



Effective Utilization of ICT in English language learning- The case of University of Botswana undergraduates

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Abstract

The study investigates the effective utilization of Information and Communication Technology [ICT] by first year undergraduates of the University of Botswana [UB] in their reading and writing skills. The first year students are not first language [L1] learners of English. They have not utilized computers for learning reading and writing in their basic education and have not been exposed to such Learning Management Systems [LMS] as Blackboard and Moodle at the secondary school level. Consequently, at the university, when they are required to utilize computers in reading and writing in their core courses, this becomes a huge challenge. For example, when these students are required to download course outlines, assignments, notes and other course materials using the LMSs, they find it very challenging; perhaps because they are more comfortable with the print media. This paper investigates how UB first year undergraduates utilize the computer as an ICT tool in their reading and writing skills using the quantitative research method. A questionnaire was administered to 200 students enrolled in both ICT 121 and ENG 131 courses during the second semester of 2013/2014 academic year. In addition, classroom observations over the same period were undertaken by the researchers. The constructivist theory of learning formed the theoretical framework. The findings reveal that most first year students have difficulty in downloading and uploading course materials using the LMS platform; they also have problems with engaging in online discussion forums on the LMSs. In addition, they are unaware of the silent interaction offered by the computer as an ICT tool. The researchers recommend that first year undergraduate students be given lots of practice on the use of the LMSs and computer skills for effective performance in their academic work.

Introduction

Information and Communication Technology [ICT] has become so pervasive and vital in today's world that it is impossible to envision life in the 21st century without technology. To keep abreast with the rest of the world, the University of Botswana has incorporated ICT into its daily operations, in administration as well as in teaching and learning. In fact, it would be impossible for UB to realize its vision "to be a leading academic centre of excellence in Africa and the world" [UB Strategic Plan, 2008] if teaching and learning are not firmly anchored on the use of technology. Mingle [2002] asserts that in today's world, no institution can reach its educational goals without the use of technology. According to Tinio [2002], one of the most commonly cited reasons for using ICTs in the classroom has been to better prepare the current generation of students for a workplace where ICTs, particularly computers, the internet and related technologies, are becoming more and more ubiquitous. Technological literacy, or the ability to use ICTs effectively and efficiently, is thus seen as representing a competitive edge in an increasingly globalizing job market [Tinio 2002:3].

Batane and Motshegwe [2012:2] explain that ICT "resources were put in place and technology use formally launched" in UB in 2001. Since then, the institution has vigorously pursued the policy of increasing the technological base in order to provide state of the art infrastructure to its clientele [UB IT



Policy, 2003]. In teaching and learning, UB has adopted the blended approach to classroom instruction. The blended approach refers to learning models that combine traditional classroom practice with e-learning solutions [Tinio 2002].

Background of study

Research in the use of ICT to enhance teaching and learning abound in literature. Though some scholars believe that these studies are inconclusive, nonetheless, they point to the fact that ICT in education can make both positive and negative impact on students' learning. On the positive side, Hennessey, et al [2007] found that when appropriately utilized, "technology increased learners' motivation, engagement and participation through providing novelty and variety, creating interest and excitement and adding more fun in the classroom".

In addition, Purcell, et al, [2013] indicate that ICT tools "encourage student creativity and personal expression; encourage greater collaboration among students; and allow them to share their work with a wider and more varied audience". Studies carried out at UB reveal that the use of technology in teaching and learning has a positive impact [Batane & Mafote, 2007; Batane & Motshegwe, 2012; Oladiran & Uziak, 2009]. According to Batane & Mafote [2007], students reported that "using technology in learning... greatly improved their understanding of course content; the use of WebCT and other online courses made course materials easily accessible, reduced elaborate and extensive note-taking in class and helped them participate in online discussions with their lecturers and classmates". Also, Oladiran & Uziak [2009] reveal that "technology generated interest in students' courses, enhanced learning and understanding of course materials, provided useful feedback on assignments and improved interaction between learners and their lecturers". However, these studies did not focus on first year undergraduates of the university.

Despite the positive impact reported in these studies, the use of technology in teaching and learning has its problems and challenges. For example, technology has been said to encourage student laziness since it makes it easy for them to take short cuts and not put effort into their writing; they often 'copy and paste' and download material from the internet without acknowledging sources... [Purcell et al, 2013]. Furthermore, classroom observations reveal that the use of the LMS platforms encourages students' absenteeism and reduces face-to-face interaction between lecturers and students.

In this study, ICT is defined as a "diverse set of technological tools and resources used to communicate and to create, disseminate, store and manage information. These include computers, internet, broadcasting technologies (radio and television) and telephony" [Tinio 2002:4]. At UB, all first year undergraduates take an ICT course which exposes them to the use of computers in learning and to the LMS platforms- Moodle and Blackboard. In addition, the IT department organizes regular training sessions through orientation workshops and offers regular support to students throughout the academic year [Batane & Motshegwe, 2012]. There are also several points at which students can access computers and internet facilities on campus. Indeed, UB has provided ICT facilities and infrastructure for teaching and learning which are comparable to any modern learning environment in Africa and the world. In the light of the above, this study investigates how these resources are being utilized by first year students in their reading and writing skills.

It is important to understand the background of the first year students in this study. Most of the students come from a background where teaching and learning are done in the traditional mode through the use of print media tools such as books, notes, handouts; and teachers dictate or write notes on the chalkboard. This means that these students are used to the traditional teaching approaches in traditional classrooms. Though there is a small degree of use of ICT tools such as radio and tape recorders, especially at the primary school level, the use of these ICT tools mostly focuses on students' listening and speaking skills as opposed to development and improvement of reading and writing skills.



At the junior secondary school level, computer awareness course is introduced and most of the junior schools have a computer laboratory. However, the computer as an ICT tool has not yet been integrated into the school lessons nor is it part of the examinable subjects in the Junior Certificate examinations. At the senior secondary school level, Computer Studies as a subject is part of the school curriculum and it is an examinable subject which is offered as an optional course. However, because of the mindset of students who normally associate computing with such difficult subjects as Math and Science, most students do not opt for Computer Studies at the senior secondary school level. Consequently, when these students are admitted into UB, they face numerous challenges. One of the challenges that these students face is that of reading and writing using ICT tools.

At the university, the students realize that notes are no longer dictated or written on the board for them to copy, instead, content material is often projected on the screen and they are expected to listen, read and write at the same time. Materials are posted on the LMS platforms and they are expected to access them, submit assignments online and have interactive communication with lecturers and classmates on these platforms. Furthermore, students are required to search for journal articles, read and understand them and use the information to word process their assignments. All these processes seem overwhelmingly difficult and this new experience impacts negatively on their performance, especially in reading and writing.

Theoretical framework

This investigation is grounded on the constructivist theory of learning. The basic belief of constructivism is that knowledge is actively constructed by learners rather than transmitted by the teacher [Jonassen, 1991]. Constructivism emphasizes the cultivation of the spirit of enquiry through questioning, sharing ideas through collaborative learning and the creation of knowledge based on learners' previous experiences of the world. Oliver [2002] reveals that technology has the capacity to promote and encourage the transformation of education from a very teacher directed enterprise to one which supports more student-centred models. The effective use of ICTs in the learning environment therefore, facilitates collaborative learning, knowledge construction and social relationship building which are hallmarks of the constructivist learning theory.

Research Methodology

This study has employed the survey method using the questionnaire and classroom observations as instruments of data collection. A total of 117 first year undergraduates at UB for the 2013/2014 academic year responded to the questionnaire. All the respondents were registered for ICT 121, ENG 131 and COM 121 for the second semester of the academic year. In these courses, students acquire ICT skills as well as reading and writing skills. The random sampling method was used in selecting participants from the different courses listed above to ensure that every student had an equal chance of being selected for the study. The questionnaire had four sections, namely: Section A- General Information, Section B- the use of computer as an ICT tool, Section C- the impact of ICT on students' learning, and Section D - the effectiveness of the computer as an ICT tool for reading and writing.

Findings

Overall responses show that students do utilize the computer for reading and writing in their various courses. However, students' responses showed weak or low utilization of the computer dictionary and thesaurus in spell checking, looking up difficult words, and enriching their vocabulary. Some students stated that they are unaware of the support that the online dictionary and thesaurus offer to users. In addition, most students admitted that they have difficulty in using the LMS platforms in discussion forums, uploading assignments and downloading course materials. These students are conversant with the traditional face-to-face interaction with teachers in the primary and secondary schools. Therefore, the



faceless interaction using Moodle or Blackboard poses a challenge. Most students indicated that they have difficulty in using the email forum for academic discussions.

Students also showed weak or low responses in using the internet to get information for word processing their assignment. Most students indicated that they preferred reading journal articles on print rather than from the computer screen, again, showing that they are more comfortable with the print media than the electronic media. Majority of the students indicated that they would need lots of practice [tutorials] to improve on their ICT skills in reading and writing. The most significant finding is that most students are unaware of the silent interaction offered by the computer during word processing. The result is that they submit assignments which are full of grammatical as well as spelling errors.

Conclusion

This study has established that first year undergraduates at UB have various problems with using the computer as an ICT tool in their reading and writing skills. The use of the LMS platforms is also problematic. The study therefore recommends that the first year undergraduates be given more tutorials and practical sessions on the LMSs and the use of the computer as an ICT tool. In addition, lecturers should be encouraged to use ICTs in their teaching to ensure that the students receive enough exposure in ICT skills.

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