Title:   
How to improve e-learning platform effectiveness, using data analytics: Study based on some of the online education platforms in Sri Lanka

# Background of the study:

During the COVID-19 pandemic time period, most of the students and teachers implemented an online education platform. Even after the pandemic time frame, some students and teachers are still using the online education system. Now in Sri Lanka, it’s become a trend and is growing with technology.

Even after the COVID-19 pandemic time frame, there were still more than 15% of teachers conducting online classes, and 80% of teachers were not conducting online classes due to a lack of student attention (Bandara & Kanthilatha, 2023). Based on some research done in Sri Lanka, most students do not like online classes, as do teachers. There can be a major reason why we do not have better online platforms. With better options.

In Sri Lanka, most school-level student’s education is based on tuition classes and private teachers. Especially in rural areas, students have to deal with a lot of issues in our education system. Every day, we can see a lot of major cities in the country full of students. Most of these students travel long distances to join physical education classes, from their villages to the city. It's wasting lots of valuable time and money that they could invest in their education. If students move to online education, they will be able to save a lot of time as well as money. But in Sri Lanka, the majority of students and parents have less IT literacy, especially in rural areas. This is the main issue: most students trust physical education more than e-learning platforms. But when they start higher education, most of the higher education institutions start online education and force their students to join their online classes. So it's very important that students have some experience with the online platforms when they start higher education after school. On the other hand, most Sri Lankan parents have low literacy levels related to information technology as well as the English language. This we can see most of the time in rural areas, but when searching for social media knowledge among parents and students, it is at a high level compared with other countries. (Hemamali et al., 2018). If we able to compare and analysis major exams results summary and some e-learning platform records we will be able to get advantage of it and improve system more effective and useful for both teachers and students.

In Sri Lanka, we have talented teachers who, if some media block them from continuing their classes, have the talent to continue their classes using other media or methods. When we were passing the lockdown time frame, some of those teachers created YouTube channels, Facebook pages, etc. They created educational videos and updated them on these kinds of social media platforms. Some of them created articles and uploaded them to public websites. But none of these resources worked for most rural area students. All the pandemic time frame they survived with Television or Radio Channels but now they have some level of information technology literacy to work with the internet and social media.

Comparing with some other countries researchers, we can assume our students and teachers also have the same questions and issues that they are facing; it can be different with age, environments, technologies, and platforms. According to their data records and charts, with the experience of using those platforms and tools, any student can build themselves with more effective ways to adopt online education and platforms (Vinita Tiwari and Abhay Tiwari, 2021). In Sri Lanka, if we continue to use online platforms, we can expect the same results from Sri Lankan students and teachers. We need to improve the usage of e-learning platforms in Sri Lanka.

According to the collected data sets and exam results, will be able to get an idea about geographical spread all over the country according to the time duration.