

Case for a Virtual University in Sri Lanka

S. A. Ariadurai

Open University of Sri Lanka

Abstract

Sri Lanka considers education as a wealth and offers facilities for education at various levels. It fares well ahead of many countries at primary and secondary education enrollments. However, it is much behind in tertiary education enrollments, thus denying access to quality higher education opportunities for most of the population, due to lack of places in the existing higher educational institutes. Many countries that have set targets to increase enrollments in higher education are considering online education, which offers flexible yet rigorous education opportunities for this purpose. Accordingly, it is proposed that focusing on the positive aspects arising out of Covid-19 pandemic, an online virtual university be established in Sri Lanka, adapting the best practices implemented globally to suit the specific local conditions with maximum flexibility. This would enable increased student intake and widening access to higher education, most of them away from urban centres, for the rural population to pursue higher education at an affordable rate and bring about a social transformation taking Sri Lanka to higher levels.

Introduction

In any nation, education is a crucial sector making a major investment in human capital development, thus contributing to long-term productivity and growth at all levels. UNESCO considers education as a top priority, as it is the foundation on which to build peace and drive sustainable development. In this context, if Sri Lanka, a developing island nation, had to achieve sustainable development, one of the key achievements it must provide is access to quality education on an equal basis enabling anyone to choose and follow an educational path of their own choice, with a sense of fulfilment and freedom. Unfortunately, this type of education freedom does not exist in Sri Lanka when it comes to higher education, which encompasses all types of education (academic, professional, technical, artistic, pedagogical, distance learning) provided by universities, technological institutes, teacher training colleges, etc., which are normally intended for students having completed a secondary education, and whose educational objective is the acquisition of a title, a grade, certificate, or diploma of higher education (UNESCO, 2019).

The International Covenant on Economic, Social and Cultural Rights, ratified by Sri Lanka, provides that higher education 'shall be made equally accessible to all, on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education' (UNHRC, 1976)

In Sri Lanka, annually more than 300,000 students sit for the final senior secondary examinations (General Certificate of Education – Advanced Level) of which nearly 200,000 qualify for university entrance. However, in the conventional state universities there are only about 42,000 places available. This means nearly 80% of the students who qualify do not have an opportunity to pursue higher education in one of the conventional state universities.

According to the available statistics (Dundar, et al., 2017), of those who do not have the opportunity to enter a conventional state university, about 5% enroll in other state higher educational institutions, including the Open University of Sri Lanka (OUSL), while another 6% enroll in private higher educational institutes and about 3% enroll in external degree programmes. Even though, about 30% of the young people join technical and vocational institutes, among the programs offered by these institutes, only 8% require completion of GCE A-levels. After including the number of students who pursue higher education at professional institutes, and those who go overseas, the country needs to create at least another 100,000 higher education places, if it is to achieve the objective of the Government of enabling all qualified students to continue with their higher education. This type of expansion is not possible through the existing conventional system of higher education, due to scarcity in terms of intellectual, physical and financial resources.

In this scenario, this paper argues the need to establish a Virtual University in Sri Lanka as an endeavour to create increased opportunities for those wish to pursue higher education using the online mode of learning to take Sri Lanka towards a knowledge-based economy through Human Resource Development.

Education system in Sri Lanka

Sri Lanka lies south of the Indian subcontinent, separated by a narrow strip of sea, and has a population of 21.4 million people. It ranks 58th in the world, by population in the list of 235 countries and territories, and 23rd among 51 countries in Asia (Statistics Times, 2021). With a literacy rate of 92.5%, it has one of the most literate populations amongst the developing nations (Central Bank of Sri Lanka, 2021).

In terms of economy, Sri Lanka with a Gross National Income (GNI) per capita of USD 3,720 in 2020 (The World Bank, 2022^a), falls under the lower-middle-income country, as per the 2021 classification of the World Bank, where countries are classified into four income groups based on GNI per capita in USD as low (below USD 1,046), lower-middle (USD 1,046 to 4,095), upper-middle (USD 4,096 to 12,695), and high (above USD 12,695) (The World Bank, 2022^b).

Like in many countries, in Sri Lanka too, education plays a vital role in the lives of the people. Schooling is compulsory for children from five to fourteen years of age. According to the constitution of Sri Lanka, education is a fundamental right and the state manages vast majority of educational institutes and offers free education at all levels, including at the tertiary level. As of 2021, there were 10,155 government schools with a student population of 4.2 million and 104 private schools with 127,968 students (Abeyratne, 2021). However, when it comes to university education, there are only seventeen (17) state universities, including the OUSL, the only distance education university in Sri Lanka. As a result, undergraduate education in state universities is extremely competitive, limited, and standardized, with only about 20% of the students who qualify receiving admission. There is much resistance to establish private universities in the country, by many groups, claiming that it would undermine the state sector universities resulting in equity issues. However, in recent years a few non-state higher educational institutes have been established, many of them offering foreign degrees in affiliation with overseas universities.

Vocational education and training in Sri Lanka are managed by the Tertiary and Vocational Education Commission of the Government of Sri Lanka and is also dominated by the state, though a few registered private course providers too are present. At the tertiary level, training is provided by the University of Vocational Technology and about forty (40) state government technical colleges and a few discipline-based state institutes.

Due to this scenario, even though Sri Lanka as a country fares well ahead of many countries in the primary and secondary level of education, when it comes to tertiary education, the country lags behind its contemporaries. Table 1 illustrates the situation, with reference to ‘General Enrollment Ratios’ in primary, secondary and tertiary education of Sri Lanka and countries in the region and World Bank economic groupings. Gross Enrollment Ratio (GER) is described by the UNESCO as the number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. For the tertiary level, the population used is the 5-year age group starting from the official secondary school graduation age (UNESCO Institute of Statistics, n.d.). In certain instances, the GER can be more than 100%, as it includes students who may be older or younger than the official age group.

Table 1: General Enrollment Ratios in Primary, Secondary and Tertiary Education in Sri Lanka and selected countries in the region and economic groupings of countries as of September 2021 (UNESCO, 2022)

Country	General Enrollment Ratio (%)					
	Primary Education		Secondary Education		Tertiary Education	
	Most Recent Year	Most Recent Value	Most Recent Year	Most Recent Value	Most Recent Year	Most Recent Value
Sri Lanka	2018	99	2018	91	2020	22
Bangladesh	2010	91	2018	67	2020	23
Bhutan	2018	88	2018	70	2020	16
India	2013	92	2013	62	2020	29
Maldives	2017	95	2002	47	2019	34
Nepal	2019	96	2019	62	2020	13
Pakistan	2018	68	2018	37	2019	12
China	1997	89	-	-	2020	58
Indonesia	2018	93	2018	79	2018	36
Iran	2017	100	2017	81	2020	58
Malaysia	2017	100	2018	72	2019	43
Philippines	2017	94	2015	66	2017	35
Singapore	2017	100	2017	100	2019	91
Thailand	2009	98	2015	77	2016	49
Vietnam	2013	98	1977	36	2019	29
World	2018	89	2018	66	2020	40
South Asia	2018	88	2018	61	2020	26
East Asia & Pacific	2015	96	2018	79	2020	51
Low income	2017	81	2018	34	2019	9
Lower middle income	2018	87	2018	60	2020	27
Middle income	2018	90	2018	68	2020	38
Upper middle income	2018	95	2018	82	2020	58
High income	2018	96	2018	91	2020	79
Small States	2018	86	2017	58	2019	22

According to Table 1, the GER in primary and secondary education in Sri Lanka is above the world average and is comparable with high income countries. However, the GER in tertiary education is only about 22%, compared to the world average of 40%, 26% in South Asia and 27% in lower middle-income countries. The figure is much lower than 58% in upper middle-income countries, where Sri Lanka was for a few years prior to 2020, and is expecting to move back in the next few years.

In addition to low GER, Sri Lanka faces significant brain drain. Every year nearly 250,000 Sri Lankans leave the country looking for foreign employment, with over 3.0 million people leaving the country in the last ten years (Central Bank of Sri Lanka, 2021). Sri Lanka has one of the highest rates of brain drain among the South Asian countries, with 27.5% of those who received a tertiary education already migrated, with an average annual migration level of 6,000 professionals (World Bank Group, 2016).

This is not a specific problem for Sri Lanka, as due to population growth and modernization, the need for accessible lifelong formal education is increasing worldwide. For this reason, many countries across the world have set targets to increase their GER in higher education. All these countries are considering online education as an important mode to achieve these targets. World over, online distance learning continues to grow as it offers flexible, yet rigorous education opportunities that provide individuals with access to the in-demand skills needed to achieve their career goals.

ICT Facilities in Sri Lanka

For online education to be effective the students need to have adequate ICT facilities to access the courses on offer. This includes both devices and internet connectivity. Even though, Sri Lanka does not have ICT facilities comparable to developed countries, as of January 2021, Sri Lanka has an internet penetration rate of 50.8% and 141.7% mobile connections to the total population (Kemp, 2021).

Further, as of March 2021, there were over 17.2 million mobile broadband subscriptions ($\approx 80\%$ of population) and 2.1 million ($\approx 10\%$ of population) fixed-line broadband subscriptions (TRCSL, 2021). Table 2 presents the statistics of internet users in Sri Lanka based on the age groups (Tissera, 2021).

Table 2: Internet users in Sri Lanka based on age groups

Age group	Internet users as % of target population
15 – 25	81
26 – 35	67
36 – 45	43
46 – 55	26
>55	10

Sri Lanka has four mobile service providers and some of the statistics in respect of internet provision by these providers are given in Table 3 (Wyrzykowski, 2021).

Table 3: Statistics related to mobile internet provision in Sri Lanka

Mobile Service Provider	4G Availability	Video Experience	Games Experience	Voice App Experience	Download speed experience	Upload speed experience	4G Coverage experience
A	-	38.9	32.0	60.0	4.6	0.6	-
B	78.9	47.6	37.2	68.9	8.5	4.2	8.5
C	71.8	32.9	34.6	64.8	4.2	1.8	3.9
D	79.2	45.2	37.1	69.5	8.0	2.4	7.4

Even though only about 22% of Sri Lankans own a computer (Department of Census and Statistics - Sri Lanka, 2020), the Government of Sri Lanka initiated a telecentre project known as ‘Nenasala’ through which communication centers are being built in rural areas to provide free internet access and currently 1,005 such centers have been established (Information and Communication Technology Agency of Sri Lanka. n.d.). In another initiative by the government, a project named ‘e-Thaksalawa’ has been launched to facilitate all students who are engaged in studies through online due to the Covid-19 pandemic with internet service without charges.

According to three online surveys conducted in June 2020, covering forty-six (46) state and ten (10) non-state higher education institutions, during their closure due to Covid-19 pandemic, it was found that students actively joined the ‘online education’ that was made available, achieving 88% participation rate.

Further, it was found that more than half of the responding students joined online every day, while around 10% attended only once a week, with nearly 90% of students being highly or moderately satisfied with the online education provided (Hayashi et. Al., 2020). In another research conducted among Sri Lankan conventional university students, during the Covid-19 pandemic, it was found that 79% of those who were surveyed indicated their preference to use 'online learning' even in the future in a post pandemic scenario (Haththotuwa and Rupasinghe, 2021). Though it must be stated that most 'online education' that was provided during the pandemic was 'Emergency Remote Teaching' as described by Hodges et.al. (2020) using a conference platform such as Zoom, MSTeams, or GoogleMeet, with limited use of a Learning Management System, mostly to store recorded video lectures for later viewing and assessments.

Based on these facts, it is expected that when programs are offered through online platforms, there would not be major barriers for access due to technology. Further, the university would be able arrange device loans through banks and provide free or concessionary internet packages through internet service providers, as it is being done during the Covid-19 pandemic.

Need for a Separate Virtual University

Distance learning is not a new concept for Sri Lanka. The Open University of Sri Lanka (OUSL) has been offering programs in the distance mode, primarily print based, since 1980s. Fundamentally, conventional universities and Open Distance Learning (ODL) universities have very contrasting viewpoints about their approach to education (Moore & Tait, 2002). The ODL universities practice a form of open education using electronic or printed technologies supported by institutional policies that support open admissions, freedom for the student to decide on what, when and where to learn, recognition of prior learning, flexible offering of courses, extended study period and numerous other flexibilities, as against many rigid policies adopted by conventional universities.

Further, as the student cohort of ODL universities are mainly adult learners or learners who learn while employed or engaged in other activities, the education principles followed by ODL institutes show a strong bias towards supporting the freedom of individual learners to exercise choice over one or more of the main processes of their learning. On the other hand, conventional or face-to-face education is practiced in a classroom setting. Due to their contrasting natures, both conventional and ODL educational institutes employ different educational philosophies and methodologies to facilitate learning. Accordingly, conventional universities practice principles belonging to pedagogy, which is the teaching of dependent personalities, whereas the ODL institutes practice the principles belonging to andragogy, which is the facilitation learning for adults, who are self-directed learners and heutagogy, which is the management of learning for self-managed learners. In this context, affiliating the Virtual University, which is essentially an ODL institute, with any conventional university, mainly practicing traditional classroom teaching, would place obstacles for adopting organizational and educational processes of ODL, as these would be in contradiction to the general philosophy and practices of the parent university.

Probably, one of the options could be to place the proposed virtual university under the OUSL which also practices educational principles pertaining to the ODL mode. However, if the proposed virtual university is to meet the envisaged objectives, this too is not a possibility, as the way the OUSL has consolidated its structure and system over the last forty years, there is limited flexibility to implement an expansion that is envisaged to reach GER levels that are comparable to countries of the South and South-East Asian Regions, which require maximum flexibility. Currently, even though the OUSL practices many ODL concepts, its administrative and academic structure is like that of conventional universities, with individual departments and faculties that are compartmentalized and focusing on individual programs. As these faculties function autonomously with respect to course offerings and academic administration, there is increased reluctance to go beyond their own boundaries. Further, as permanent academics involve in both the development and delivery of courses, as in a conventional university, they are unable to cater to higher number of students due to workload constraints. As a result, many of the programs of the OUSL enroll limited number of students, thus restricting student intake. As this system is now well established and entrenched, it has become difficult to reform to open it up with higher flexibility.

Therefore, it is more prudent to establish the virtual university in Sri Lanka as an independent university, encompassing the best practices that are being currently implemented globally at the various online higher educational institutes, adopted to suit the specific local conditions, with maximum flexibility. As many of these flexible concepts could be established at the inception itself, it would be possible for the university to achieve its intended objectives without constrained by the shackles of an established university.

Main Features of the Virtual University of Sri Lanka

It is proposed that the new virtual university to be essentially an online university, encompassing the philosophy of distance education, and to have several unique features that are currently not available in the university system in Sri Lanka. This would enable maximum flexibility in course offerings, enabling students to choose study programs that meet their expectations.

It is further proposed that the new virtual university, instead of having the traditional model of departments and faculties, to have several Schools dedicated to undergraduate studies, foundation studies, and graduate studies. Based on the local and overseas experiences, following are some of the other features that are proposed for the university.

- Forging partnerships with local and overseas universities and institutes to mobilize the already existing rich intellectual resources in those institutes
- Constituting Boards of Study for each subject area with academics from partner institutes
- Establishing a one-place national repository of multiple mode learning resources as in many countries.
- Using a combination of video lectures, online reading materials, audio/video tutorials and on-line interaction to facilitate learning. For courses that require practical sessions, appropriate arrangements as practiced by many distance education institutes around the world to be implemented.
- Having varied authentic formal assessments and evaluation systems as prescribed by the University Grants Commission of Sri Lanka.
- Having complete flexibility for students to learn at their own convenience, pace, and place.
- Entering partnerships with local non-state, non-profit organizations for course delivery and learner support.

It is proposed that the University should hire minimal permanent academic staff and mainly draw resources from other institutes, both within the country and overseas, in visiting/consultancy capacity and use optimally the existing infrastructure of other institutes. As all its courses are to be offered online, it is possible to contract the best subject specialists both within the country and overseas to develop the courses as it is practiced in many countries around the world. Further, arrangements should be made for students to take courses offered by online partner institutes overseas, which would constitute part of the curriculum.

Conclusion

Establishment of a virtual university provides enormous potential for widening access to higher education in Sri Lanka, and increasing the diversity of student population, since online technologies provide opportunities to learn from anywhere, at any time, from anyone, at any pace. Students will be able to pursue study programs while being employed and in locations near their own home. This will allow them to contribute to the economy as well as enjoy family lives.

Further, the establishment of a virtual university will undoubtedly increase the GER in tertiary education in the country enabling opportunities for the population to pursue higher education at an affordable rate and bring about a social transformation that would take Sri Lanka to higher levels and fulfil the objective to provide university education to all qualified students.

The Covid-19 pandemic has forced the world to engage in the ubiquitous use of virtual learning. The impact of this and the developments required to make it work is expected to permanently change how education is delivered world over. Online education has traditionally been viewed as an alternative pathway, one that is particularly well suited to adult learners seeking higher education opportunities. However, the emergence of the Covid-19 pandemic has created paths for greater access and opportunities to online education, and there is a clear route for the next generation of adopters of online education.

In these circumstances, this is the most opportune time for Sri Lanka to establish a virtual university encompassing all the modern-day good practices and the technology adopted in many countries around the world to meet the challenges of the Twenty-First century Higher Education.

References

- Abeyratne, D. S. (2021, October 26). *It's Back to School for Primary Graders*. Daily News. Lake House Publications.
- Central Bank of Sri Lanka. (2021). *Economics and Social Statistics of Sri Lanka - 2021*. Central Bank of Sri Lanka, Statistics Department. Central Bank of Sri Lanka.
- Department of Census and Statistics - Sri Lanka. (2020). *Computer Literacy Statistics - 2020 (First six months)*. Department of Census and Statistics.
- Dundar, H., Millot, B., Riboud, M., Shojo, M., Aturupane, H., Goyal, S., & Raju, D. (2017). *Sri Lanka Education Sector Assessment: Achievement, Challenges, and Policy Options*. World Bank Group.
- Haththotuwa, P.M.P.S. & Rupasinghe, R.A.H.M. (2021). *Adapting to Online Learning in Higher Education System during the Covid-19 Pandemic: A Case Study of Universities in Sri Lanka*, Sri Lanka Journal of Social Sciences and Humanities, Volume 1 Issue 2, August 2021: 147-160
- Hayashi, Ryotara., Maddawin, Angelica., Garcia, Marito., & Hewagamage, K. P. (2020). *Online Learning in Sri Lanka's Higher Education Institutions during the COVID-19 Pandemic*. Asian Development Bank
- Hodges, Charles., Moore, Stephanie., Lockee, Brab., Trust, Torrey & Bond, Aaron. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*, Educause Review, <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning#:~:text=In%20contrast%20to%20experiences%20that,mode%20due%20to%20crisis%20circumstances.>
- Information and Communication Technology Agency of Sri Lanka. (n.d.). *Nenasala Project (National Telecenter Project)*. Information and Communication Technology Agency of Sri Lanka: <https://www.icta.lk/projects/nenasala-project-national-telecenter-project/>
- Kemp, S. (2021). *DIGITAL 2021: SRI LANKA*. DataReportal: <https://datareportal.com/reports/digital-2021-sri-lanka>
- Moore, M. M., & Tait, A. (Eds.). (2002). *Open and Distance Learning - Trends, Policy and Strategy Considerations*. UNESCO.
- Statistics Times. (2021). *Population of Sri Lanka*: <https://statisticstimes.com/demographics/country/sri-lanka-population.php>
- The World Bank. (2022^a). *GNI per capita, Atlas method (current US\$) - Sri Lanka*. World Bank national accounts data, and OECD National Accounts data files.: <https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?locations=LK>
- The World Bank. (2022^b). *World Development Indicators*. The World by Income and Region: <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>
- Tissera, M. (2021). *Internet use in Sri Lanka has grown due to pandemic, but slower than peers, survey shows*. LIRNEasia.
- TRCSL (2021), Telecommunications Regulatory Commission of Sri Lanka - Statistics, <https://trc.gov.lk/images/pdf/StatisticalOverViewReportQ1202105052021abc.pdf>
- UNESCO Institute of Statistics. (n.d.). *UNESCO*. Glossary: <http://uis.unesco.org/en/glossary-term/gross-enrolment-ratio>
- UNESCO. (2019). *Right to Education Handbook*. Education Sector of UNESCO.
- UNESCO. (2022). *UIS Database*. Other policy relevant indicators: Gross enrolment ratio by level of education: <http://data.uis.unesco.org/#>
- United Nations Human Rights Office of the High Commissioner. (1976). *International Covenant on Economic, Social and Cultural Rights*. United Nations Human Rights Office of the High Commissioner: <https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx>
- World Bank Group. (2016). *Migration and Remittances Factbook 2016*. KNOMAD.
- Wyrzykowski, R. (2021). *Sri Lanka Mobile Network Experience Report*. Opensignal.