

## THE IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON SECONDARY EDUCATION IN SRI LANKA (A SELECTED SAMPLE DRAWN FROM SCHOOLS IN KANDY DISTRICT)

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### Introduction

With the world moving into the new millennium need for a revision of the school curriculum towards the vocational sphere has been recognized. The subject of General Information Technology (GIT) was introduced for the grade 12 students in the year 2002 (<http://www.nie.sch.lk>) and Information and Communication Technology for the grade 10 in the year 2005 as a subject by the Ministry of Education in Sri Lanka. This subject is presently spreading rapidly among the secondary schools of Sri Lanka.

There are three the approaches of introducing ICT into the school curriculum. Namely, IT subject approach, IT cross curricular approach and Hybrid approach. (Crawford: 1997) Among the above three models IT subject approach is used in Sri Lankan School Curriculum, at present.

This research examines how introduction of this subject into school curriculum affects the teachers and students in the teaching learning process.

### Specific Objectives

1. To obtain the views regarding the experiences gained by the teachers who teach ICT as a subject in the revised curriculum.
2. To understand the problems faced by the relevant teachers of this subject in its implementation.
3. To ascertain what skills acquired by the students through this subject

### Methodology

Qualitative and Quantitative methodologies were utilized for this study. Three educational zones from the Kandy District were selected randomly. Among these three zones 25 schools were selected. 80 teachers from those who teach ICT as a subject were selected as a teacher sample. In addition, 200 students, who study ICT as a subject, were selected as the student sample.

Data was gathered through interviews, observations, and questionnaires. Two separate questionnaires were given, one to the teachers and the other to the students. The teachers were questioned on teacher attitudes towards the subject, experience gained, teaching methodologies and the problems faced when teaching the subject. The questionnaire to the students collected information on attitudes towards the subject, learning methodologies, skills

obtained and future expectations of learning ICT.

Data taken from teachers' questionnaire and students' questionnaire were analyzed using SPSS.

### **Results**

According to the study, 98% of the teachers who teach ICT have not been recruited for this subject but from Mathematics, Science, English and other subjects. The majority of the teachers in the sample stated that they are interested in teaching ICT but they face the following problems when teaching the subject. Lack of physical resources, unfamiliar with the medium of instruction –English, insufficient knowledge of the subject, inadequate training obtained and administrative problems are some of them. Eighty percent of the teachers expressed a great interest in teaching the practical component of the subject rather than the theory. About ninety percent of the teachers viewed that training programs on teaching methodologies of the subject to be updated continuously, as this is a field which develops each hour of the day. Seventy percent of the teachers are of the view that the curriculum of the subject should be amended.

In the case of students they expressed a great interest in studying this subject, but their biggest problem was the lack of adequate physical resources. Sixty percent of the students also stated that teachers tend to cover application programmes such as office package instead of covering programming components in the syllabus.

The computers available in the computer labs are mostly obsolete. Further, due to the insufficient number of computers, more than two students are required to use one computer at a time. The majority of students were of the view that even though the students are very interested in the subject (ICT) sufficient time has not been allocated in their time tables for this particular subject. Students are of the view that more job opportunities could be available to those with ICT qualifications.

### **Conclusions**

This subject was introduced without providing adequate human and physical resources to schools. Therefore, students have encountered a lot of difficulties in the learning process. As there was a tendency of teaching theoretical content in the classroom, students were unable to fulfill the vocational expectations too.

Majority of the teachers who teach ICT do not have adequate knowledge to teach the subject. Short term courses designed by the Ministry of Education do not meet the requirements of the teachers. The time allocated in the timetable to provide necessary practical knowledge is insufficient.

Therefore, the students face difficulties in obtaining proper ICT skills in order to enter the job market and find employment in the business world.

## References

Crawford R. (1997) Managing Information Technology in the secondary school, London, Routledge.  
General Information Technology

(ICT), Grade 12 Syllabus and Instructional Manual, National Institute of Education, Sri Lanka. (<http://www.nie.sch.lk/ebook/e12sy141.pdf>) accessed on 1<sup>st</sup> November 2002.