Cloud Computing Technology Model for Teaching and Learning of ICT

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 143

Number 5

Year of Publication: 2016

Authors:

Peter Appiahene, Bryce Yaw Kesse, Christopher Bombie Ninfaakang

Abstract

Information and communication Technology (ICT) is basically making use of ICT tool to store and retrieves information. It plays an important role in growing and maintaining country’s economic growth. Currently, the old system of classroom teaching and learning of ICT is changing and students in Ghana are becoming more technology oriented. Therefore, in this changing learning environment, it’s important one thinks of the latest technologies to incorporate in the teaching and learning of ICT. One of the latest technologies prevailing nowadays is cloud computing. By sharing IT services as platform-based, software-based and infrastructure-based in the cloud, educational institutions in Ghana can now out-source non-core services and better concentrate on offering students, teachers, faculty and other staff the essential tools to help them succeed.

This paper looks at how Cloud Computing can be applied in the study of ICT and also focuses on the role of cloud computing on the study of ICT in the Ghanaian educational system. It also
looks at how one can provide quality and affordable ICT education by using cloud computing technology. A study of the previous system without cloud computing technology was considered and a new model of teaching ICT with help of cloud computing technology has been proposed.

An extensive review and analysis of the existing literature and models were considered and a new model was designed and piloted. Our research shows that for the past decades, most public and private educational institutions in Ghana are making grant strides in the development of curriculum for teaching ICT. The model designed was found to be effective and useful for the teaching and learning of ICT and its related subjects. Our research also shows that a good number of tertiary institution both private and public now offer various IT and its related degree and diploma programs. The Ghana Education Service now runs ICT at basic and second cycle levels as subjects.

References


Index Terms

Computer Science

Information Sciences

Keywords

Information and Communication Technology Education, Cloud Computing Technology, SaaS, PaaS, IaaS, CCT4ICT.