How to Overcome Challenges Caused by Lack of ICT Resources in Sri Lankan Schools?

T. M. S. S. K. Y. Ekanayake
Department of Education, University of Peradeniya
syatigammana@yahoo.com

It is well recognised that education can aid development of a country by creating a workforce that is more productive. However, without the availability of classroom resources, teachers cannot provide quality education. It is now being recognised that Information Communication Technologies *(ICT)* could support quality-education in many ways. Nevertheless, *ICT* resources are limited in many schools. For example, computer laboratories are available in only 40% of schools and only 12% of schools have the internet connectivity. Some of these computer laboratories are now becoming out of date. Moreover, it is well known that the remote schools always have less *ICT* resources and the low levels of electrification. Therefore, frequent power outages in many places regularly hinder the effective use of *ICT* in teaching and learning. The possibility of using mobile phones to carry out most of the functions that computers could do make them an ideal solution for education. The biggest advantage in using mobile phones for learning activities in Sri Lanka is the comparable low cost of mobile phones. Further, mobile phones do not suffer from power outages and can be used in areas where there is no electricity.

The work presented in this paper first reviews the literature to discuss the potential of mobile phones for teaching and learning. Then the factors that supported their use in Sri Lankan schools were discussed by carrying out a survey among group of science teachers and a market survey in Sri Lanka. Finally, four sample lessons were developed with a group of teachers and implemented in four different classroom settings. The survey questionnaire data were analysed descriptively using the SPSS statistical package. During the lesson development and implementations, data were collected using observation via video, audio recording and written materials (teachers' notes on how they used mobile phones during lesson planning stage, the participant observer's field-notes and students' comments in post-lesson interviews). These data were transcribed; translated, coded and emerging themes were abstracted using Thematic Network Analysis. From the findings it was recognised that the mobile phone

is an ideal alternative for computer, video camera and still-camera and they could support learning by bridging the outside world with classroom and enhancing the interactions. However, the main limitation of this study was that the findings are based only on four lessons. Thus, further studies should be carried out with a greater number of participants and in different contexts before making a broad generalisation of the above claim.