Assessing Students' Awareness of the Blended Learning: A case Study of Open University of Tanzania

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Abstract

This paper presents the findings of the study that assessed students' awareness of the Blended Mode of Learning (BML) in ODL context, Open University of Tanzania (OUT) as a case study. Specifically the study assessed the level of students' awareness on BML, examined the usefulness of BML to OUT students and lastly identified challenges facing students in learning through BML. The study was mainly qualitative by nature. The study also employed a phenomenology research design. Data were collected through both telephone and face-to-face interviews. Population of this study involved all postgraduate students from Faculty of Arts and Social Sciences who pursue their studies through BML. Moreover, the study employed a sample of forty (40) continuing postgraduate students. The named sample was collected through convenience and snowball techniques of sampling. In this study, data were analyzed qualitatively by forming themes and sub-themes. The study findings revealed that most of students are not well informed of the concept BML apart from the fact that it is the mode of learning they use in their studies. However, students seem to be well informed of MOODLE as an on-line learning platform of the BML. Students credited positively the usefulness of BML as compared to other learning modes used by OUT. The findings further indicated BML meets students' learning expectations. Moreover, findings revealed a number of challenges impeding the effective use of BML. Finally, the paper concludes that BML is useful as an instructional and learning mode in ODL context.

Key words: Distance learning, Blended Mode of Learning, Online learning, Face to face instruction.

Introduction

The Open University of Tanzania is a public institution mandated to conduct its academic programmes leading to the award of certificates, diplomas, undergraduate and postgraduate qualifications using open and distance learning methods. The main function of OUT as an ODL institution is to provide opportunities for higher education to a broader segment of the population (OUT, 2006). The institution has its headquarter in Dar es Salaam and it operates through a network in all regional centers in Tanzania Mainland and Zanzibar. In fulfilling its instructional role, traditionally, the OUT used print study materials. Later, this went hand in hand with the use of audio-tapes and then, the use of CDs where learners were required to register for courses in a particular academic year. Then, they were given course outlines and reading notes in form of the named technologies.The provision of study materials was accompanied with some days of face-to-face sessions where tutors met students for clarification of difficulty areas, and in the recent years. Kissassi (2013) noted that Students Progressive Portfolio (SPP) has now replaced face-to-face activities. The above named mode of ODL instruction requires the OUT students to study on their own while there is little interaction amongst students and between students with course instructors.

In trying to address this ODL instructional pitfall, in 2015/2016 academic year the OUT particularly the Faculty of Arts and Social Sciences (FASS) devised an innovative mode of instruction to all postgraduate programmes. This involved teaching and learning through Blended Mode (BM) where students learn through e-learning platform called MOODLE (Modular Object-Oriented Dynamic Learning Environment). The adoption and use of MOODLE as a learning system is the result of the university's effort for enhancing the use of ICT in teaching and learning hence replacing traditional mode of instruction (OUT, 2013). This is to say, transformation has been made by improving quality in T/L by blending the learning methods used by the OUT with online learning. The moves towards BML are a global move as most higher education institutions turn to it. This is recognized as one of the greatest trends in education and

training today. This has led to a point that Blended Mode becomes the popular mode for delivery in distance education context (Drossos *et al*. 2006). It has been proved that the use of computers in learning communities enabled learners to engage in shared learning activities (Holmes and Gadner, 2006). With blended mode, the distance between learners and tutors is minimized as it enhances student-tutor interaction and increase students engagement in learning through discussions moderated by tutors and assignments. Hence, BML has the potential to transform higher education (Garrison and Kanuka, 2004 also Haythorthwaite and Andrews, 2011).

In supporting the usefulness of the BML, Skill and Young (2002) thought that the mode is one of the most effective new educational strategies. Therefore, the use of blended mode tries to join the best features of face-to-face T/L with the best features of online T/L, thus optimizing achievements of learning objectives by applying the right learning technologies to match the right person at the right time (Singh and Reed, 2001). The above positive credits and results in the pilot FASS programmes regarding the use of the BML led to OUT in this academic year 2016/2017 to adopt the approach to all of its non-degree, undergraduate and postgraduate academic programmes. Blended Mode of learning has just been introduced in all OUT academic programmes in 2016/2017 academic year. What remains unknown and thus become the motive of this paper is the level of awareness about BML amongst OUT students. Therefore, this study aimed at assessing students' awareness of Blended Mode of Learning (BML) in open and distance learning contexts taking OUT as a case study. Specifically, the study aimed to attain the following objectives:
  (i) To assess the level of students' awareness on BML
  (ii) To examine the usefulness of BML to OUT students
  (iii)To identify challenges students face when using BML

Literature Review
Open and Distance Learning (ODL)
The terms Open Learning and Distance Education refers to methods or approaches that focus to open access to education and training

opportunities whereby learners have flexible learning environments. Learners are free from constraints of time and place (UNESCO, 2002). ODL is a rapidly becoming a preferred mode of education delivery due to advancement of Information Communication Technology (ICT). In 1992, the Parliament of the United Republic of Tanzania endorsed the establishment of the Open University of Tanzania (OUT) which opened the door to higher education through distance education in 1994 (Mnyanyi and Mbwete, 2009). The OUT was established with the aim of increasing access to higher education in Tanzania.

OUT as an ODL institution is freeing learners from the constraints of time and place through flexibility in learning. This has unlocked doors for education opportunities to a number of Tanzanians and non-Tanzanians to have access to higher education. The teaching and learning at OUT as a distance learning institution has transcended technological and media changes from printed, audio tapes, CDs and soft copy materials supported with face to face sessions. The fact that the above generations of instructional media/technologies had inadequately addressed issue of facilitating active interaction and communication amongst OUT students and instructors, OUT introduced Blended Mode of Learning (BML) to bridge distance learning and the increasing revolutions of technology and communication. This is because, what was initially viewed as technological option became viewed as a technology imperative (Holt and Thompson, 1998). Blended Learning is an important building block of new teaching and learning environment that offers students both flexibility and convenience (Al-Saai *et al.*, 2011).

Moreover, communication between teachers and learners is a necessary component in distance education. Therefore, OUT's decision to invent into Blended Mode of Learning (BML) is thought to be a panacea to the long-lived challenges of communication in ODL contexts. Therefore, the Blended Mode of Learning at Open University of Tanzania is expected to improve distance learning by reducing such experienced distance and problems of lack of effective

communication between learners and teachers. Thus, this paper assessed the awareness of BML amongst OUT students.

Blended Learning
Defining BML
There are different sources which have tried to coin the meaning of the concept Blended Mode of Learning (BML) (Singh and Reed, 2001; Driscoll, 2002; Sands, 2002; Rossett, 2002 and Graham, 2006). For instance, Graham (2006) defines Blended Learning as the combination of instructional delivery media. Graham (2005) also defined Blended Learning as the system of learning which combine face-to-face instruction and computer-mediated instruction. Moreover, Bonk and Graham (2006) defined Blended Learning as a combination of face-to-face instructions with online instructions.

BML is also defined as the combination of instructional methods (Discoll, 2002 and Rossett, 2002) and as the combination of online and offline instruction (Sands, 2002; Rooney, 2003). Throne (2003) explained Blended Mode of Learning as the learning that integrates the innovative and technological advances offered through online learning with the interaction and participation offered in the best of traditional learning. Generally, the working definition for this paper is that Blended Mode of Learning (BML) is explained as a system of learning that combines face-to-face instructions with online instructions in teaching and learning.

Rationale of BML at OUT
Graham *et al*. (2005) identified three main reasons for introducing blended learning which are improved pedagogy, increase access and flexibility and increased cost- effectiveness. The goal for OUT to introduce blended learning is to promote effective teaching and learning with technology. At the Open University of Tanzania, the move towards Blended Mode of Learning does not replace traditional learning methods such as the use of printed and soft copies of study materials. It has been pointed out that Blended Learning is a complement to traditional education and not a replacement (Pailing,

2002 and Trasler, 2002). Therefore, Blended Mode is complementing the existing teaching and learning modes to improve the quality of output. Hence, this paper focused on assessing the awareness of students to this new mode of learning at the Open University of Tanzania. The learning through Blended Mode needs a Learning Management System (LMS) which is a software application for administering the delivery of e-learning educational courses (Ellis, 2009). At OUT MOODLE is a learning management system or learning platform that has been applied for while, the system started to be used in FASS postgraduate programmes. On MOODLE is where students find and interact with their learning materials, online discussion forums and communication with instructors and within students is enabled. MOODLE covers the online instruction in Blended Learning. Marsh II *et al*. (2004) identified that in Blended Learning face-to-face instructions are to fill the gaps in online instructions.

Requirements of blended learning
In the implementation of Blended Learning, Learning Management System is compulsory for facilitation of online instructions. Watson and Watson (2007) claims that the LMS is necessary technology. There are numerous forms of LMSs including MOODLE. Students and tutors should be trained on the use of LMS because LMS allows learners engagement through discussion forum, access to learning materials and enhance student- teacher interaction. There is also a need for students to acquire a personal computer, laptop or tablets and skills to use such devices for easy access to learning materials and assignments with internet connectivity. However, the design of instructional materials needs to be initiated in such a way that students are engaged in learning activities to meet the desired learning outcomes. Comprehensive and well designed materials may stimulate self- directed learning and thus influence the quality of the system as a whole (UNESCO, 2002: 26). Moreover, communication between teachers and learners is also necessary.

Advantages of blended learning

For students, Blended Learning provides active learning environment and flexibility in using time and resources. Moran and Myringer (1999) explained flexibility in learning as freeing up time, place and methods of learning and the use of appropriate technology in a networked environment. Blended Mode increase students' engagement in learning and widen access to learning recourses. For example in Srilanka Distance Higher Education, before Blended Mode was introduced learning was through print-based system with very few face-to-face seminars or tutorials. With Blended Mode, online components were introduced and learners were able to access course materials. Garrison and Vaughan (2011) revealed that students appreciate Blended Learning as it gives them greater flexibility and improved learning outcomes. In addition, Bath and Bourke (2010:01) stated that:

> *Blended learning is about effectively integrating ICTs into course design to enhance the teaching and learning experiences for students and teachers by enabling them to engage in ways that would not normally be available or effective in their usual environment, whether it is primarily face-to-face or distance mode.*

Consequently, the OUT transformed to Blended Learning to improve distance teaching and learning for quality output. Blended Learning reduces geographical distance through communication between students and teachers and online discussions than itwas previously used with printed learning materials. Through Blended Learning, the institution widens access to course materials (Garrison and Vaughan (2011). Thus, this paper assessed the OUT students' awareness on Blended Mode of Learning.

Methodology

Research approach and design

This study on the students' awareness on Blended Mode of Learning (BML) applied a qualitative approach in data collection and analysis.

Preference of using this approach based on the fact that, researchers sought of getting students' opinions, views and experiences particularly regarding the usefulness and challenges of BML. The fact that BLM at OUT is a new phenomenon, which needed to be explored, the best approach according to Cresswell (1998) was qualitative approach. Among the vast types of qualitative research designs, a phenomenology design was applied in this study. A phenomenological study describes experiences of individuals about a concept or a phenomenon (Cresswell, 1998). In the case of this study, researchers aimed at assessing OUT FASS postgraduate students lived experiences on the use of BML.

Data collection
Interview method particularly face to face and telephone interviews were used in data collection. Face to face interviews were conducted to continuing postgraduate students from FASS in Iringa regional center. Telephone interviews involved continuing postgraduate students from FASS who were from other regional centers including Mbeya, Mwanza, Unguja, Pemba and Dar es Salaam, to find out their opinions and awareness on Blended Mode which is a learning mode in their studies. Data were collected and analysed qualitatively using content/thematic analysis.

Participants
Participants were OUT postgraduate students from the FASS. The study involved 40 students from three different programs, which included Masters of Arts in Kiswahili (MA Kiswahili), Masters of Arts in Governance and Leadership (MAGL) and Masters of Arts in Monitoring and Evaluation (MA M&E). The students were also from different regional centers since the OUT is extended to all regions in Tanzania Mainland and Zanzibar. The centers include Iringa, Mbeya, Mwanza, Unguja, Pemba and Dar es Salaam. Snowballing and convenience sampling technique were used to get the sample of postgraduate students in FASS.

Findings

Students awareness of the blended learning
The first objective of this study sought to assess the level of students' awareness of BML. To achieve this, interviews were held with FASS postgraduate students. During interview, students were firstly asked whether or not had ever heard about BML? Responses from 40 postgraduate students from three different Masters programmes (MA. Kiswahili, Governance, Leadership, and MA Monitoring &Evaluation) revealed that 23 students, which is equivalent to 57.5%, had never heard of BML, while 17 students, which is equivalent to 42.5%, agreed to have ever heard about BML. The above findings show a close match between those who have ever heard and those who have never heard of BML. This real connotes that there somehow mixed feelings regarding how informed are the interviewed OUT student about BML.

Although, a close look into the findings also reveals that, the number of students who are not well informed about BML exceeds that of who are informed. This may have an implication that information regarding BML is not well disseminated to students as to FASS postgraduate students were supposed to be well informed. This is because, to them, this particular mode of Teaching and Learning has existed for about 2 consecutive years since its commencement in 2015/2016. This might be attributed to the fact that students are inadequately oriented on the mode, which is contrary to what is advised when it comes to adopting innovation in education, where to be the beneficiaries of the new system. Likewise, for the BML, it is advised that early and regular face-to-face contacts between learners and their teachers are required for familiarization (Ali and Leeds, 2009; Frank *et al*. 2002; Khine and Lourdusamy, 2003; Schuhmann and Skopek, 2009). Secondly, for the students who admitted to be informed about BML were asked to explain what they understand of BML. 17 responses were obtained from research participants. From them, 8 responses explained it as a hybrid mode which involves online learning with face to face interactions. Nine (9) responses mentioned and explained BML as a mixed form of learning whereby

online instructions are mixed with face-to-face instructions. Both of the responses imply that students are aware of BML as a learning mode that involve online learning with face-to-face interactions. The above findings, which show the hybrid nature of BML match with what Skill and Young (2002) and Brown (2001) conceive about Blended Learning and Hybrid instructions to be commonly used to explain the learning form whereby online instructions are combined with face-to-face instructions. On the other hand, for those who said NO on whether or not they had ever heard of BML. The study required them to mention which mode of learning they employ in their studies and programmes at large. Response from all 23 (100.0% of those confessed to be not informed of BML) participants mentioned MOODLE as a mode of learning they use in their studies. These findings mean that all these postgraduate students are confusing BML with MOODLE which is just a component of the entire BML for the on-line part. In fact, this further confirms that there are inadequate orientations to students.

In Blended Mode of Learning, MOODLE is a learning management system that enables learners to log inn with a user name and password for accessing learning resources, assignments and online discussion forums. Bates (2015) added that, most LMS such as blackboard, desire to learn and MOODLE are in fact used to replicate a classroom design model. LMS have been designed to fit the online learning environment. Tutors use MOODLE for teaching and assessment and they are advised to be online to guide learners. Therefore, these students understood much on MOODLE platform than the blended learning because during orientation they were much trained how to use MOODLE in their learning as it was a new learning system in the OUT for online learning. Thus, MOODLE covers the online learning but to have a complete BL face-to-face instruction is another part.

The Usefulness of blended learning to OUT Students
The second research objective desired to examine the usefulness of BML to OUT students as ODL learners. Specifically, the first question

asked whether the named mode of learning is useful or not to ODL learners? Responses revealed that all 40-research participants (100%) agreed that BML is useful in their learning. This means that those who responded that they had never heard of BML and mentioned MOODLE as the learning mode in their courses meant for BML and not otherwise. Therefore, when asked on the usefulness of BML they were together with those respondents who agreed to be informed on BML. The responses imply that BML is useful to students learning in ODL as has been mentioned by Lucey (2014:32) that: "*Blended Learning has numerous advantages for all distance learning students*".

Moreover, respondents were also required to explain how useful BML is in their learning. A number of responses were collected from participants regarding the usefulness of BML. Forty (40/40) responses revealed that with BML students get easy access of learning materials. Through BML students can access learning materials at their convenient time and favorite spaces. Bath and Bourke (2010) that blended learning supports the provision of information and learning resources to students support. This communication with teachers and among students has also been mentioned whereby 40 responses expressed that before BML, it was not easy to know the specific teacher for a specific course. They added that, with BML all information and instructions are online through MOODLE platform andduring face-to-face sessions, students ask for clarification difficulty areas that have not been covered online.

The same has been mentioned by Garrison and Kanuka (2004) that bblended learning provides open communication and limitless access to information on the Internet. Inline with that 33 out of 40 responses credited BML as useful to distance learners because it intensifies asking questions through online discussion forums. Likewise, Delioglou and Yildirim (2007) in their study found that majority of students indicated their enjoyment in taking a hybrid course because the interaction with their tutors was motivating. Again, Weaver (2005) highlighted that discussion forums helps learners to learn from others by gaining opinions, advice or responses and receiving help

from moderators. Therefore, access to easy communication among learners and student teachers reduces the experienced distance between teachers and students. Moreover 38/40 responses remarked BML as a learning mode that enhances active learning. This has been a reason for Distance learning institutions to opt for BML as students participate in learning through online discussion and assignments (Bonk and Graham, 2006 also Graham, 2005). In addition to that, Some Universities have seen blended learning approaches increase the level of active learning strategies, peer-to-peer learning strategies, and learner centered strategies (Collis, 2003; Morgan, 2002 and Smelser, 2002). Also 16/40 responses indicated that there were students who were computer illiterate but with BML, they acquired computer-use skills. Flexibility in learning was another comment on usefulness of BML whereby 34 responses revealed that students learn at their own time and place.

Thus, the part of online instruction in blended learning free distance learners from time and place constraints and allows flexible learning as students control their learning (Frank *et al*. 2002; Piskurich, 2004; and Lucey, 2014). In addition, BML has been useful to OUT students since 30/40 responses expressed that it enhances social interaction among students as they communicate through social networks such as WhatsApp, where they form groups. Together with this, Garrison and Kanuka (2004) added that with BML learner can be connected to community of learners anytime and anywhere without being time, place or situation bound. OUT as mentioned before, has centers in all regions in the country, therefore, students in different regions who share courses can have social interaction. This is different compared to the time before the introduction of BML when it was not easy to organize dispersed students. One of the six reasons mentioned by Graham (2003) that make one to choose BML is social interaction. Therefore, blended mode of learning is a convenient mode of learning and it serves time in learning. Online instructions improve interaction among students. With teachers, it provides a room for discussion and question asking, facilitates students social interaction, promote acquisition of other skills like computer skills, promotes students'

independency, self-confidence and it easier access to varieties of teaching and learning materials. Addition to that, Garrison and Vaughan (2011) observe that, BML enhance student-teacher interaction, increase student engagement in learning, flexibility in the teaching and learning environment.

Concerning the usefulness of the BML, the study also was interested to find out whether or not blended mode of learning meets students expectations. Reponses to this question revealed that all 40 respondents agreed on the assertion by answering ''YES'' which signifies that BML fulfills students learning expectations. This big support on the usefulness of BML in meeting students' learning expectations was further confirmed by students' opinions regarding usefulness of BML as it showed that students credit it positively. BML has been useful as compared to other learning modes used in OUT like distance and executive mode of learning. With that, BML is also said to meet students learning expectations. For instance, some students commented that:

> *…in fact this system is very useful as it has enabled me to study as if I'm in a normal class. With this mode I reach my teachers and my fellow students very easily at any time I want…''* (Interview, Kisw-ST-Mbeya; November 2016).

Another student added that:

> *In my view, BML is a good mode of learning, as we students get many resources posted by our tutors on-line. On the other hand, there is a room for us as students to share and discuss using the system. To me this system is more useful especially in this particular time of ICT.* (Interview PA-ST-Iringa; November 2016).

The Challenges of blended mode to OUT Students
Apart from the fact that BML is credited positively as useful to OUT postgraduate students, the third objective of this study aimed at identifying challenges encountered by students when learning through BML. Responses acquired during interviews revealed that; most respondents 22/40 confessed that computer illiteracy is a

challenge to them as some of them were adults and had never used computers before. This is a challenge that associates the use advanced technological media. To support this, Survey and Duffy (1995) urged that familiarity with instructional media could affect learners' attitude towards online learning. Moreover, Hofmann (2014) expressed that we can be successful in creating content but our participants cannot be successful in using it.

Furthermore, Hofmann (2014) added that if participants run into technical difficulties that cannot be easily fixed, the content might be abandoned completely. Therefore, with BML the OUT must ensure availability of computer training to students during orientation and face-to-face sessions. Apart from the challenge of computer illiteracy, secondly 28/40 responses mentioned lack of internet connections as another challenge facing students who reside in rural/peripheral areas where there is limited internet connectivity. In addition, in some regional centers like Iringa there is no wireless internet for that reason students are forced to extra costs for buying internet bundles. For instance, one student from Pemba had this to comment:

> *In our area there is no internet connectivity, I cannot get in to MOODLE, therefore I use to travel to   town so that I access internet and do an assignment and reading notes, this is very costing to a student………* (Interview PA-ST-Iringa; November 2016).

These responses imply that at OUT, students are not supported with technical facilities. Much more, students without computers or smart phones cannot access online learing. Garrison and Kanuka (2004:102) noted that:

> *There need to be a dedicated students service support center to help students with technology access, which includes not only access to a computer with the necessary software and Internet connections but also with the skills necessary to succeed in a blended learning environment.*

Therefore, for the Faculty and institution at large to succeed in BML technical support is highly encouraged. Minimal time of face-to-face

since students needs more time for face to face to clear things that were not understood during online instructions. Furthermore, inappropriate scheduling of face to face along with face-to-face sessions being located in distant areas to some students hence it is costing and some teachers are delay in uploading learning materials. It is shown that learning scheduling for FASS postgraduate students is not accommodated with distance learners. Kauts and Kaur (2014) pointed that; blended environment also adds additional scheduling and communication challenges as course meet both online and face-to-face. However, Garrison and Kanuka (2004) noted that BML requires considerable thought to the scheduling of courses. This would create flexibility to distance learners.

Conclusion and Recommendations

There is no doubt that, for distance learners blended mode of learning provides many opportunities because students learn while working and taking care of their families. Students are motivated for futher studies with institutions that do not consume their work and family time. Gabriel (2004) shows that being able to access information at a time of their own choosing provides students with many opportunities to further their studies. However, some students are not aware of BML due to inadequate information during orientation whereby they had misconception between blended learning and MOODLE as online learning platform. With the mentioned challenges, the OUT has to develop blended learning environment technical resources for students and staff for a successful blended learning. The role of teachers is to develop interactive activities and students' role is to understand what is expected and required to accomplish their courses. According to the University of Western Sydney (2013), the role of students is to understand what is expected of them and the mandatory requirements for successful completion of the unit.

References

Al- Saai, A. Alkaabi, A. Almuftah, S. (2011). Effect of a Blended e-Learning Environment on Students' Achievement and Attitudes toward Using E-Learning in Teaching and Learning at the University Level. *International Journal for Research in Education (IJRE)* 29,34-55.

Ali, R., & Leeds, E. (2009). The Impact of Face-to-Face Orientation on Online Retention: a Pilot Study. *Online Journal of Distance Learning Administration*, 12(4).

Bates, A. W (2015). *Teaching in a Digital Age Teaching in a Digital Age.* Creative Commons Attributions Non- Commercial International License.

Bath, D & Bourke, J (2010). *Getting started with Blended Learning*. Griffith Institution of Higher Education: Griffith University Press, Australia.

Bonk, C. J. & Graham, C. R. (2006). *The Handbook of Blended Learning: Global Perspectives, Local Designs*. San Francisco: Pfeiffer.

Collis, B, Bruijstens, H & van der Veen, J.K (2003). "Course redesign for blended learning: Modern Optics for technical professionals" *International Journal of Continuing Engineering Education and Lifelong Learning*, 13(1/2). 22- 38.

Cresswell, J. (2013). *Qualitative Inquiry and Research design: Choosing Among Five Approaches*. London: SAGE.

Driscoll, M. (2002) Blended learning: Let's Get Beyond the Hype. *E-learning*, 1(4). Retrieved from http://www-07.ibm.com/services/pdf/blended_learning.pdf

Driscoll, M. (2002). "Blended Mode of Learning: Let get beyond the hype" *E- Learning*, 3(3). 54-56.

Drossos, L. Vassiliadis, B., Stefani, A., Xenos, M., Sakkopoulos, E. and Tsakalidis, A. (2006) "Introducing ICT in Traditional Higher Education Environment: Background, Design and Evaluation of a Blended Approach", *International Journal of Information and Communication Technology Education*, Vol. 2, No. 1. pp 65-78.

Ellis, R. (2009). *A field guide to learning management systems*. USA: American Society of Training and Development (ASTD).

Retrieved from http://www.astd.org/~/ media/Files/ Publications /LMS_field guide_20091

Frank, M., Kurtz, G., and Levin, N. (2002). Implications of Presenting Pre-university Courses using the blended e-learning approach. *Educational Technology & Society*, 5(4). 1-16

Garrison, D.R. & Kanuka, H. (2004). "Blended Learning: Uncovering its Transformative Potential in Higher Education". *Internet and Higher Education*, 7, 95–105.

Garrison, R. D. & Vaughan, N. D. (2011). *Blended Learning in Higher Education: Framework, Principles and Guidelines*. Wiley Publishers.

Graham, C, Allen, S., Ure, D. (2005) *Blended Learning Environments: A Review of the Research Literature*, Brigham Young University.

Graham, C. R. (2005). Blended learning systems: Definition, Current Trends, and Future Direction. In C. J. Bonk, & C. R. Graham (Eds.). *Handbook of Blended Learning: Global Perspectives, Local Designs*, San Francisco, CA: Pfeiffer.

Graham, C.R. (2006). Blended Learning Systems: Definition, Current Trends, and Future Directions. In C.J. Bonk and C.R. Graham (Eds.). *The Handbook of Blended Bearning: Global Perspectives, Local Designs* (pp. 3–21). San Francisco: Jossey- Bass/Pfeiffer.

Haythornthwaite, C & Andrews, R (2011). *E- Learning: Theory and Practice*. SAGE Publications, London.

Hofmann, J. (2014). *Solutions to the Top 10 Challenges of Blended Learning* InsyncTraining, Retrieved from https:/www.insy nctraining .com, visited on 15, February, 2017.

Holmes, B & Gardner, J (2006). *E- Learning: Concepts and Practice* SAGE Publications, London.

Holt, D.M and Thompson, D. J (1998) "Managing Information Technology in Open and Distance Higher Education" in *Distance Education*, 19(2). 197- 227.

Kauts, A. and Kaur, G (2014) "Blended Learning: A Shift from Unimodal to Multimodal"*University News*, Vol.52, No.09

Khine, M. S & Lourdusamy, A. (2003) "Blended Learning Approach in Instructor Education:Combining Face to Face Instruction, Multimedia Viewing and Online Discussion" *British Journal of Educational Technology*, 34(5). 671- 675

Kissassi, G. (2013). *Provision of Assignments and Face-to-Face Sessions at the Open University of Tanzania for the Past 20 Years*, HURIA journal OUT.

Lucey, D. J (2014). *Blended Learning: Meeting the Needs of Distance Education Students*. Submitted in Fulfilment of the Requirements for the Degree of Master of Education (Thesis). University of Technology.

Marsh II, G. E., McFadden A. C., & Price, B. P. (2004). *Blended Instruction: Adapting Conventional Instrument for Large Classes.* The University of Alabama, Institute for Interactive Technology.

Mnyanyi, B.F and Mbwete, T. S (2009) *Open and Distance Learning in Developing Countries: the Past, the Present and the Future*. Open University of Tanzania, Tanzania

Moran, L. A anmd Myringer, B. (1999). "Flexible Learning and University Change" in Higher *Education through Open and Distance Learning*, edited by Harry, K: London, Routledge.

Morgan, K.R. (2002). *Blended Learning: A Strategic Action Plan for a New Campus*. Seminole: University of Central Florida

Orey, M. (2002a). *Definition of blended learning*. University of Georgia

OUT (2013). Rolling Strategic Plan 2013/2014-2017/2018. OUT: Dar es Salaam.

Pailing, M. (2002). E-learning: is it really the best thing since sliced bread? *Industrial and Commercial Training*, 34(4). 151-155.

Piskurich, G. M. (2004). *Getting the Most from Online Learning. A Learners' Guide*, San Francisco: Pfeiffer.

Rooney, J. E. (2003). Blended Learning Opportunities to Enhance Educational Programming and Meetings. Association Management, 55(5). 26-32.

Rossett, A. (2002). *The ASTD e-Learning Handbook*. New York: McGraw-Hill.

Sands, P. (2002) "Inside Outside, Upside Downside: Strategies for Connecting Online and Face-to-Face Instruction in Hybrid Courses". *Teaching with Technology Today*, 8(6).

Schuhmann, R. A. and Skopek, T.A. (2009). "Blurring the Lines: A Blending Learning Model in a Graduate MPA Program." *Quarterly Review of Distance Education*. 10(2): 219-232.

Singh, H., and Reed, C. (2001). *Achieving Success with Blended Learning*, White Paper, Centra Software.

Skill, T. & Young, B. (2002) "Embracing the hybrid model: Working at the Intersection of Virtual and Physical Learning spaces". *New Directions for Teaching and Learning*, 92, 23-32.

Smelser, L.M (2002). "Making Connections in our Classrooms: Online and off". Paper Presented at the Annual Meeting of the Conference on College Composition and Communication. Chicago.

Tresler, J. (2002). "Effective Learning Depends on Blend" *Industrial and Commercial Training*. 34(5). 191- 193.

UNESCO. (2002). *Open and Distance Learning: Trends, Policy and Strategy Consideration*. Paris, UNESCO.

Watson, W.R and Watson, S.L (2007). "An Argument for Clarity: What the Learning Management System, What are They not and What Should They Become?" *TechTrends*, 51(2)