Embracing e-Learning: Higher Education Institutions in Sri Lanka

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Abstract: Sri Lanka, a developing country is attempting to embrace e-learning to increase the opportunities for learners to continue with lifelong learning. Due to limited capacities in conventional universities many secondary school students who qualify to enter the state universities do not get the opportunity to continue their higher studies. To overcome this problem the government has taken steps to initiate course delivery via e-learning. The higher education institutions in Sri Lanka have started embracing e-learning for mainstream course delivery. However, there are many developments and requirements such as infrastructure, training, resources and skilled personnel to complete a successful delivery. This paper discusses the current initiatives in Sri Lanka and how the initiatives have benefited the students to excel in their education in spite of their geographic location. The benefits gained by the community are also discussed with examples. Plausible enhancements in e-learning teaching and learning environment in Sri Lankan higher education institutions are addressed suggesting ways and means to increase the learning facilities.

Keywords: e-Learning, Sri Lanka, Higher Education, Distance Education Modernization Project, Management

Introduction

E-learning has started to make its way into developing countries and is believed to have huge potential for delivering courses to meet a growing demand for education where resource and capacity shortages exist. E-learning has been seen as a method of course delivery to provide higher education for a larger population, especially marginalized groups in rural areas by as a cheaper and more flexible alternative (Dhanarajan, 2001; Patton 2000). However, among many challenges that developing countries face, when providing education using e-learning lack of vital components such as computers, electricity and skills, have delayed the process (Rajesh, 2003; Dhanarajan, 2001). The study was carried out specifically focusing the higher education institutes in Sri Lanka, to identify the current initiatives in relation to e-learning and how the initiatives have benefited the students.

Significance

This study will inform the higher education practitioners about the success and limitations of embracing e-learning to mainstream course delivery especially in a developing country like Sri Lanka. The main focus of the research is to identify how to provide higher education for a wider population through alternative teaching and learning mechanisms. The paper will present methods and initiatives used to embrace e-learning, enabling other practitioners to refine their own strategies in embracing e-learning into the mainstream course delivery.
Problem

Sri Lankans have a very high literacy rate, due to government support for education in the school education (World Bank 2005). In Sri Lanka, education is free from the primary grade up to the first degree at the university level. The Sri Lankan government has made a strategic decision to introduce free education, mid day meals, free textbooks, free uniforms, and scholarships for disadvantaged students. The government also subsidizes transport charges for students. These facilities have enabled Sri Lanka to achieve an adult literacy rate of 90.7% in 2001 from 87.2% in 1981 (both census years) (Department of Census & Statistics 2007).

However, only 12% of the labor force has a high school degree or above, with 2% of this labour force having a university degree (ADB 2008). This is because only 3% of qualified secondary school graduates gain admission to university (ADB 2008). Hence it was found that only a selected group of students gain access to higher education due to capacity and infrastructure limitations. This limitation has created a major problem in the country, leading to an education divide.

Literature Review

Education Divide

There are around 10,548 schools (government schools, private schools and pirivenas) in Sri Lanka, as well as 14 universities, 14 National Colleges of Education, and about 30 technical institutions (Government of Sri Lanka 2007). More than 99% of these schools are public schools in line with the free education legislation of 1945, providing free education up to the first degree at university level (DEMP 2005). Entry into technical education and vocational training (TEVT) is open at grade 9 upon completing basic education, and at grade 11 upon passing the ordinary level (O-level) national examination. Tertiary education and training is open to students successfully completing the advanced level (A/L) examination, the highest level of senior secondary education, or graduating from a technical institution.

However, every year there are about 100,000 G.C.E. (A/L) qualified students who fall into the category of “higher education opportunity less” due to the fact that the conventional university system does not have the capacity (DEMP 2005). The following table (Table 1) shows the admissions to all public universities as a percentage of eligibility at the Advanced Level examination.

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<td>A</td>
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A - Percentage eligible for University Admission
B - Admissions as a Percentage of eligibility

Table 1: Public University Eligibility (UGC 2008)
These figures show a high drop out rate, after qualifying at the advanced level examination, the most competitive examination in the country. To further explain this situation the following section elaborates the current governance in the Sri Lankan Higher Education sector.

As the country’s population is 21 million providing higher education facilities with a small number of universities has become a problem (UGC 2007). Access to quality higher education becomes a problem if the students do not get selected to a state university. According to research findings, the inability to provide sufficient education to the students who complete year 13, G.C.E (A/L) at school has generated an education divide in the country as many school leavers who qualify to enter university are not getting quality higher education (ADB 2005). Identifying this problem, the government has taken initiatives to provide an alternative path for higher education through e-learning.

**E-Learning**

Urdan and Weggen (2000) specify that e-learning is: “the delivery of content via all electronic media, including the internet, intranets, extranets satellite broadcast, audio/video, interactive TV and CD ROM” (p. 4) indicating how learning can be extended beyond the classroom environment, supporting the use of e-learning to eradicate the education divide.

However, educationists were concerned about using technology for teaching and learning purposes, assuming that the students may not be able to gain the real learning experience through e-learning. Gerjets, Scheiter, and Catrambone (2004) advocate that e-learning’s discussion boards, forums and wikis enable collaborative learning that is required by learners to develop teamwork skills. Further, Jasinki (2008) and Water (2008) mentioned how e-learning can support distance learners through learning activities, game-based learning and collaborative activities.

The literature further indicates that Khan’s (2005) P3 model and Seymour and Collet’s (1992) Cascading model have been used for evaluation and management of e-learning implementation, while models such as the Baldrige Education Excellence Model (BEEM, 2005) are used for the management, investigation and evaluation of excellence in education. On the other hand, the RIPPLES model has been used to investigate and evaluate specifically an e-learning environment with many descriptive categories relating to e-learning resource development and delivery (Jasinki, 2007).

**The Research Methodology**

The research was designed to be a qualitative study, including face-to-face interviews with the participants. Grounded theory was used to proceed with the research to identify the emerging themes in the research. Focus group meetings enriched the findings by accumulating multiple views into the data set. Three higher education institutes were studied in depth. In addition several other institutional developments were studied to identify how e-learning was embraced into mainstream course delivery within the Sri Lankan context. Distance Modernisation Project, was contacted to identify the number of students who gain access to higher education through the initiative.
Research Findings

It was found that the ‘e-Sri Lanka’ concept supported by the government has taken steps to create a new environment in the education sector in Sri Lanka. Taking the government directives many HEIs have started using e-learning for their course delivery. The investigations indicated that the staff were motivated towards the use of technology for teaching and learning.

“With new technology staff can provide learning and teaching facilities for distance learners.”

The research participants indicated that the reforms were implemented to enhance the education system in their institutions through projects such as Distance Education Modernization Project (DEMP), Distance Education Partnership Project (DEPP), Capacity Enhancement Project and Secondary Education Modernisation Project (SEMP), which was also indicated by Hanna (2008, p23).

“It is amazing how these young students interact when they are given the opportunity, especially as they are not very good in English and not literate in using the computers. But still they use the forum so effectively to communicate among themselves as well as with me”

The skills development project of the Asian Development Bank has begun work in the area of improving the technical training system, and the participants from the vocational education sector indicated that use of computer-based training has made great benefits for the students. Participants mentioned that:

“The training was very successful and many staff members who were new to technology and e-learning learned from scratch and learnt to develop and deliver using e-learning. They were very good in picking up these concepts and building resources of their own within a short period”

“Without these training sessions I wouldn’t have come this far. Specially the international consultants made it so interesting and made us love teaching using e-learning”

The DEMP project supports the three types of expenditures such as: 1) design and development of online courses and materials; 2) equipment such as computers, peripherals and software; and, 3) link programmes with foreign postsecondary educational institutions. The participants interview data supports this claim on the DEMP program:

“The initiative taken through the Asian Development Bank with Distance education project is noteworthy as the training and purchase of software and hardware support the development of e-learning and it enables us to implement e-learning within our organizations. Also the National Access Centers located around the country have facilitated the students who do not own computers to use e-learning for their higher education.”
There are several organizations in Sri Lanka, that are inline with the government directives to support lifelong learning. e-Sri Lanka is immersing the new culture of lifelong learning within the Sri Lankan community. Several public and private institutions have started embracing course delivery via e-learning. Some of the institutions that have embarked on e-learning are Informatics Institute of Technology (Information Technology) Institute of Quantity Surveyors (Project Management) Open University of Sri Lanka (Education Technology Course), Sri Lanka Institute for Development Administration (Management for Professionals), Sri Lanka Library Association (Library and Information Science), University of Jaffna (Business Management), University of Moratuwa (Information Technology), University of Peradeniya (Business Administration) IDM (Business Management), Sri Lanka Institute of Marketing (Marketing), Ladies College (Learning Disabilities), WinStone (Food & Beverages Services) (NODES 2008).

The research participants indicated that more than 50 enrolments from OUSL take place per semester for the new course delivered via e-learning. Further, it was found that rural students participation in class activities through e-learning was appealing and satisfying to the teachers. The participants indicated that learners from distant cities such as Ampara and Matale were studying well with the new system.

University of Colombo, offers the Bachelor of Information Technology (BIT) via e-learning and over 1200 students have registered for this course. This large number indicates the popularity the e-learning course has gained and the number of students who are now gaining higher education with the introduction of the new system.

Informatics Institute of Technology, a private institute, has started offering a Diploma in Computing through a DEMP grant. With 36 students on board, the institute has further taken opportunity to enhance students’ learning experiences. Informatics Institute of Technology also developed course materials to engaged students in an e-learning environment. Embracing these pedagogical changes have taken the time and effort of the staff who are involved in e-learning resource development and delivery.

These examples highlight the interest of the teachers and students to teach and learn, in spite of the medium or methodology. Through these projects the student population has been given the assurance of provision of opportunities to learn.

Implementation

Sri Lanka being a developing country, many people do not have the required infrastructure to learn through e-learning. Therefore, the implementation of such a programme has to be strategically designed. To be able to address the infrastructure problem, NODES have implemented NODES-Access Centres which are called NACs. NODES-access centres are spread across the country providing computers with multimedia capabilities and software that are required for teaching and learning. They provide high speed internet access, printing facilities and technical support for students.

Evaluation

The evaluation of the selected courses that are delivered via e-learning was carried out using the Baldrige Education Excellence Model (BEEM). The qualitative data gathering provided
rich information about the processes used in embracing e-learning, their short comings as well as the benefits gained.

The implementation plan through staff training and providing infrastructure to develop the required resources was appreciated by the participants. They also indicated that the learning processes that were introduced to them as academics to adjust into new teaching environment assisted them to develop and, change pedagogical views and create assessments. These breakthroughs were considered as a great achievement as many educators who are used to face-to-face teaching have embraced the use of technology for teaching purposes. The staff motivating factors used in the institutions differed based on the management practices. However, currently many academics who understand the problem in education divide are supporting the concept of e-learning to facilitate education for a wider population.

The students who are engaged in e-learning courses have shown a great interest in their studies and have found the concept useful as they can study anywhere anytime.

The higher education institutions were embedding e-learning using traditional course delivery policies and procedures instead of having e-learning specific policies and procedures. Also, strategic alignment of the e-learning project to the organisation’s strategies was not clear. The staff were trained to use technology. However, the staff lacked motivation from the senior managers and administrative personnel.

Mainly, the students were not well guided in the new courses to gain the maximum benefit. Some communication problems were found guiding the students into these courses.

Discussion

The staff could be motivated through incentives to make the e-learning resource development and delivery more attractive. Encouraging staff and conducting awareness programmes and making enhancements in e-learning teaching and learning environments in Sri Lankan higher education institutions could assist eliminate the education divide in the country.

By encouraging the students and making them aware of these courses, more students would be able to use the resources and participate in learning. However, it was found that institutions strategies and policies need to be aligned to incorporate new ways of teaching and learning. Especially, the time allocations for e-learning course delivery and management cannot be compared with traditional delivery methods.

Conclusion

The research was conducted to identify the current initiatives in Sri Lanka and how the initiatives have benefited the students to continue their higher education, through interviews, observations and record review in four selected higher education institutes. As discussed, several initiatives were identified. These initiatives have gradually attracted the students to excel in their higher education. However, several plausible management enhancements were identified as providing necessary resources, training, policies and procedures and staff motivation. It was evident that many higher levels of management needed to be educated in understanding these courses and what the strategies have to be. The initiative such as DEMP project is changing the education system providing access to education for wider population. The country’s progress in providing higher education that has been a problem for many years can now be eliminated by strategically embracing e-learning to mainstream course delivery.
References


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About the Author

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Currently employed at Informatics Institute of Technology Colombo Sri Lanka. From 2001 to 2007 was working for Holemsglen institute of TAFE in Melbourne. In 2005 started reading for Doctor for Information Technology - Charles Sturt University, Australia. In the past 10 years gathered experience in flexible learning as a student, teacher, facilitator, developer, instructional designer, coordinator and team leader. Combining the experience and research, progressing in developing better management practices in e-learning resource development and delivery. The current role involves in teaching under graduate students, supporting, training, and assisting academics to develop e-learning solutions and find ways to deliver their content flexibly and innovatively.