ICT Education in Universities and its Relevance to Job Market: Perspectives from University and Industry Employers in Sri Lanka

G D M N Samaradiwakara[1] and Chandra Gunawardena[2]

[1]University of Sri Jayewardenepura, Sri Lanka
mnsamara@sjp.ac.lk
[2] Open University of Sri Lanka, Sri Lanka
ggunawardena@hotmail.com

Abstract

ICT has fast become a crucial part of our global society and it is dramatically transforming the world, facilitating innovation and increasingly, connecting people and communities, and improving standards of living and opportunities across the globe enabling the compression of time and space. This phase caused for a paradigm shift in higher education in Sri Lanka in capturing ICT in a large scale in creating a technologically sound graduates who can effectively face the challenges in this rapidly changing job market demands with technological advancement. With those implementations, Sri Lankan higher education institutions now rely mainly on computers and the Internet for all aspects of their activities: administration, teaching, learning and research. Further, conventional universities have made the highest investment in ICT infrastructure.

Moreover, higher educational institutions increasingly rely on ICT to develop their students' skills as there is an immense growth in the use of computers and the Internet. However, literature reveals that ICT adoption has not taken place among Sri Lankan university students to achieve its best use. Employers expect graduates to be "ICT fluent" and to continue trend to have more opportunities in the job market. Therefore, it seems a less demand for Sri Lankan graduates in the job market. These circumstances constitute why undergraduates do not use ICTs up to the desired level even under a regular improvement of ICT facilities in universities. This study aims to explore the present situation regarding ICT facilitation in universities and the views of the

university and job market personnel necessity regarding the ICT skills for the job market, factors affecting the use of ICT and strategies to promote using ICT among the students in universities.

The study followed the phenomenological approach of qualitative paradigm through semi structured interviews and focus group discussions. Altogether 24 semi structured interviews and focus group discussions were conducted. Nine (9) interviews were conducted with ICT coordinating lecturers who were in charge of ICT activities in the Faculties of Arts, Science/Applied Science and Management, five (5) interviews with ICT instructors and with one Librarian (1) from the University of Colombo, the University of Sri Jayewardenepura, the University of Ruhuna and the South Eastern University of Sri Lanka. Three (3) focus group discussions were conducted with undergraduate students and each group consisted of more than ten students from Arts, Science/Applied Science and Management Faculties from selected universities. Six (6) interviews were conducted with employers who are engaged in recruitment of employees for jobs in leading fields in Sri Lanka such as Aitken Spence Company, Ministry of Public Administration, Hirdaramani Garments Industry, Ceylon Electricity Board, People's Bank and Sampath Bank. The data collected were analyzed using thematic content analytical techniques.

The majority of the participants had considerable working experience and experience with ICT. Moreover, most of them had at least a Bachelor's Degree level education. Results revealed that universities had made efforts to produce ICT literate graduates who are able to create a global demand for their products by enhancing their facilities, resources and more ICT courses and students are also immersed in this ICT environment in their faculties at respective universities. According to the views of university community and the employers, the basic ICT is an essential component for today's job market and advanced ICT skills attract higher positions. It was found that Word, Excel, Power Point, e-mail and Internet searching and its applications are the essential basic ICT tools for fresh graduates. Moreover, it was revealed that even though, most of the students have identified this necessity; there are some who do not accept ICT as an essential element. On the

other hand, job market employers seek ICT knowledgeable employees. They further emphasize on the job market demand with ICT and believe that a graduate can easily capture a highest position with advanced ICT skills. Ease related to ICT, availability of more infrastructure facilities, community to which students belong, prior ICT experience, gender, subject streams, the university attached and the lecturers' beliefs in students' use of ICT were the main factors identified for using ICT in universities. An interesting feature of the perceptions of the interviewees was that though all of them have experienced individual differences in the performance on ICT of the students/graduates, exact reasons could not be identified by all of them. They believe that it might be due to the students'/graduates' attitudes and the self-efficacy towards the work and ICT. The strategies suggested by the respondents were to encourage undergraduates to use ICT in universities, to enhance the ICT environment of universities including infrastructure in the universities with less facilities, staff, and courses, to promote ICT based education, and to form strategic plans to encourage students to make the most use of ICT in universities. Most commonly, the employers reported that even though the students were knowledgeable in using ICT they are reluctant to use their knowledge at their work places. Some private sector employers claimed that they prefer if fresh graduates would be able to use e-mail and social media such as Skype and Facebook. Finally, a novel view emerged through the perceptions of employers. They believe that the students can build up a self-demand at the job market by improving their individual use of ICT during the undergraduate period. It is recommended that the strategies brought up the interviewees could be implemented at university level to improve the ICT education.