contact Number
M/17/082	0	0	0	0	0	3	0	3	
M/17/057	6	0	0	0	0	0	0	6	
M/17/030	8	0	0	3	3	0	0	14	
M/17/102	5	0	0	0	3	0	16	24	
M/17/140	1	3	13	8	3	0	0	28	
M/17/021	0	11	2	9	0	7	0	29	
M/17/040	2	0	16	7	4	0	0	29	
M/17/099	0	4	23	2	0	0	0	29	

# A Preliminary Report: Student engagement in Medmoodle (March-May, 2020)

M/17/061	7	2	0	19	3	0	0	31
M/17/106	3	7	11	0	4	0	11	36
M/17/059	26	9	3	0	0	0	0	38
M/17/123	1	27	0	0	0	12	0	40
M/17/089	0	0	33	0	13	0	0	46
M/17/157	3	11	22	0	0	1	9	46
M/17/159	13	3	13	0	0	5	13	47
M/17/097	6	0	13	7	4	0	18	48
M/17/122	6	2	10	0	5	0	27	50
M/17/046	0	0	0	0	0	0	52	52
M/17/125	5	4	30	0	3	4	11	57
M/17/090	3	0	24	13	8	0	11	59
M/17/184	4	10	24	0	9	0	12	59
M/17/025	14	0	40	0	7	0	3	64
M/17/144	3	0	44	5	11	0	10	73
M/17/011	5	0	44	0	3	10	13	75
M/17/024	0	0	33	0	0	0	45	78

# 2018/19 batch (Batch average of total Medmoodle actions – 756)

Reg_No	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week	7th Week	Total	Contact Number
M/18/030	10	0	0	0	0	0	0	10	
M/18/124	15	0	0	0	0	0	0	15	
M/18/155	27	0	16	0	0	0	0	43	
M/18/032	8	12	49	0	0	0	0	69	
M/18/151	73	34	58	23	0	6	0	194	
M/18/078	51	23	47	85	0	5	0	211	
M/18/120	74	7	130	0	0	8	0	219	
M/18/146	135	5	66	8	14	0	0	228	
M/18/031	241	0	17	2	0	1	0	261	
M/18/154	148	0	104	19	0	0	0	271	
M/18/005	28	11	227	0	12	1	3	282	
M/18/081	9	107	29	263	0	0	0	408	
M/18/158	174	18	227	0	0	0	0	419	

## 2013/14 batch (Batch average of total Medmoodle actions – 466)

	No of	Actions		T					Contact numbers
Reg_No	W1	W2	w3	W4	W5	W6	W7	Total	
M/13/008	0	0	0	0	0	0	0	0	
M/13/029	0	0	0	0	0	0	0	0	
M/13/087	0	0	0	0	0	0	0	0	
M/13/124	0	0	0	0	0	0	0	0	
M/13/132	0	0	0	0	0	0	0	0	
M/13/145	0	0	0	0	0	0	0	0	
M/13/169	2	0	0	0	0	0	0	2	
M/13/195	1	0	0	0	0	3	0	4	
M/13/FQ/002	0	0	0	5	0	0	0	5	
M/13/041	0	0	0	7	0	0	0	7	
M/13/106	0	0	0	0	0	7	0	7	
M/13/188	1	0	0	0	0	14	0	15	
M/13/150	11	0	0	0	5	0	0	16	
M/13/122	9	0	0	0	9	0	0	18	
M/13/159	2	0	0	0	16	0	0	18	
M/13/123	1	0	0	0	21	0	0	22	
M/13/165	0	0	0	0	0	22	0	22	
M/13/063	0	0	15	0	6	0	12	33	
M/13/089	0	18	0	0	15	0	0	33	
M/13/028	12	0	15	0	8	0	0	35	
M/13/131	0	0	20	2	1	3	13	39	
M/13/062	15	13	12	0	0	0	0	40	
M/13/014	32	11	0	0	0	0	0	43	
M/13/015	0	0	0	0	24	0	19	43	
M/13/075	0	0	0	1	0	45	0	46	
M/13/166	0	0	0	0	0	0	51	51	
M/13/082	7	0	47	0	0	0	0	54	
M/13/FQ/007	0	0	0	0	0	54	0	54	
M/13/117	0	0	0	0	0	0	59	59	
M/13/107	5	9	14	0	0	0	37	65	
M/13/064	0	32	0	25	0	10	0	67	
M/13/103	0	0	0	0	0	0	70	70	
M/13/FQ/005	0	18	41	4	15	0	0	78	
M/13/034	0	0	21	0	58	0	1	80	
M/13/037	0	5	8	2	65	0	0	80	

# A Preliminary Report: Student engagement in Medmoodle (March-May, 2020)

M/13/052	31	0	0	0	6	14	30	81	
M/13/128	0	0	0	0	0	0	81	81	
M/13/184	27	0	26	0	30	0	0	83	
M/13/143	6	81	14	0	0	0	0	101	

#### Annexure 2

Draft questions to explore reasons behind poor Medmoodle activity during 31<sup>st</sup> March2020 to 17<sup>th</sup> May 2020

- o Verify name and index number
- o Postal area/ closest town of current residence
- District
- O What is the reason for poor Medmoodle activity?
- Issues related to online access
  - Internet Connection
  - Data
  - Devise
  - Signal strength
  - Internet service provider
- o Perseverance/resilience
  - What did you do to compensate the loss?
  - What sort of support that you received from the batch?
  - What sort of support that you requested from the faculty?
  - If, financial issues cited as reasons for poor logins to Moodle Did you asked for financial help from faculty?
    - Did you receive the message?
- o Are you satisfied with your learning during the last 6 weeks?
- What do you think the faculty may do to help you?