

IMPLEMENTING A SOCIAL MEDIA-BASED E-LEARNING SYSTEM

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CERTIFICATION

It is hereby certified that this dissertation written by SAMUEL AKINWALE MICHAEL was supervised by me and submitted to the Department of Computer and Information Sciences, College of Science and Technology, Covenant University, Ota, Nigeria, for the award of M.Sc. (Computer Science)

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ABSTRACT

A Social network is a web-based platform made up of individuals or groups called nodes, which are connected by area of interest or specialization while e-Learning is the delivery of learning through information and communication technologies. With the surge in the popularity and patronage of social network among young adults, most of which are students of Colleges and Universities, the integration of e-Learning into social network will be of great benefit to learning by reducing the usage gap between social network sites and e-Learning systems.

This study was embarked upon to see the viability of developing a platform through which individuals can socialize and learn; connect and collaborate. An extensive study of the various features of both social network and e-learning was done, resulting in the development of a social media-based e-Learning System that has the major features of social network and e-Learning such as online profile, chat, forum, groups, web conference and blackboard. An open source license software, Wordpress, was used to develop the system which is hosted on a Linux server with MySQL serving as the database manager.

Questionnaires were administered to individuals with varying areas of interest and usability test was carried out based on responses from the individual testers of the system. The independent variables considered against the dependent variable, Usability, were Attractiveness, Simplicity, Browserbility, Navigability, Completeness and Interactivity. A regression analysis was carried out on the data obtained from response to the questionnaires using SPSS 22. The analysis showed that all six variables added statistically significantly to the prediction, $p < .05$ and determined 62.6% of variability in the dependent variable. This indicate that the system is usable.