Abstract

**The Teaching of Information and Communication Technology (ICT)
Component In Post Graduate Teacher Education Programme**

Instructional Technology places the importance of the process of designing, developing, implementing, managing and evaluating instructions to promote optimum learning. Nevertheless, not all of these professional activities can ensure the achievement of even planned instructional objectives. Hence, a study in the attempt to understand the delivery processes in the teaching of Information dan Communication Technology (ICT) components to teacher trainees is highly needed.

The aims of this research is to study the conditions of instruction, and the utilization of instructional strategies in the teaching of ICT components of Post Graduates Teacher Education Program. The Resource Management syllabus which lists topics of ICT components were used to determine the conditions of instructions under study and the use of the teaching strategies by teacher educators. The study also investigates the learning outcomes experienced by the teacher trainees after undergoing the trainers' instructions using specific strategies.

The Instructional Design Theory was employed to underpin the theoretical framework of the study, and the qualitative case study design was used as the research methodology. The selection for the research site was based on the typical characteristics of a teacher education training institute which conducts Post Graduate Teacher Education Programme (KPLI) and implements the ICT syllabus towards the acquisition of ICT knowledge and skills among teacher trainees.

Data were collected using four research techniques namely; observation on the instructional processes using the audio-visual recorder, interviews, document analysis and field notes. Video recorder was used in the attempt to gather data regarding the conditions and instructional strategies selected by teacher trainers during the instructional process. Interviews with four research participants were conducted in order to gather further information with regards to the use of instructional strategies, and ICT learning outcomes. Interviews with the teacher trainees were also conducted in the attempt to get more information regarding the teaching conditions and learning outcomes.

The finding of the research shows that there are five instructional conditions that influensed the selection and utilization of instructional strategies in the teaching of ICT component, namely; the syllabus, students criteria, the performance of the ICT infrastructures, managerial supports, and constrains. These instructional conditions had influenced teacher trainer in the utilization of pre instructional strategy, expository strategy, practice strategy, problems orientation strategy, dual language strategy, monitoring strategy, and humane development strategy. The challenging strategies such as the Complex-dynamic strategy was hardly utilised to promote self-regulated learning.

The research finding also shows that the instructional outcomes were centered on the aquisition of ICT verbal information and intellectual skill, software and hardware applications skills, problem solving skills, and creative media productions skills. Aquisition of positive attitudes towards the ICT in teacher trainees were observed.

The instructional conditions were summariized by the PDPL Model (Internal and External Insturctional Environment Model) that is important for planning and designing of instructions. The complex-cognitive strategy should be promoted to encourage the self-regulated learning that helps teacher trainees towards the integration of ICT in teaching and learning.

Hence, it is proposed that the Resource Management syllabus should be reviewed for further improvement of the syllabus. It is proposed that the teaching of ICT component should be conducted in instructional environment that are technology rich, with infrastructures and sofywares towards the web-based instructions and mobile-learnig. The instruction of ICT component should make the transformed towards the utilization of more challenging strategies in order to produce novice teachers who acquire the Technological Pedagogical Content Knowledge (TPACK).