

# TRAINING REQUIREMENTS EVALUATION AND USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN NATIONAL COLLEGES OF EDUCATION IN SRI LANKA

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## ABSTRACT

The main aim of this research is to evaluate the training Requirements that would enable not only lead to prosperous integration of ICT skills into teacher edification curriculum in Sri Lanka, but additionally to sustained Use of ICT resources. The research attempts to investigate the fissure between the idyllic and the condition on the ground. An amalgamation of both qualitative and quantitative methodologies was exploited to get the preminent out of respective designs. Therefore, the research employed the utilization of questionnaires from which quantifiable data was engendered, whilst treasured sentiments, involvements, perceptions and feelings were apprehended utilizing interviews. Policy documents and syllabuses were analyzed to understand the background in which colleges executed their ICT conclusions, and this furthermore permitted the researchers to triangulate by cross checking the sources against each other to ascertain reliability. Findings exposed that whilst lecturers are indeed employing ICT skills and resources in their edification, they are debilitated by insufficient training. Majority of lecturers received ICT training on start of the college academic career and none thereafter; hence there is an absence of Continuous Professional Development. (CPD) The research furthermore recognizes amongst other things obstructions that are operational in contradiction of full ICT amalgamation into the teacher inculcation curriculum and these include access to ICT resources, technical quandaries associated with ICT use such as reduced internet connectivity and absence of adequate training programmes. Among Numerous commendations that there is desideratum for a well thought out training programme that would ascertain affluence and sustainability of ICT amalgamation into college syllabi. Training should be a component of CPD and should be central to the prosperity of ICT integration. Other recommendations advanced include the desideratum for standards that guide the implementation of ICT syllabi to ascertain a good product in the form of an edifier graduate, that college administrators need to invest more human and monetary capitals on ICT amalgamation, and finally that the edification of ICT skills Requisites to be decentralised from the IT Divisions in colleges to subject areas so that subject categorical ICT skills are developed and subject lecturers are coerced to develop their own ICT skills.

**Key words:** ICT, Professional Development, Education

## 1. INTRODUCTION

We are breathing in a continuously progressing digital biosphere. ICT has an influence on approximately each and every characteristic of our lives - from working to socializing, learning to playing. The digital age has transformed the way adolescents interconnect, network, try to find help, access and utilize information and study. As technology becomes more and more embedded in our culture, teachers must find new ways of thinking about how to use ICT so that it is at the center of edifying and learning - not using computers to do the identical things more efficiently, but altering the procedure of learning through digital media itself.

Like many other educational systems, the world over, Sri Lanka is now under increasing pressure

to use and impart ICT skills to students that are relevant for the digital age. For teacher education the benefits of using ICTs in learning can only be achieved if both trainee and employed teachers are equipped with relevant pedagogies and skills during training.

Against this background, the Government of Sri Lanka requested the support of the Asian Development Bank (ADB) to modernize secondary education. at the Government's request, ADB designed the Secondary Education Modernization Project.1[1] . The stakeholders in the Project were (i) the 2,300 secondary schools, including the principals, teachers, students and parents; (ii) zonal and provincial education authorities; and (iii) MOE New subjects developed by NIE through the Project include general information technology (GIT) for

advanced-level grades, which started in 2004, and information technology (IT) for ordinary-level grades, which was introduced in January 2006. NIE developed detailed syllabi, teacher guides, CD-ROMs, and conducted teacher training programs on IT and GIT. Multimedia units (MMUs) were included in the project design to modernize teaching. Classrooms in 2,169 schools (against an appraisal target of 2,500) were converted to MMUs. Schools were expected to provide a room, furniture and a teacher. Finding a teacher for this task was a major problem observed when implementing this project. Also The Project included provision of computer learning centers (CLCs) in 800 schools—a target that was later revised upward to 1,000 schools—to develop computer literacy and support computer-assisted learning (CAL) in core subjects. In total, 1,006 schools received (i) civil works to convert existing classrooms to CLCs; and (ii) furniture, air conditioners and 15–25 computers, depending on the total n number of students enrolled.

Even this project was completed the ICT literacy rate and User of ICT in class rooms are very low in Sri Lankan schools. [2]. This creates vacuum for the training requirements evaluation and develop a program that has more ICT Components.

## 1.2 Objectives of the Study

The objectives of the study were to:

- i. Assess how ICTs were being utilized in the edification and cognition process in National Colleges of Education.
- ii. Recognize ICT skills and competencies of lecturers in National Colleges of Education.
- iii. Evaluate the skills and competencies that lecturers need for the use of ICTs in National Colleges of Education.
- iv. Measure the extent which ICT skills developed in teacher trainees are relevant to the subject specific skills needed in schools.
- v. Come up with a framework for the training and use of ICT in National Colleges of Education.

## 2. METHODOLOGY

### 2.1. Population and Sampling

This study was carried out in the three National Colleges of Education in Sri Lanka and the target population included lecturers and college IT unit members. Its scope centered on a skills audit of college lecturers against ideal skills needed, hence it can be seen as a Requirements Evaluation of skills that are needed for using ICTs in education. The emphasis was on ICTs and their effective value in teaching and learning in different subject areas in all the three National Colleges of Education.

The research design that was used in this study was the case study, which is an empirical inquiry that investigates a contemporary phenomenon within its real-life context especially when the boundaries between phenomenon and background are not undoubtedly evident; but allowing multiple sources of evidence to be used [3].

Purposive sampling was utilized for IT unit personnel in all the three colleges while the cluster sampling technique was utilized for edifier educators. Because there are several departments in the National Colleges of Edification, it consequently became ostensible to utilize this method. And each department composed a cluster as these were mutually independent with each other; the persons inside each department fitted to dissimilar subject capacities (units).

Data was accumulated through document analysis, questionnaires and interviews. Documents such as the national IT policy, colleges and school's ICT syllabuses and the National Institute of Education (NIE) documents were analyzed.

The data amassed through questionnaires was analyzed utilizing the Statistical Package for Convivial Sciences (SPSS) software. Qualitative data from both consultations and feedback forms was subjected to explanatory, structural and contemplative investigation.

## 3. RESULTS

### 3.1. ICT Skills and Competencies

Results denote that 79% of respondents did designate receiving some form of ICT training. Of those who received such training, 41% received during pre-accommodation training

while 23.5% as in accommodation. The remnant got it elsewhere. IT managers revealed that fundamental in-accommodation ICT skills training in word processing, spreadsheets, internet use, and network resources for incipient lecturers were done in all the three colleges. Albeit 82% of respondents denoted receiving rudimental ICT skills in office applications, resource implements and communication implements, it appears as if the training is not supportable subsequently respondents showed lack of Continuous Professional Development (CPD) in ICT.

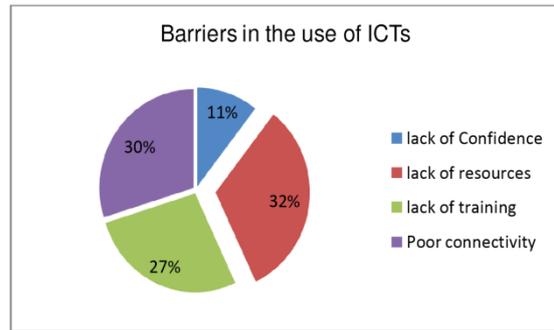
### 3.2 ICT Integration into National Colleges of Education

Responding the research query “how best can the development and utilization of ICTs be implemented in National Colleges of Education?” most respondents felt that fundamental ICT skills should not only be integrated into the pedagogia edification curriculum, but that there is need to include subject concrete ICT programmes that will avail groom better subject edifiers. Good examples of such programmes include MYOB for Accounting, GIS for Geography, Adobe photo shop or Illustrator for Art etc. This calls for devolution of ICT management from a centralized ICT Unit to departmental level, where ICT integration becomes pertinent.

Majority of respondents (82%) withal argued that standards guiding the implementation of ICTs in teacher inculcation are needed. Reasons cited included the desideratum for uniformity in the quality of teacher inculcation such that all edifiers engendered from any of the three National Colleges of Education have the ICT skills that would make them functionally constant in the field.

Grippingly, numerous causes were recognized as barriers to the full integration and use of ICT resources by college lecturers. (See Fig 1) Firstly, it was established that at one of the colleges, resources were not only inadequate, but there was also a quandary of access to the little available ICT facilities, yet in the other two colleges there were inadequate but accessible.

Most respondents (62%) concurred that adept educators were by far the most paramount condition since all other factor depend on the desideratum for adroit personnel, hence the desideratum to train pedagogia educators and withal have a consequential CPD.



**Figure 1: Factors identified as barriers to the full integration and use of ICT resources**

Lastly, analysis of the sundry college subject syllabuses including the current ICT syllabuses divulges a discrepancy between ICT and other subjects. Indeed, ICT is an accommodation subject that develops germane research, organizational, communication and presentation skills to all students. However, the ICT syllabus has general topics that are not linked to any edification subjects. The ICT syllabus is a standalone hence has no evidence of a purposeful link with other subject syllabi. Sri Lankan Ministry of Inculcation policy falls short in prescribing integration of ICT into edifying subjects.

### 4. CONCLUSION

Current study wanted to fill the vacuum amid the ideal ICT skills requisites at edifier in National Colleges of Edification and the state on the ground. The study was directed by Wang's (2008) generic model on ICT integration in which pedagogy; gregarious interaction and technology are optically discerned as critical components of a technology-enhanced education atmosphere. The investigation gathered valuable opinions, experiences, insights and feelings of those participants involved in pedagogia edification. The research revealed that whilst lecturers are indeed utilizing sundry ICTs in their edification, they are incapacitated by inadequate training and a lack of Perpetual Professional Development. (CPD) The research additionally identified among other things barriers that are working against full ICT integration into the pedagogia inculcation curriculum and these include access to ICT resources, technical quandaries associated with ICT use such as deprived internet connectivity and absence of training programmes. However, albeit several recommendations were given, their prosperous implementation will depend on depend on the commitment of all stakeholders involved with pedagogia inculcation as well as with the

competency of educators to be able to acclimate to the ever transmuting ICT environment.

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