Online Teaching and Learning Activities of the State Universities Under the UGC

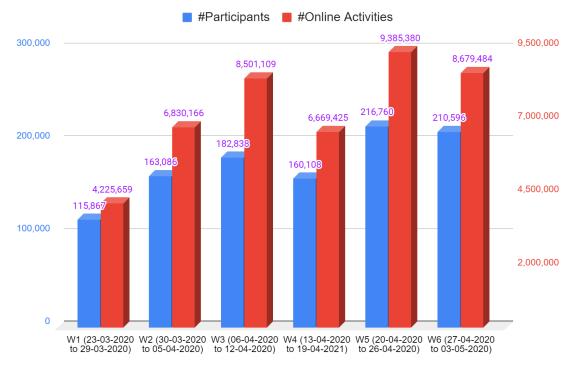
Report Summarizing the Online Activities During 23-March-2020 to 03-May-2020

Sri Lankan higher education sector has 15 State Universities that come under the University Grants Commission (UGC). Before the pandemic, the majority of the State Universities practised blended learning using Learning Management Systems (LMS, i.e. Moodle). The servers are connected through Lanka Education And Research Network (LEARN) through high-speed Internet. State University members had access to these servers on LEARN network through public Internet facilities by using paid services of Internet Service Providers (ISPs) in Sri Lanka. Under the guidance of the President, and in collaboration with TRC and the ISPs, the UGC chairman was able to obtain free data access to those servers in the LEARN network of Universities. This initiative motivated the Work From Home (WFH) practices of staff and students in the current situation.

1. Overall Online Activities

Accessing the Learning Management System (LMS) with free data provided has become the norm for asynchronous teaching and learning within the State University sector now. The last six weeks' usage statistics are below in the illustration.

State Universities: Weekly Asynchronous Activities (LMS)



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The graph presents two types of data, namely

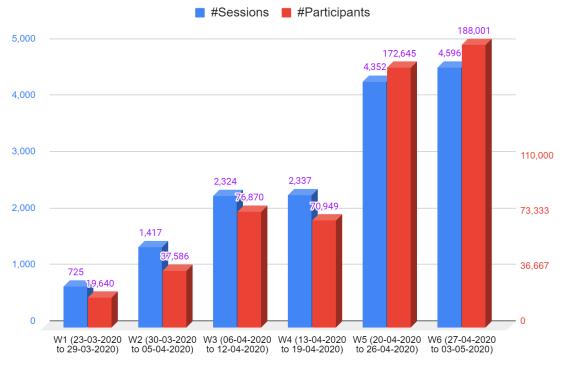
1. **#Participants**: The number of users (teachers/students) who access the University LMS system on a daily basis, aggregated to a week

2. **#Online Activities:** The number of online activities performed by the users weekly; an activity could be accessing a reading material, following a lecture slide, attending an online quiz, etc.

As per the graph, the total number of users accessing the system has increased during the first three weeks, then dropped a little during the New Year week and again picked up in the last two weeks. The total number of activities performed by the LMS users from the State Universities is around **44 million** during the said six weeks.

For synchronous teaching and learning at State Universities, LEARN had a video conferencing solution (LEARN.zoom.us). During the present situation, LEARN set up its own media servers with its member network and provided a faster and cheaper solution to its members (teachers and students). As a result, it was possible to keep the video conferencing data traffic within the LEARN network saving international data bandwidth. The solution has become a livewire of the synchronous teaching method for the State Universities. The video conferencing activities illustrated here for the last six weeks is the evidence for the claim.

State Universities: Weekly Synchronous Activities (LEARN.zoom.us)



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The above graph presents two types of data, namely

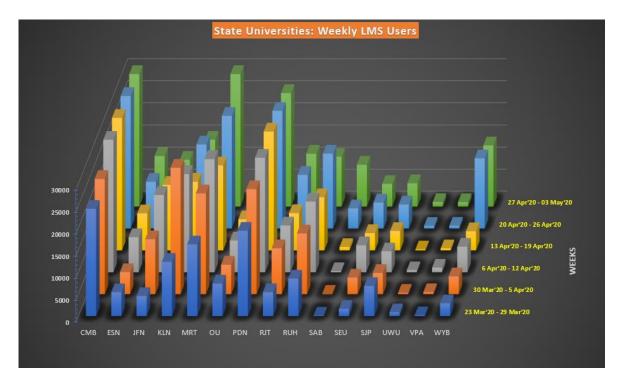
- 1. #Sessions: the number of online sessions (lectures, discussions, meetings, etc.) weekly
- 2. **#Participants:** the number of participants attended such sessions weekly

As per the graph, both the total number of sessions per week and also the total number of weekly participants for such sessions has increased tremendously during the last six weeks. Although we see a small drop in week four due to the New Year, the numbers have again increased during the fifth week much more. It further improved in week six. During these six weeks, the State University users had more than **15,000** sessions with a total of over **565,000** participants.

2. Institution-wise Online Activities

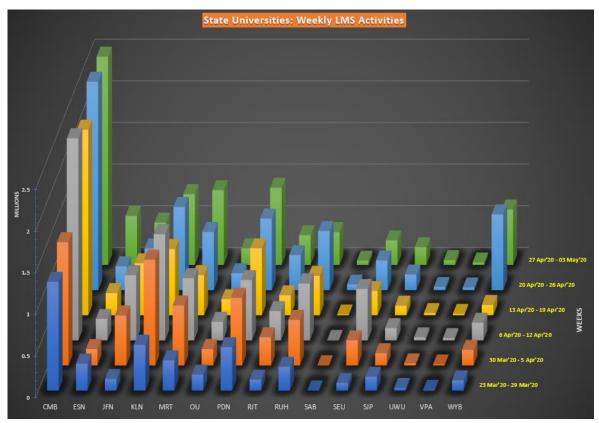
Similar measures that are used for the overall online performance of the State Universities are used here in this section for a comparison between the activities of the same institutions. It is worth noting that the data presented here are incomplete (as they are being collected) and also are not compared against the baseline data; that is, different institutions have different number of enrolled students and the number of teachers. UGC is working on providing the baseline data, which will identify the group of students who are expected to engage in online education in the said period.

The next figure depicts the number of online participants (as defined in Section 1) across 15 State Universities over the six weeks period.



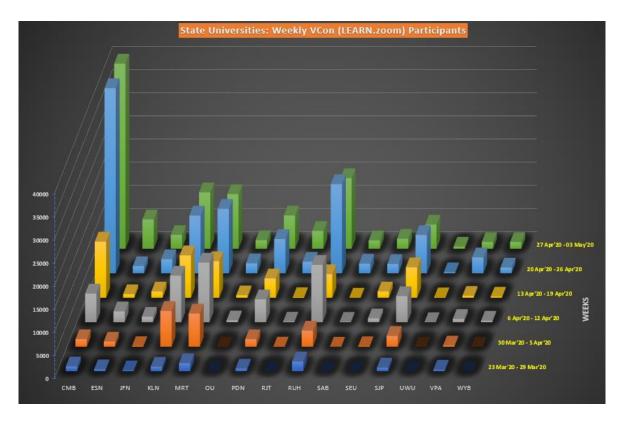
The number of participants for LMS systems are in the rise in each and every institution. During the sixth week, highest numbers are reported from University of Colombo (CMB), University of Moratuwa (MRT), University of Peradeniya (PDN) and University of Kelaniya (KLN) and the lowest numbers are reported from South Eastern University (SEU), Uva Wellassa University (UWU) and University of Visual and Performing Arts (VPA).

The number of LMS activities performed by the users from the 15 State Universities over the six weeks period are reported in the next graph.



Again, University of Colombo is having the highest number of activities followed by Universities of Peradeniya, Moratuwa and Kelaniya. The lowest numbers are reported from University of Visual and Performing Arts (VPA), Sabaragamuwa University (SAB) and Uva Wellassa University (UWU) during the said period.

The next figure shows the Video Conferencing sessions, expected to be synchronous teaching sessions, conducted at the 15 institutions over the six week period.

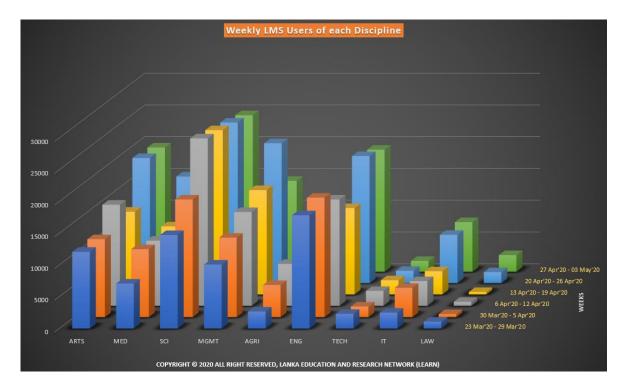


The number of participants attending the video conferencing sessions increased exponentially during first five weeks and further improved in the sixth week. Universities of Colombo, Ruhuna, Kelaniya and Moratuwa are at the top of the list and Universities of Uva Wellassa, Visual and Performing Arts, Wayamba and Sabaragamuwa are at the lower end of the list during week six.

3. Discipline-wise Online Activities

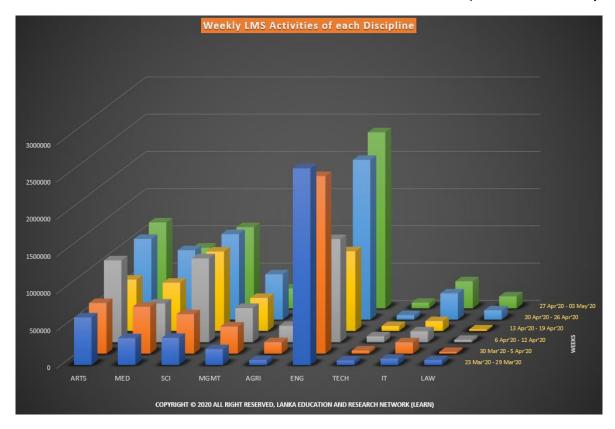
LMS users and activities are considered in this section for a comparison between the online performance of different disciplines within the State University system. *Some universities maintain a single LMS for multiple disciplines, thus we cannot differentiate the usage and activities into disciplines*. Please make a note that such information is not considered for the analysis.

The next figure illustrates the number of online participants (as defined in Section 1) across nine disciplines within State university system over the past six weeks period.



We can observe that the number of LMS users of most of the disciplines increased gradually throughout these six weeks even though it shows a small drop around fourth week due to New Year. This implies that most of the disciplines adapted online Teaching and learning to face the crisis with minimal damage to planned academic work. Science discipline recorded the highest number of users logged in to LMS systems during sixth week followed by Arts and Engineering disciplines, meanwhile Technology and Law disciplines recorded the least.

The number of LMS activities performed by the users from each discipline over the past six weeks period are reported in the next graph.



Engineering discipline reports the highest number of engagements by recording more than **12 million** LMS activities throughout the six weeks, followed by Science, Arts and Medicine disciplines. Lowest number of activities are recorded by Technology and Law disciplines. The data are not compared against baseline data as mentioned at the beginning of section 2. This might be a reason why we observe huge variations between the amount of activities performed by different disciplines.

This report is prepared by Lanka Education and Research Network (LEARN) on the request of the University Grants Commission of Sri Lanka. Updated on the 06^{th} of May 2020.

