THE CONTRIBUTION OF INTERNATIONAL COMPUTER DRIVING LICENSE (ICDL) TRAINING OF SECONDARY SCHOOL TEACHERS TO CLASSROOM TEACHING LEARNING

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INTRODUCTION

Before the introduction of Information and Communication Technology (ICT) there were no remarkable changes in the teaching-learning process. Just as much as there were revolutionary changes brought about by modern technology in areas such as economics, politics, cultivation, and the arts, the impact of ICT on education has been equally profound and of historic significance. Naturally, ICT has offered teachers and students a giant leap forward that has been unequalled by any other phenomenon, barring the printing press. ICT is seen as a way to promote educational change and to improve the skills of learners and prepare them for the global economy and information society (Butcher, 2011). It makes education more child-centered by providing many alternative paths, with a variety of resources, so that learning can take place in accordance to the learner's study performance (Abbas and Ayo, 2013). The fact remains that ICT involves a combination of a range of continuously evolving technologies, such as desktop, notebook, and handheld computers, digital cameras, local area networking, Bluetooth, the internet, cloud computing, the World Wide Web, streaming, and DVDs. Of these, the computer is the most outstanding, and it is of vital relevance to every field of education. Computer applications in education provide student-centered learning instead of teacher-centered learning, and learning becomes based on the constructivist approach, which creates motivation in the teaching-learning process with the help of computer technology (Forcier, 1996).

One approach to ensure that teachers have the necessary fundamental skills to support ICT instruction in primary and secondary schools is to require International Computer Driving License (ICDL) training and certification. The Ministry of Education in Sri Lanka urges all teachers to receive ICDL training, regardless of the subject they teach. The ICDL, which is known as the European Computer Driving License (ECDL) within the European Union, is a certification that attests to basic proficiency in the use of certain types of software and/or computer systems (Csapo, 2002). The ICDL/ECDL is the world's largest computer certification programme, with more than 9 million candidates applying for certification in 148 countries (ECDL Foundation, 2009). Since the Ministry of Education recognizes the need to ensure that teachers have fundamental ICT skills in order to facilitate integrating ICT into classroom teaching, it considers ICDL training as an effective in-service training approach that allows teachers to acquire fundamental ICT skills, as this program aims to improve teachers' ICT proficiency at three levels: ICT skills, pedagogical skills, and curriculum training. Therefore, the main purpose of this study is to evaluate how ICDL training contributes to classroom teaching and learning.

Objectives

01. To evaluate the contribution of ICDL training to use ICT in the teaching learning process.
02. To assess the usage of computer technology by those who have undergone ICDL training.

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03. To identify the ICT skills, which are gained through ICDL training, that are the most likely to be transferred to the classroom setting.
04. To find out for which purposes computer technology is used by teachers after ICDL training.
05. To find out how often teachers implement computer-based activities in the target class after ICDL training.

METHODOLOGY

The study followed quantitative and qualitative research techniques, which included questionnaires, observations, and interviews. Quantitative techniques, such as the use of percentages, tables, and charts, and qualitative techniques were used for data analysis. A survey was the basic research method used in this study. 848 secondary school teachers have qualified in ICDL training in the Badulla district between 2008 and 2013 under EKSP project. From these 848 secondary school teachers in the Badulla district, a sample of 85 teachers were selected, which represented 10% each of Sinhala-, Tamil-, and English_medium teachers. 45 teachers out of 465 Sinhala-medium teachers, 25 teachers out of 241 Tamil-medium teachers, and 15 teachers out of 142 English-medium teachers, were randomly selected. The total sample consisted of 85 secondary school teachers who followed the ICDL training under the EKSP project, so that it would be large enough to ensure the validity of results and small enough for the study to be completed within the given period of time.

RESULTS AND DISCUSSIONS

The majority of the ICDL participants (69%) stated that the ICDL training increased their understanding of the way in which ICT can be integrated into the classroom, while 60% of the participants stated that they felt more confident about integrating ICT into their classroom teaching after completing the ICDL training and certification process. While 61% of the participants stated that the ICDL training they received was sufficient to use computers in teaching, 56% of the participants stated that their teaching is more student-centered after ICDL training. However, only 51% of participants stated that they could transfer the skills that were provided in the ICDL training to the classroom, while 54% of participants stated that the ICDL training received was sufficient to prepare learning materials. On the other hand, a large number of the participants (75%) stated that they needed more knowledge and practice on computer technology to use computers effectively in the teaching-learning process. Only 49% of participants stated that the ICDL training taught them to use various ICT software applications to solve future education or research problems. At the interview, 65% of the participants stateed that their expectation was to pass the ICDL certification exam and they felt that the short period of time given to learn ICDL was insufficient. They further stated that they obtained some skills only to pass the examination within a short period of time.

A majority of participants (59%) stated that they were using computer technology in the teaching-learning process, while 41% of teachers do not use computer technology in the teaching-learning process. Several reasons were given by the teachers for not using computer technology in the teaching learning process, which included the inadequacy of computer facilities in the school, problems of paying electricity bills, a lack of electricity facilities, difficulty of covering the the workload in syllabi, and a dislike of students towards the use of ICT in the teaching process.
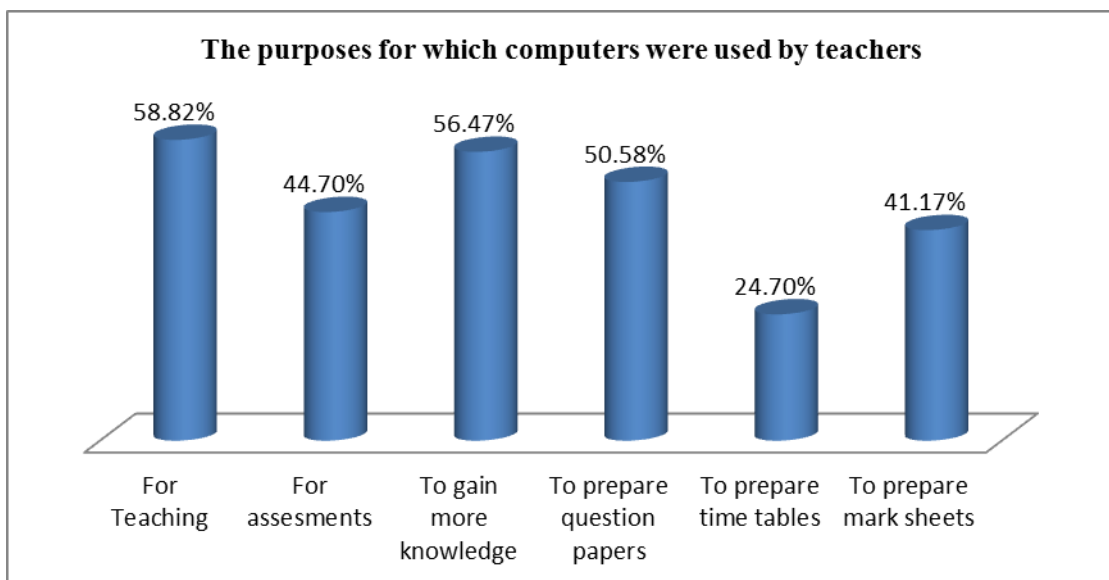
One interviewee noted the difficulties as follows:

> "When I was teaching at (x) school with computer facilities, I was able to use computer technology in the teaching-learning process, but after my transfer to this school (y), I have been unable to use

computer technology because of the inadequacy of computer facilities.

However, most of the teachers who do not use computers have given first preference to difficulties in covering the syllabi and the inadequacy of computer facilities. A large number of ICDL participants (86%) stated that they would like to transfer presentation (MS PowerPoint) skills, while 61% of ICDL participants stated that they would like to transfer Word-processing skills. Only 52% of participants stated that they would like to transfer the internet skills that were gained through the ICDL training to the classroom setting. 22% of participants stated that they would like to transfer database skills, while 33% of participants indicated that they would like to transfer the spreadsheets skills that were gained through the ICDL training. The collated data indicates that the majority of teachers would like to transfer the presentation skills they gained through the ICDL training to the classroom setting.

Many teachers (59%) in the sample indicated that they used computer technology directly in their teaching. Only 45% of teachers stated that they used computer technology for assessment purposes. 56% of the teachers stated that they use computer technology to gain more knowledge, while 51% stated they used these skills to prepare question papers.

The purposes for which computers were used by teachers

For Teaching	For assesments	To gain more knowledge	To prepare question papers	To prepare time tables	To prepare mark sheets
58.82%	44.70%	56.47%	50.58%	24.70%	41.17%

The collated data indicated that, in terms of internet browsing and usage on a daily basis, only 22% of teachers used it to collect information to prepare lessons, while 8% used it to collect learning material, 11% used it to prepare presentations for lessons, 7% used it to prepare exercises and tasks for students, 7% used it to browse material on the school's website, and 15% used it to search for online professional development opportunities.

CONCLUSIONS AND RECOMMENDATIONS

The findings indicate that even though ICDL training has increased teachers' understanding of the importance of ICT in the educational system and the usefulness of the ICDL training, a majority of teachers disagreed that the ICDL training had given them the full range of capabilities of the software applications that were covered by the ICDL certification. A majority of the teachers felt that the ICDL training they had received had increased their understanding of the way in which ICT could be integrated into the classroom and that it had increased their confidence in integrating ICT into their classroom teaching, but only a moderate number of teachers stated that the ICDL training provided them with skills that they can transfer to the classroom that enable them to prepare computer-based learning materials. Only a minority of the teachers could use various ICT software applications to solve future education problems and a large number of teachers still needed more computer training

courses to use computer technology in the classroom and to solve future education and research problems. The findings indicated that only a very low number of teachers used computer technology every day for internet browsing to collect information to prepare lessons and learning material, to prepare presentations for lessons and exercises for students, to download/upload/browse material from the school's website, to use as a virtual learning environment/learning platform, and to search for online professional development opportunities.

This study reccomends the following:

01. Plan to provide multiple incentives, such as reducing workloads, recognizing and rewarding in faculty evaluations, increasing research allocations to encourage the use of ICT in teaching, and compensating those who provide educational/technological assistance to others.

02. Guide teachers who followed ICDL training to prepare lessons, ensuring the effective management of time.

03. Make arrangements for zonal directors who inspect teachers to inspect those who had followed ICDL to note whether they use what they had learnt, provided they are given sufficient equipment.

04. Consider the ICDL training as one phase toward ICT literacy in Sri Lankan schools.

05. Enroll teachers completing this program in more courses first or more specific courses that are aimed at introducing the same into classrooms. (For eg, only some teachers were trained in International Pedagogical ICT License (IPICT) after the ICDL training, but most teachers are not trained in it).

06. Maintain continuous training for a school-centered approach to handle fast-changing computer technology, which would maintain the learning process beyond short courses, and its extension into regular school and classroom life is needed.

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