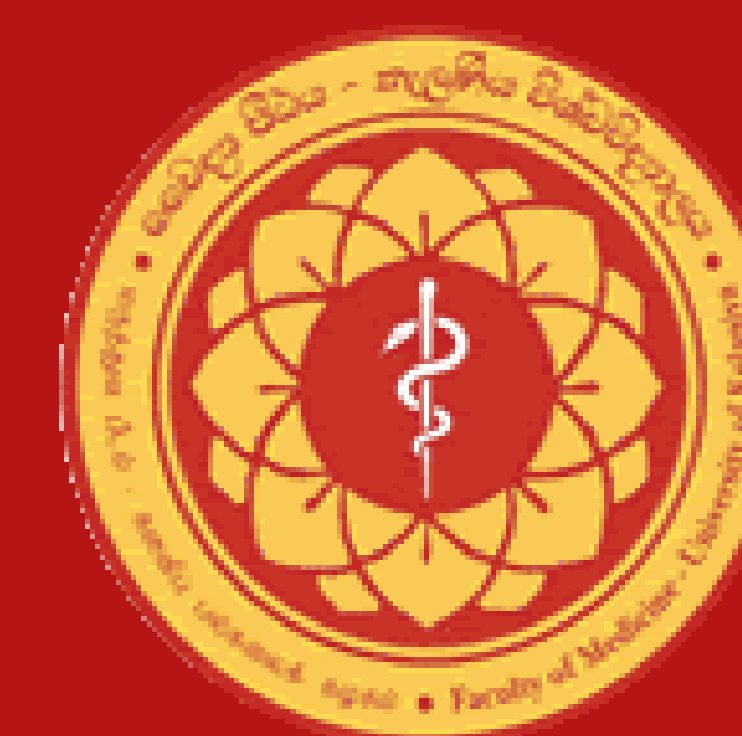# Usage And Awareness of The Faculty Learning Management System Among The Students and Members of The Academic Staff of The Faculty of Medicine, University of Kelaniya

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Introduction

Faculty Learning Management System(LMS);Computer Assisted Learning(CAL) is a platform for both students and academic staff to achieve learning and teaching goals effectively. A proper understanding and proper use of LMS facilities can enhance our educational goal achievement.

University of Kelaniya provides LMS creating a Virtual Learning Environment via MOODLE for a better student lecturer relationships. Instant access to the lecture notes, forums ,online assessments, calendar and many other facilities are available in the LMS. But some are not even touched by the users. Recently further widening the scope of LMS occurred with introduction of mobile app.

Objectives

To describe the usage patterns and awareness on Learning Management System among the medical students and the Academic Staff of FOM, UOK(Faculty Of Medicine, University Of Kelaniya).

Materials and Methods

Study Design- Descriptive cross sectional study
Study Setting- Faculty of Medicine, University of Kelaniya
Study Period- December 2018 to March 2020
Study Population- Medical undergraduate students of batch 27th, 28th, 29th of the Faculty and members of the academic staff who are conducting lectures to them.
Sample - 384 for students
53 for academic staff
Data collection- Self administered questionnaires were provided separately for academic staff and students(online format and paper based format). Questionnaires comprised on questions based of assessing awareness and usage of LMS. User login details for a month were obtained separately for the batch 27th,28th and 29th from the MOODLE system.
Data analysis- Data was entered to MS Excel. The data was analyzed as percentages, proportions, frequencies and cross tabulations using R and R studio. In the results which are analyzed as scores, the cut off was taken as 2/3 of total score.
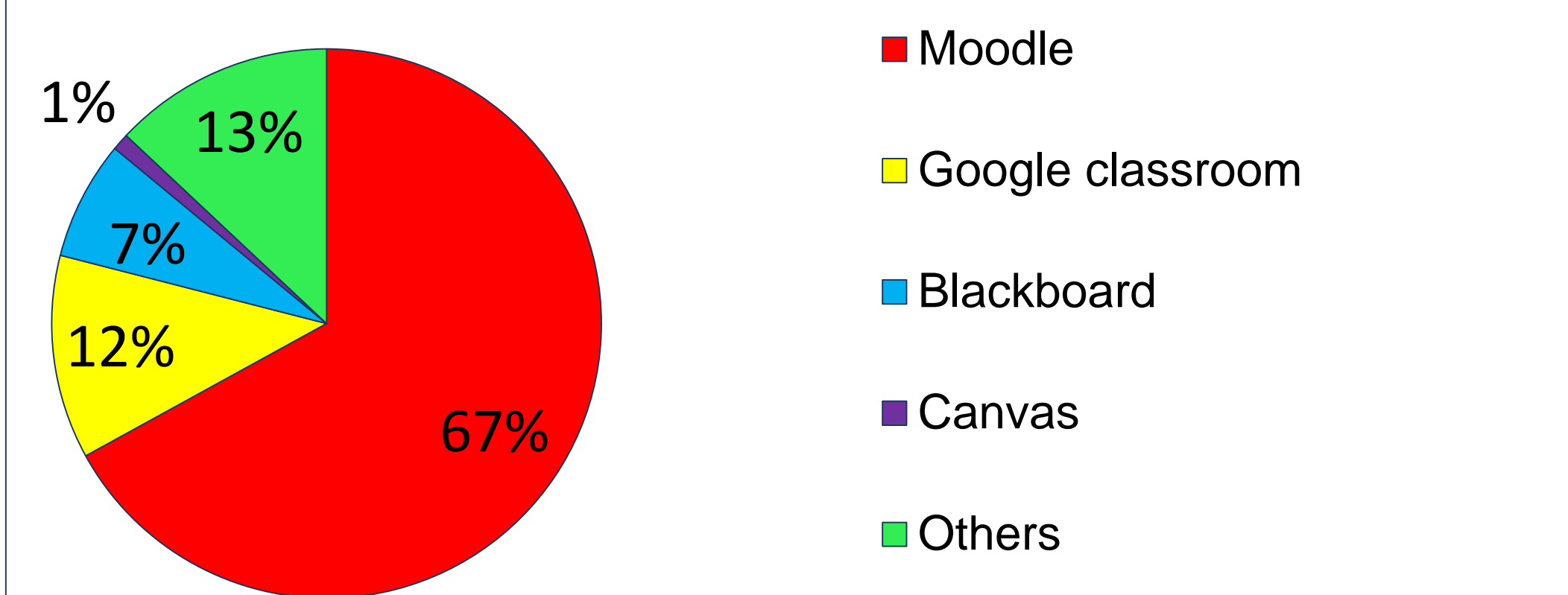
Results

Overall response rate of students is 68%.

Table 1-Demographic data of students

Batch(total student)	Questionnaires distributed	No. of responses and response rate from the questionnaire	Individual logins and percentage (from LMS records)
27(172)	120	91(75.8%)	57(33.1%)
28(167)	160	131(81.9%)	152(91%)
29(177)	160	77(48.1%)	36(20%)
Overall	440	299(68%)	245(47.48%)

Results

Figure1- User experience in different LMS
(Moodle 67%, Google classroom 12%, Blackboard 7%, Canvas 1%, Others 13%)
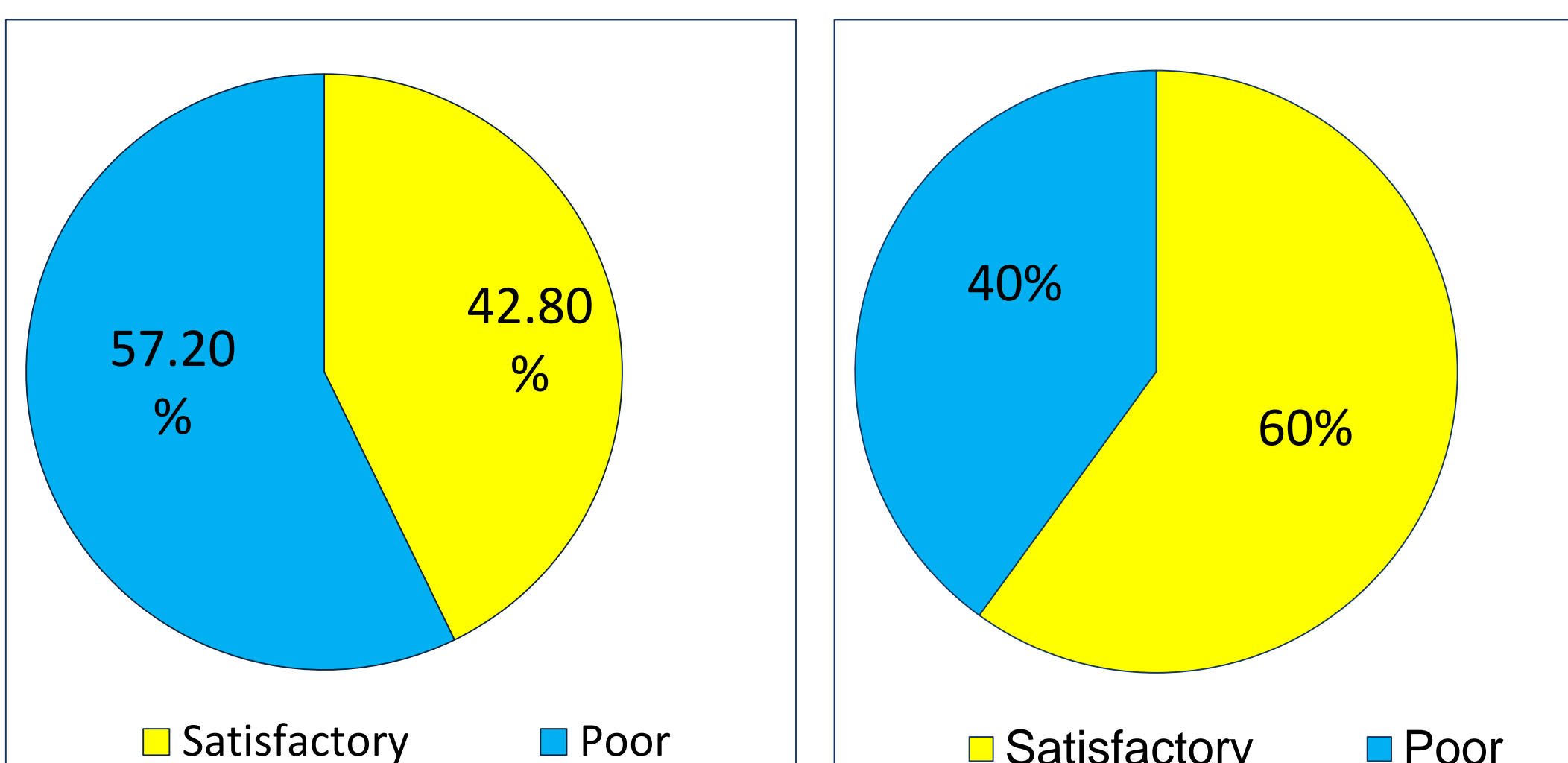
Figure2- Awareness score of faculty LMS
(Satisfactory 42.80%, Poor 57.20%)

Figure3- Compliance score of LMS
(Satisfactory 60%, Poor 40%)
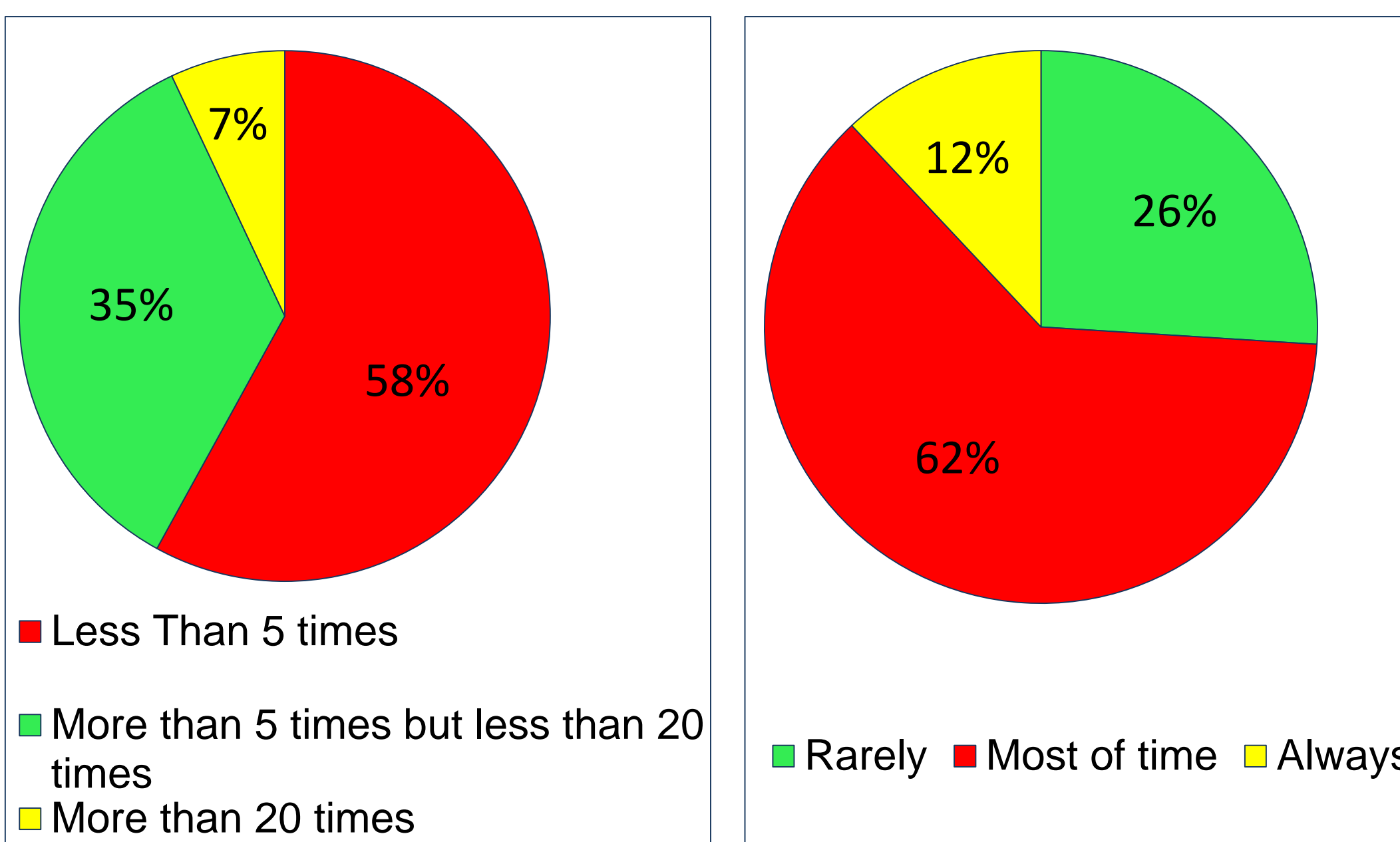
Figure4- LMS usage per month(User responses)
(Less Than 5 times 58%, More than 5 times but less than 20 times 35%, More than 20 times 7%)

Figure5- Receiving lecture notes via LMS
(Rarely 62%, Most of time 26%, Always 12%)
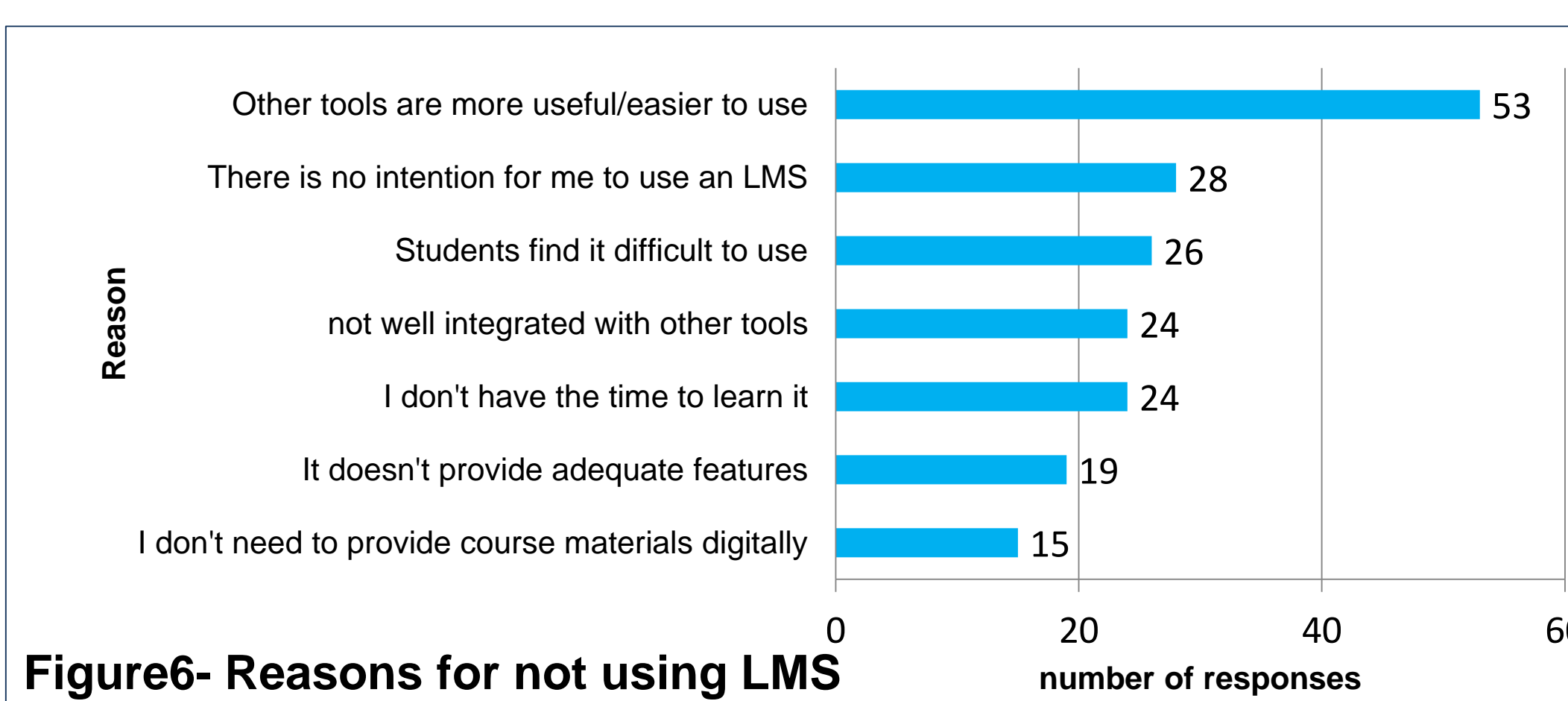
Figure6- Reasons for not using LMS

Reason	number of responses
Other tools are more useful/easier to use	53
There is no intention for me to use an LMS	28
Students find it difficult to use	26
not well integrated with other tools	24
I don't have the time to learn it	24
It doesn't provide adequate features	19
I don't need to provide course materials digitally	15
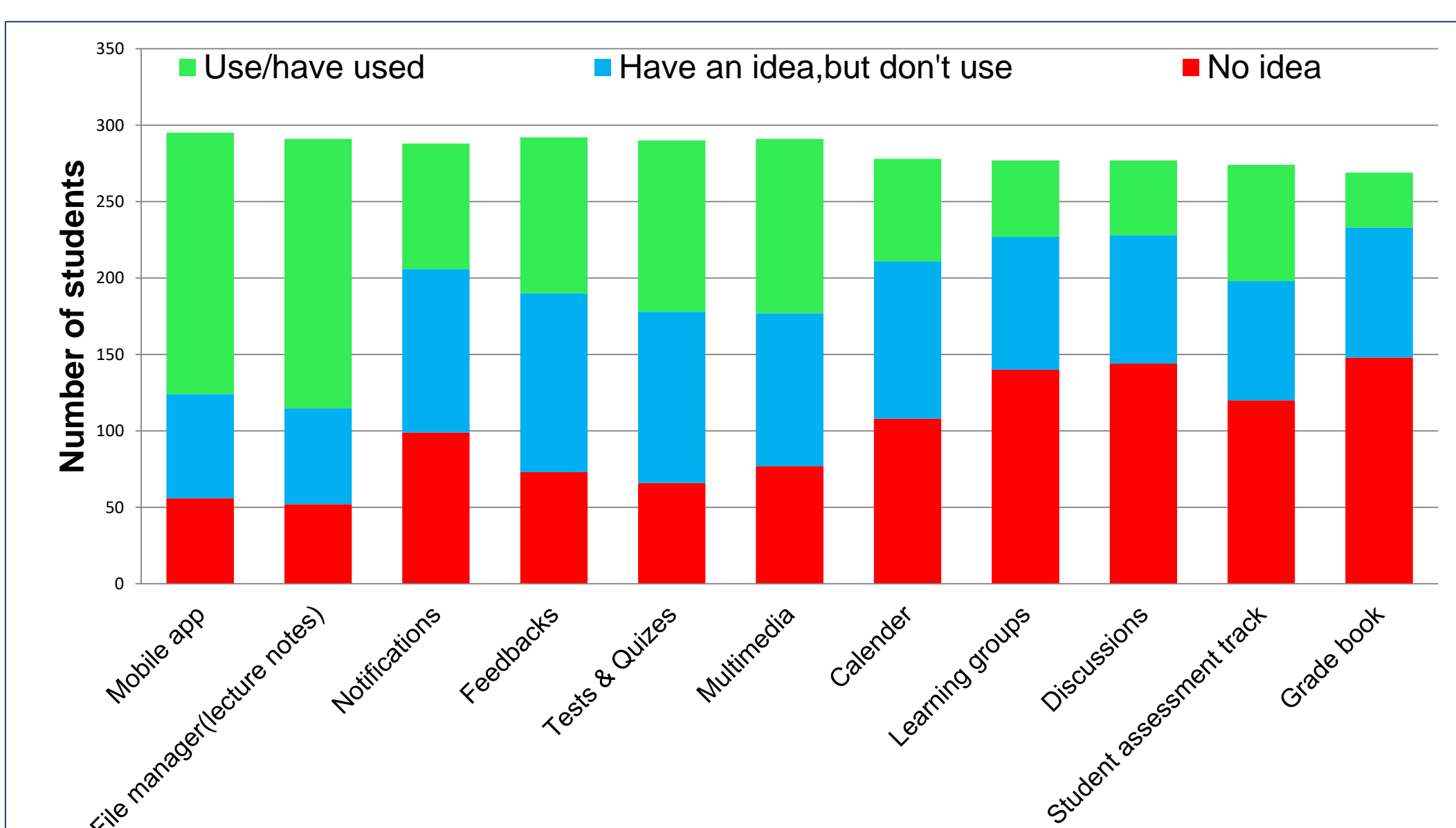
Figure7- Usage score of different LMS features
(Use/have used, Have an idea,but don't use, No idea — Mobile app, File manager(lecture notes), Notifications, Feedbacks, Tests & Quizes, Multimedia, Calender, Learning groups, Discussions, Student assessment track, Grade book)
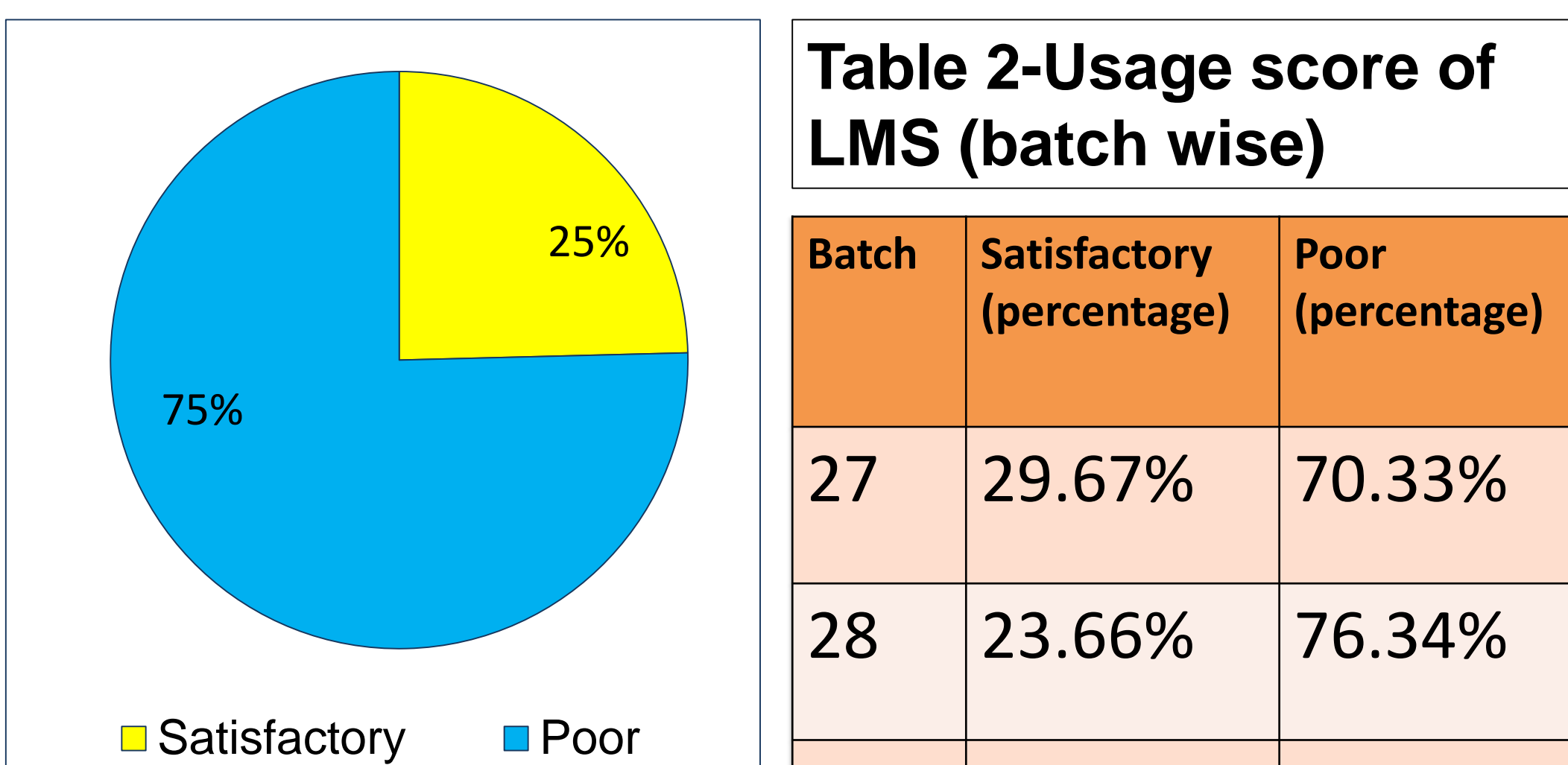
Figure8- Usage score of LMS
(Satisfactory 25%, Poor 75%)

Table 2-Usage score of LMS (batch wise)

Batch	Satisfactory (percentage)	Poor (percentage)
27	29.67%	70.33%
28	23.66%	76.34%
29	20.78%	79.22%

Results

Table3- Summary of frequencies of user logins and login frequencies from questionnaire responses to LMS per month

Batch		27th batch		28th batch		29th batch	
Source		questionnaire	login records	questionnaire	login records	questionnaire	login records
Frequency of login	<5	48	34	73	11	50	20
	<20	35	17	42	51	26	15
	>20	5	6	15	90	1	1
Total number		91	57	131	152	77	36
Median (*interpolated)		4.59*	3	4.486*	24	3.77*	4
P value (Wilcoxon sign rank test)		0.6156		<0.001		0.3572	

The results of the questionnaire of academic staff.

• When the monthly frequency of logging to LMS was assessed,78% of population logged less than 5 times.11% logged less than 20 times.11% more than 20 times.
• 28% uses the features provided in the LMS.33% have an idea on the features, but do not use them.39% neither use them or have an idea about them.

Conclusion

• Overall usage of LMS by students is poor(Only 25% has satisfactory usage)
• Majority of students lack a proper awareness about faculty LMS and the features available in LMS
• There is no significant difference between the median user logins and response to the questionnaire for batch 27 and 29 (p > 0.05) .
• Number of unique logins per month were, 57 (33.9%) out of 168 in 27th batch, 152 (94.4%)out of 161 in 28th.

Limitations

The data collection was interrupted and wasn't able to achieve the expected sample size as the faculty was suddenly closed due to the COVID19 outbreak.
The results of the academic staff could not be generalized as the response rate was low.(17%)

Recommendation

1. An introductory training session(more focus on LMS features) can be given to first year students, so that they are encouraged to use LMS from the beginning .
2. More study materials and learning resources should be provided through LMS so that students access LMS more.
3.The academic staff can be encouraged to use LMS by giving a short training on LMS usage.
4.As LMS awareness and usage may have increased during lockdown, reassessment of the situation after the lockdown, might give interesting findings

Acknowledgement

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