Abstract

The use of technology at the Institute of Extra Mural Studies of the National University of Lesotho to transform teaching and learning.

Despite the recognized need for the use of adequate and relevant technological devices in the distance mode of learning to transform teaching and learning the Institute of Extra Mural Studies (IEMS) of the National University of Lesotho (NUL) faces an enormous challenge of adopting the use of desirable technological devices. IEMS is mandated to widen access to educational opportunities through distance education. This mode of learning separates learners from the teaching institution as well as deprives them of regular contact with their peers. Hence, it is mandatory that learners be able to access learning materials from various technological devices to enable them achieve their academic goals.

Learners enrolled in the Adult Education Programme (ADE) are geographical separated from the institution because of the nature of the distance mode of learning they have opted for. The distance mode of learning deprives learners of access to learning resources available at institutions. Therefore, learners have to supplement the prescribed self-instructional materials by accessing additional information from various technological devices.

Primarily, the study investigated whether the use of emerging technology was one of strategies adopted to promote effective teaching and learning at IEMS. Qualitative data was collected from learners and academic staff. Findings from the study revealed that there was dissatisfaction regarding technological support. For example, it was indicated that learners did not have any access to computers either at the main centre or designated regional centres. In addition, participants also reported that IEMS did not equip them with relevant and adequate technological skills to prepare them for the world of work.

Introduction

Lesotho is one of the Southern African countries landlocked by the republic of South Africa (RSA). In the Lesotho context, learning at a distance often means that students are geographically separated from teachers and the institution of learning. The mandate of the Institute of Extra Mural Studies is to bring the University to the people. Therefore, it has established regional centres in remote parts of the countries such as Mahobong which is in the northern part of the country and Mohale’s hoek that is also situated in the southern part of the country. The main campus of IEMS, which is also regarded as the headquarters, is in the Maseru the capital town of Lesotho. Regional centres, as well as the Maseru Centre, serve as study centres where learners attend monthly face-to-face sessions and also sit for examinations. IEMS has managed to reach out to individuals who would not qualify for admission by employing the strategies of openness and the distance learning method. Learners enrolled in the degree in Adult Education Programme (ADE) are individuals who have the desire to further their studies in order to improve their competence levels. However, like their counterparts in other parts of the world as well as in the developing countries, these learners cannot afford the cost of full time studies because of their multifarious adult responsibilities in society. The ADE degree programme uses two modes of operation, namely one week residential in a semester, as well as monthly face-to-face meetings of one
weekend of two days. The course duration for the degree programme is four years. However, learners are allowed up to seven years for completing this degree.

**Background**

The majority of distance learners are adults who have full-time jobs and other multiple responsibilities and obligations such as providing for families. Since most distance learners do not live in close proximity of their institutions of learning they are often not able to access resources such as libraries and do not have the regular teacher and peer contact enjoyed by conventional learners (Koul & Bhatt 1989). Therefore, distance learners are disadvantaged in terms of accessing institutional resources due to their geographical separation from their learning institutions. Distance learners are also geographically separated from their peers. Hence, it is imperative that distance learning institutions provide learners with relevant and adequate technological devices that could support their learning. Therefore, the purpose of the study was to reflect on academic staff and learners perceptions regarding the use of emerging technology at IEMS as an innovation to facilitate teaching and learning.

**Electronic media/infrastructure**

Currently, there is a great demand for accessibility of relevant technological devices in the distance mode of learning hence several authors have written about the significant role of technology in facilitating teaching and learning in institutions of higher learning (Baltaci-Goktalay and Ocak 2006; Marginso 2000; Monsakul 2007; Rogers 2004, Turney, Robison, Lee and Soutar 2009. Consequently, the use of telephones, radios, mobile devices, computers and television has become important. Modern technology has contributed to the availability of information (Daniel 2006), even though some areas of developing countries often do not have the necessary infrastructure and connectivity that can facilitate easy access to the desired information.

(a) **Telephone**

A telephone is identified as a relevant and viable learner support (Gibbs 2002; Kaye 2002 and Simpson 2003). Gaskell and Mills (2006) point out that telephone learner support for distance learners has been in existence since 1970. These authors describe three types of telephone support and tuition used as: proactive contact between institutions and the individual student; responsive contact between the tutor and the individual learner; and planned tutorial by phone. Proactive contact with the institution involves contacting students shortly after enrolment to offer them support and
encouragement. Regular communication by telephone with learners to assess and monitor academic progress is reported as essential for improving learners’ retention rates. With regard to the proactive contact from the tutor, Gaskell and Mills state that if tutors, prior to submission of the first assignment contact learners, the chances are that they may score good marks. Additionally, it is reported that telephone contact is effective for initial support compared to e-mails or letters (Gaskell & Mills 2006). Responsive contact pertains to tutors responding to questions and comments. Telephones are also considered as more effective in facilitating a discussion of content by the tutor and learner within a short period of time, compared to the process of sending several e-mail messages. This kind of exercise is considered as tutorial contact from the tutor.

(b) Mobile phones

With the rapid increase in the use of cell phones in developing countries (replacing the traditional telephone in many instances), mobile devices can provide an additional and often easy way of communication and support. It has also given rise to the practice of mobile learning. Mobile learning (m-learning) is an innovation that has been applauded by most developing African countries offering programmes by distance mode. Viljoen, Du Preez and Cook (2005) refer to m-learning as “the use of mobile devices and mobile phones for teaching and learning”. Daniel (2006) also concurs that mobile phones can be very effective in facilitating communication with learners on academic and administrative issues. Brown (2006) claims that the mobile phone affords students in remote areas and professional distance students who are constantly travelling on business, an opportunity to access support services. M-learning is considered as a feasible option due to the rapid expansion of the cell phone industry and in view of inadequate infrastructure for communication technology in most developing countries in Africa (Brown 2006).

(c) Radio

For most African countries, including Lesotho, radio is still regarded as a feasible educational option for teaching adults, as well as primary and high school learners. Couch (in Arulchelvan & Viswanathan 2008) states that although television is preferred to radio, radio is easily accessible to a fairly large number of people at reasonable costs. Most importantly, Arulchelvan and Viswanathan report that some universities have established that a radio can serve as a supplementary device for slow learners. In addition, radio can also facilitate curriculum content with which some teachers are not conversant (Arulchelvan&Viswanathan 2008). In countries such as India, educational radio also has a facility that allows the audience to have discussions and ask questions. Furthermore, Satyanarayana and Sesharatnam (in Arulchelvan&Viswanathan 2008) suggest that radio is effective in facilitating remedial tutorials. Furthermore, they also claim that distance students tend to listen to
radio programmes more frequently than conventional learners. This makes the radio an effective and viable medium of instruction in developing countries such as Lesotho, Botswana and Malawi (Arulchelvan & Viswanathan 2008).

(d) Computers and the Internet

Computers and the internet are technologies preferred by distance students, since they enable them to access a vast amount of valuable information within a relatively short period of time (Arulchelvan & Viswanathan 2008). The internet allows learners to access learning resources and also permits them to interact with peers and any other groups of their choice. According to Beldarrain (2006:139) these technologies enable distance learners to easily access learning resources from different locations. Beldarrain (2006) also emphasizes that technology has the capacity to promote communication and collaboration among distance learners by making use of email, the social media, blogs, wikis and more. Arulchevan and Viswanathan (2008) concur that the internet allows learners to access learning resources and also permits them to interact with peers and any other groups of their choice. Nowadays, most learners use the internet to access information on various academic areas, including career advancement and career management (Arulchevan & Viswanathan 2008). Therefore, the internet has the capacity to provide more information compared to the radio (Arulchevan & Viswanathan 2008) However, Verma and Lata (2006) mention that mostly, due to financial constraints, many learners in the poorer countries in Africa cannot afford to buy computers for learning; thus, institutions in those countries provide other relevant and affordable student support, such as radio services instead of computers to distance learners.

(e) Television

Television is described as one of the mediums of instruction that can successfully be adopted to promote effective teaching and learning. Arulchelvan and Viswanathan (2008) claim that educational television captures learners’ interest and can motivate learners to perform satisfactorily in their academic work. According to these authors, the combination of sound and picture provides a representation of reality and thus enhances learning. They argue that institutions should promote learners’ access to television sets at the respective learning centers to enable learners to watch educational programmes. Primarily, the authors propose that institutions introduce relevant television programmes which can address the academic needs of learners (Arulchelvan & Viswanathan 2008).
Methodology

The qualitative approach was employed to collect data. The qualitative approach was preferred because of the assumption that it affords participants adequate opportunity to voice their feeling and thoughts about the issue under investigation. Focus groups discussions were a qualitative mode of inquiry adopted to investigate perceptions of learners and academic staff regarding the use of emerging technology at IEMS. Focus groups discussions were used because of their unique nature of providing an opportunity for participants to share and compare among themselves during the planned discussions.

The samples that participated in the study were drawn from ADE learners and academic staff. The total number of ADE learners who were selected to participate in two focus groups discussions was 20. Each focus group discussion comprised 10 students; strategically, learners’ focus group discussions were conducted at Maseru Centre during the residential week. The four levels of the degree programmes were represented. A total number of 8 academic staff also participated in the focus group discussion.

Findings and Discussion

(a) Cellphone and Telephone

The majority of academic staff as well as learners’s participants during reported that they owned a cell phone; however, academic staff stated that, they were not happy about having to use their cell phones to communicate with students about academic issues. For instance, Mahobong regional centre tutors (participants) mentioned that they were very unhappy because there was no landline telephone at the centre; therefore, they had to use their cell phones frequently to communicate with the regional coordinator and students at a cost to themselves. The majority of participants who claimed that they own cell phones suggest that the implementation of mobile learning could be a feasible strategy for IEMS to adopt in an attempt to facilitate effective teaching and learning.

(b) Computer and Internet

The issue of inadequate computers and a lack of internet facilities at all centres was yet another concern which was raised by academic staff and students. The general feeling of participants was that the institution had to try to improve on the unsatisfactory conditions. Dissatisfaction about inadequate computers and a lack of access to internet was a legitimate concern in view of that unavailability of
technological resources such as computers with internet facilities restricted learners and instructors from accessing relevant information that could promote effective teaching and learning. Learners also complained about not being offered a course which would expose as well as equip them with essential computer skills required nowadays in the world of work. Failure to equip learners with desirable computer skills is another shortcoming which the institution would have to address.

© Radio

Participants also reported that the NUL had secured a slot on the local radio station aimed at disseminating information about the University, its programmes and activities. However, the majority of participants claimed that the ADE department had not adequately used the radio programme for educational purposes. According to participants radio programme are accessible even in the remote parts of the country and they also claimed that radio can be purchased at a relatively affordable price, hence the general feeling was that radio was a viable option to use for teaching and learning in Lesotho.

Conclusion and Recommendations

The investigation exposed shortcomings with the regard to adequate use of technology at all designated IEMS learning centres. For example academic staff and students were dissatisfied about the minimal utilization of the university website and the secured slot on the national radio station. Access to computers with enabled internet connectivity was also described as a great concern by students and academic staff. The general feeling amongst participants was that, since most academic staff and students own cell phone m-learning they could be introduced as an innovation to facilitate effective teaching and learning.

The study has identified opportunities which could be exploited, hence the following recommendations will be outlined that could be considered by IEMS in an attempt to improve on the use of emerging and relevant technological devices that can enhance provision of quality distance education as well transform teaching and learning.

- Investigate how to utilise the university website more fully (e.g. for learners registration, communication, access to learning materials and learning activities)
- Explore how to fully utilize the radio programme for tutorials and information dissemination
• Make more computers with internet facilities available at all centres
• Investigating the feasibility of recording lectures on CD and DVD
• Provide wider administrative and academic support by use of cell phones