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Introducing U-Learning with E-Learning into the Teaching and Learning Environment of FET Colleges

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Abstract

In recent years, the educational system has undergone changes and experienced challenges due to the introduction of Information Communication Technology (ICT) in teaching and learning methodology. Traditional methods of learning are gradually giving way to electronic learning (e-learning). The concept of e-learning has been with us in South Africa for some time now, but it has not yet been successfully implemented due largely to the problem of low bandwidth in terms of internet connectivity.

Keywords: e-learning, u-learning, South Korea, South Africa

Introduction

Many nations, particularly South Korea is currently in the lead in the adoption of U-learning, which is considered a better approach to learning because it allows for the integration of e-learning with mobile learning (u-learning=e-learning + mobile learning). In terms of infrastructural development, it is cheaper to engage in u-learning than e-learning. We cannot afford at this stage of development continue to lay cables to implement e-learning, followed by delays, when a new approach to the use of wireless technology is already with us.

U-learning stands for Ubiquitous learning and is a new paradigm, which ideally allows learning to take place anywhere, at any time and with anyone through the use of wireless devices like smartphones, tablets and iPads etc. Mark Weiser (1993), first proposed ubiquitous computing technology, which refers to the use of devices such as personal digital devices (PDAs), cell phones and portable computers in a physical world of learning.

E-Learning like u-learning has the potential to enhance the method of teaching and learning, but, there are certain barriers that make u-learning more satisfactory and these are discussed as follows:

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a) In u-learning, students are often engaging with mobile devices outside of the classroom. They can easily be reached because they are totally immersed in a learning process.

b) It encourages/facilitates individualised methods of teaching that can help students to learn at a faster rate,

- more effective and with greater understanding.
- c) The technology provides real-time and all round access to information because it can be applied immediately and at any time.
- d) It prepares and encourages students to become life-long learners, in that they are able to use multiple devices to access and search for information and knowledge while developing their search skills.
- e) It creates a free interactive environment where they can interact with each other and with instructors and
- f) Learners are able to access or receive information with their portable devices at any time and at any place, about class or school news in real time.

Comparison of U-Learning with E-Learning Systems

Table 1 depicts a comparison of u-learning with e-learning, adopted from the Pacific Journal of Science and Technology (<http://www.akamajuniversity.us/PJST.htm>).

Table 1. Comparison of U-learning and E-learning

U-learning System	E-learning System
The system can sense the learner’s environment. It is context aware.	The system cannot sense the learner environment. It is not context aware.
Learners can never lose their work. There is continuity.	Learners can lose their work. There is no continuity.
Learners have access to their information from anywhere.	Learners have access to their information in specific locations.
Learners interact with experts and others	Learners’ interaction is limited.
Learners get the right to internet at the right time	Learners get the available information.

Conclusion

The idea of introducing ubiquitous technology into the e-learning environment of FET Colleges is not that it should replace e-learning, but that it could be seen as an extension to e-learning. The reason is that our learners already own u-learning devices such as smart phones. They are totally immersed in the use of such devices which have become part of their daily life-style. More than that, u-learning is a learner-centred paradigm, with the aim to achieve learning at the right time and at the right place with right services.

In our effort to embrace u-learning, it may be of interest to know that Umfolozi College is currently taking the bold step to go into partnership with South Korea, with the primary aim of exchanging ICT programmes in the area of infrastructure and human resources. Our association with South Korea is motivated by the fact that they strongly believe that investment in human resources does not only reduce the rate of unemployment but also helps to improve the economic growth of any nation.

References

- Li, L., Zheng et al (2004) “A framework of ubiquitous learning environment” Conference on Computer and Information and Technology (CIT’04). 345-350.
- Lyytinen, K and Yoo, Y. 2002. “Issues and challenges in Ubiquitous computing” Communications of the ACM. 45(12). 62-65.
- Motiwalla, L.F. (2007) “Mobile Learning: A Framework and Evaluation Computers and Education” Vol. 49 (3): 581-596.
- Weiser, M (1993) “Some computer science issues in Ubiquitous computing” Communications of the ACM, 36(7) Verified 1 (2004).

Biography



Joseph A. Okharedia is an IT & Computer Science Lecturer at Umfolozi College - RICHTEK Campus.

Joseph holds a Bsc. (Hons) degree in Geology, PGD (Computer Science), Master’s degree in Computer Science and PGC in Education.

The introduction of e-learning into the teaching and learning environment of our colleges has the potential to enhance the method of teaching and learning; that should be embraced by all institutions of learning. Joseph is of the opinion that while embarking on e-learning, the emphasis should be on U- learning (Ubiquitous learning): a new paradigm, which ideally allows learning to take place anywhere, at any time and by anyone through the use of Mobile devices like smartphones, tablets, iPads etc. Learners already own such devices and they are totally immersed in the use of such devices that have become part of their daily life-style.