The Effect of Distributing Electronic Notes to Students: Ethical Considerations Raised By Computer Science Faculty at The University Of Namibia

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ABSTRACT

In an effort to encourage the uptake of technology among its academic community, the University of Namibia (UNAM) introduced the Electronic Notes System (ENS) in the year 2010. The ENS was envisaged as a web-based method of distributing lecture notes to students, where the faculty members would upload the teaching materials and the students would download the materials. Although this method was believed to be a practical way of distributing the notes in comparison to the existing method, faculty adoption of the ENS has been rather poor, prompting the eLearning committee to conduct awareness campaigns at the Faculty Board meetings. Discussions at the Faculty Board meetings revealed ethical concerns that prevented faculty from adopting the ENS. Using the discussions from the awareness campaigns as well as results from one-to-one loosely structured interviews with the faculty members in the Computer Science department that participated in those presentations, the paper presents some ethical considerations that may need to be addressed when introducing technology-enhanced learning in similar contexts.

Keywords: Faculty Attitudes, Ethics, System Use, Face-to-face Teaching

1. INTRODUCTION

Many tertiary education institutions throughout the world have adopted technology-enhanced learning as either an alternative or a supplementary method of delivering education to their geographically dispersed and on-campus students. An annual survey which keeps track of online learning trends reported that in the year 2010, 63% of institutions in the United States alone indicated that online learning was a critical part of their institutions' long term strategy (Allen & Seaman, 2010). The report also highlighted that online enrolments had substantially exceeded the total higher education student population. Similar reports of increasing online enrolments are reported throughout the world (see for example (Sutherland-Smith & Saltmarsh, 2010)). This provides evidence that the use of technology, and more specifically the Internet, has today become pervasive in tertiary education institutions. There is also consensus that the question to ask today is no longer whether or not technology should be used in education, but rather how it can be successfully integrated to ensure improved ability to educate (McNeill, Woo, Gosper, Phillips, Preston, & Green, 2007; Abrahams, 2010).

Significant benefits resulting from the use of technology in education are reported in the literature. Bates (1997) identified four of the most frequently cited reasons that institutions believed could accrue from using technology: to improve the quality of learning, to improve access to education and training, to reduce the costs, and to improve the cost-effectiveness of education. Of these, efficient and timely provision of access to learning materials as well as the ability to reach geographically dispersed students that could not be reached without technology is the most widely cited (Allen & Seaman, 2007; Ally, 2008; Gulati, 2008). In developing countries especially, technology-enhanced learning is believed to have a potential to promote equitable access to different targets of populations, as well as the possibility to mitigate the effects of the identified shortage of, and unavailability of well qualified teachers (Delors, 1996; Keats, Beebe, & Kullenberg, 2003; Andersson & Grönlund, 2008). The use of technology in education in these countries is also believed to overcome social exclusion by providing increased participation in education (Gulati, 2008). Recent research has however reconfirmed that developing countries are still facing the basic challenges that prevent them from reaping the benefits of technology-enhanced

education. These include: lack of basic technical infrastructures, lack of qualified professionals, negative attitudes towards technology and inappropriate policy and funding decisions (Gulati, 2008; Shih, Kraemer, & Dedrick, 2008). All these challenges have further widened the gap in the adoption of technology between developing and developed countries.

While the introduction of technology offers numerous benefits to educational institutions, several researchers have also argued that its usage has not fulfilled its expectations (Bejerano, 2008; Derry, 2008). Geoghegan (1994) and Abrahams (2010) found that institutions were enthusiastic to use technology, but actual implementations showed that technology was not widely adopted by faculty, nor was it deeply integrated in the teaching and learning activities of the institutions. According to Zemsky and Massy (2004), the use of technology, together with newly adopted theories of learning, promised to revolutionize pedagogy in the following ways: learning would be customized; instructors would be replaced by facilitators; course materials would be rapidly distributed; and education would be provided at a much lower cost. They observed however, that the much anticipated revolution did not take place. Despite the unfulfilled expectations of the technological revolution however, Ferdig (2006) warned against taking a side in the debate of whether technology has inherent ability to benefit teachers and learners. Rather, he suggested that technology should be judged according to the context of its purpose as well as the pedagogic value which it adds to education. Zemsky and Massy (2004) also suggested that research involving the failed revolution should rather focus on how and why technological innovations affect educational processes.

One significant barrier to the wide adoption of technology in education is that of faculty acceptance of online instructions. Moser (2007) observed that faculty resistance regarding technology was the most striking similarity regarding the use of technology between institutions in the United States and Europe. Geoghegan (1994) also reported the same findings, identifying the failure to recognize and deal with the social and psychological aspects of the diffusion of technology as the most basic reason why faculty are reluctant to use technology in the classroom. Other researchers on the other hand, have stressed a proper understanding of the implications of technology on pedagogy (McNeill, Woo, Gosper, Phillips, Preston, & Green, 2007; Bejerano, 2008). It is thus not surprising that recent research efforts have put an emphasis on both social and psychological consequences of using technology in education, as well as the pedagogical value that such technologies add to education. Some researchers have however also established that technology offers both students and their faculty a greater potential to engage in academically undesirable and unethical behaviour (Jones, Johnson-Yale, Millermainer, & Pérez, 2008). In some cases, it reportedly led to passive and unmotivated students who are distanced from academic integration, social integration and the missing on-campus experience (Bejerano, 2008).

At the University of Namibia (UNAM), technology-enhanced learning, and more specifically eLearning, was formally introduced in 2004, making it one of the very first institutions to officially adopt it in the Southern Africa region. Despite this early introduction however, it has not been widely embraced or adopted by the academic community (Mufeti, 2008). In its effort to boost the usage of technology on campus, UNAM management introduced the Electronic Notes System (ENS) in 2010. While a number of academic staff responded favorably and are actively using the ENS, many are still hesitant to use (or even experiment) with the ENS, citing ethical considerations resulting from the practical implementation of such a system. This paper reports on four such ethical concerns of the academic community regarding the introduction of the ENS. Using results gathered from the discussions that followed from presentations delivered to the academic community at UNAM and from one-to-one loosely structured interviews with the Computer Science faculty that participated in the presentations, the paper highlights the common ethical considerations raised, that may need to be addressed when introducing technology in similar contexts.

2. LITERATURE REVIEW

There seems to be no doubt among the researchers on the positive effects that the availability of lecture notes have on the performance of students (Kiewra, 1985; Grabe, 2004). There is however a long recorded history of some uncertainties on how and when note taking should be done (Babb & Ross, 2009), as well as on whether note taking should be done by the students themselves, or the instructors should provide the students with class notes (Kiewra, 1985). Some researchers have long argued that students should take their own notes during the classroom sessions, and supplement those notes with additional research done by the individual students. This is believed to be an important learning technique for the students as it enables them to encode the information during the process of organizing the notes, while at the same time preparing them to store it in long-term memory for remembrance (Barnett, 2003). Others observed that when the students are left to take their own notes during the class sessions, they may not capture all the important and relevant information during a lecture, as their focus will be divided between learning and recording the information (Kiewra, 1985; Grabe & Christopherson, 2005). Despite the many studies attempting to clarify the effects of note taking and note provision on learning and performance, a scan of literature reveals that the findings in this regard are still not totally consistent.

Kenneth Kiewra has conducted a lot of research on the effect of providing notes to students. In one of his papers, he investigated the effectiveness of providing students notes against personally recorded notes, and a combination of the two (Kiewra, 2002). He found that students who reviewed both lecture notes from the instructors and their own notes performed better than those who did not. He also observed that the students' own notes that are taken during the class were insufficient for reviewing purposes and preparing for exams (Kiewra, 1985). He therefore recommended that instructors should provide students with supplementary detailed notes for review purposes (Kiewra, 2002). In cases where full notes cannot be distributed to students, he argued that students should at least be given partial outlines (which he also called skeletal notes) prior to the lectures, in order to

assist them with note-taking during the lecture. This recommendation was also independently supported by Barnett (2003) , who observed that providing detailed notes resulted in poor performance, possibly because of the cognitive overload and distraction that the detailed notes provides.

Another issue regarding the provision of class notes that is widely debated in literature is when these should be provided: whether it is after the class or before the class. Those advocating that they should be provided before the class believe that the notes would act as a guide to the students for their own note taking, while those supporting that they should be offered after class believe that the students use it as a supplement (and not a substitute) to the students' own notes (Babb & Ross, 2009). Concerns on the effect of providing lecture notes before class on lecture attendance have however been raised (Potts, 1993; Grabe, 2004; Grabe & Christopherson, 2005). Grabe and Christopherson (2005) argued that provision of lecture notes in itself does not encourage absenteeism, but may be a fair alternative when attendance is not possible. Babbs and Ross (2009) on the other hand observed that class attendance was higher in courses that provided slides before the lecture, than in courses that did not. They also found that the students who had access to the lecture notes before class were more likely to attend the lecture sessions than those who did not. They argued that providing the notes before class may serve as a warning to the students that difficult content is on its way, further encouraging the students to attend the lecture sessions. If this argument is true however, the counter argument will also hold: students may judge the content's level of difficulty, and if they believe that they can manage only with the lecture notes, they may not be motivated to attend the lectures.

The format in which the notes are provided to the students has also come under scrutiny in recent years. For a very long time, lecture notes were distributed to students using paper-based methods. In more recent years, computer-aided tools have been widely adopted. Notes are created using various computer software, such as word processors and presentation tools. With the availability of the Internet, the distribution of notes to the students is made even more practical, providing a more convenient and cost-effective method of distributing already existing lecture notes to students (Grabe & Christopherson, 2005). The lecture notes are easily distributed to students using email or downloadable documents from the Internet. It is especially the availability of these technologies that have caused researchers to start questioning the effect of lecture notes on students (Grabe, 2004; Grabe & Christopherson, 2005).

In addition to the provision of HTML and other formats of downloadable lecture notes over the Internet, institutions have also recently started using web-based lecture capture technology, where students are provided with recorded lectures that they can access at their own times. Some universities have reportedly offered lecture recordings in form of tape recordings to both their on-campus and distance students in the past (McNeill, Woo, Gosper, Phillips, Preston, & Green, 2007). More recently however, web-based recording technologies that enable students to access the lectures using their mobile devices and computers have also been reported (Fardon, 2003). Recorded lectures are reported to be a great way for catching up on missed lectures, and have reportedly improved content retention, provided the students with additional review methods before and after class, and provided general convenience to the students (Fardon, 2003; McNeill, Woo, Gosper, Phillips, Preston, & Green, 2007). To date, many higher educational institutions have also made their lecture recordings available to their students and freely provided them to other students worldwide, making a rich reservoir of resources available to all the students worldwide. If the faculty fail to provide the students with the necessary content therefore, the students themselves are inclined to search the Internet for course-related notes from other institutions.

Research on how and whether faculty would adopt or reject the usage of technology in education has largely focused on Rogers' (1995) theory of diffusion. Rogers suggested that people's decision to adopt or reject an innovation will most likely follow the following five steps:

1. they become aware of the innovation and gain some ideas on how it works
2. the innovation either gains favour or it becomes unfavourable to them
3. they engage with the innovation and make a decision on whether to adopt it or not
4. they would put the innovation to a test
5. they will evaluate the results of the decision and finally adopt it or not

In the Southern Africa region, Stoltenkamp and Kasuto (2011) observed that the approach used to drive technology-enhanced learning initiatives and the impact it has on the organisational culture of the institution is one of the critical factors that influence adoption. They also observed that quantitative measures of the adoption rate alone are not indicative of the success of adoption. Previous research has established a link between the educator's concerns regarding the use of technology in the classroom, and their actual usage of technology. In a recent study conducted by Dunn and Rakes (2010) for example, the researchers were able to demonstrate that learner-centred beliefs and teacher efficacy significantly influenced their technology usage. While faculty members have not widely adopted technology in their courses, 66% of the academic leaders surveyed in 2010 believe that online instructions can lead to superior learning outcomes in comparison to face-to-face (Allen & Seaman, 2010).

3. TECHNOLOGY ENHANCED LEARNING AT UNAM

At the University of Namibia, the intention to formally adopt technology as an additional method of supplementing teaching and learning was expressed in the Information and Communication Technology (ICT) strategy of 2003. In the strategy, technology was hailed as having a potential to enhance flexible and effecting teaching and learning, to add impetus to the research function, and to provide easy and wider access to information resources. The strategy called upon the university community to embrace the use of technology in all its administrative and academic units, in order to take full advantage of the opportunities provided by ICTs. With regard to the use of technology in teaching, the strategy recommended the formation of a Managed Learning

Environment (MLE) subcommittee to investigate different technology enhanced learning methods that will encourage the uptake of ICT and internet technology among the UNAM academic community. In addition, the strategy also tasked the Interactive Multimedia Unit (IMMU) of the institution with providing the necessary equipment, software and staff training. Together with the MLE committee, the IMMU was required to support faculty in developing multimedia materials for use in teaching and learning.

In 2004, UNAM management established the MLE subcommittee, called the eLearning committee. The committee consisted of members from different academic backgrounds and faculties, who all had prior training in the implementation and development of eLearning courses offered by InWent. As one of its first steps, the committee conducted an investigation of the different learning management systems available in the market. It recommended the use of Knowledge Environment for Web-based Learning (KEWL), an open source software developed at the University of Western Cape, South Africa, as the Learning Management System to be used at UNAM. The eLearning Committee also commenced a University wide training on how to integrate technology with the teaching and learning activities in early 2005.

By the year 2010, more than 100 faculty members have been trained by the eLearning Committee. The training focused on InWent sponsored eLearning development and implementation courses including: Instructional Design, Content Development, Tutoring of Virtual Communities, and Management of eLearning implementation. During the training, participants were required to choose one of their traditional courses as a pilot course for online design and development. After the training, they were encouraged to further develop their pilot course into a complete course that they could offer as a supplement to their students. Mufeti (2008) reported that participants were enthusiastic and seemed to appreciate the potential of integrating technology in their teaching activities during the training. After the training however, only 5% of the participants continued to develop their pilot courses. Among those who took part in the training were faculty members from the Computer Science department. By 2008, none of them had adopted eLearning in their courses, and 96% had continued using PowerPoint for presenting their lectures (Mufeti, 2008).

The eLearning Committee has now been in existence for the last six years. Apart from the trainings conducted, there is little progress to show for the work done by the committee. The university has strived to ensure that all academic staff members have the necessary IT infrastructure and technological support, which are believed to be critical for faculty adoption of computer technology. The academic community has however, not fully embraced the opportunities offered by eLearning, nor have they attempted to implement eLearning in their courses, citing heavy workloads, lack of incentives, shortage of exemplary open content on the Internet and lack of time as their main barriers to adopting eLearning (Mufeti, 2008).

In its effort to encourage the faculty to use technology in teaching, UNAM management introduced the use of Electronic Notes System (ENS) in the year 2010. Prior to the introduction of the ENS, faculty wishing to share their paper-based notes with their students had to print out the notes and take the hard copies to a central location in the university called the Copy Centre. To obtain a copy of the notes, students place an order with the Copy Centre, which is often overcrowded with long queues. In 2009, the Student Representative Council (SRC) voiced the student's concerns regarding the use of paper-based notes obtained from the Copy Centre to the University management, rather suggesting the use of technology to enhance the distribution of lecture notes. The introduction of the ENS in 2010 was therefore a response to alleviate the problems experienced with the Copy Centre. Since its introduction, a number of faculty members favourably responded to the introduction of the ENS. As of June 2011, fifty two courses of the University have their electronic notes posted on the system. This is however a minute percentage in comparison to the total number of courses offered by UNAM. The eLearning Committee noted that some faculties were slow to adopt usage of the ENS, and arranged presentations regarding the use of the ENS at the various faculty board meetings conducted during the year 2010.

Presentations were done at three of the seven faculties existing at the time at UNAM. At both meetings, it became evident that the academic community has negative perceptions about the introduction of ENS. This came after some concerns (including ethical considerations) regarding the practical implementation of the ENS were raised in the meetings. Conversations from eLearning meetings were noted, and used to gauge the perceptions and responses to the implications of using the ENS. As a follow up to these discussions, loosely-structured interviews were held with a smaller section of the participants, being the faculty members from the department of Computer Science, to clarify the raised concerns. The findings suggest four serious ethical concerns that need to be considered when introducing technology in similar contexts. These include: the fear that providing the notes will result in spoon-feeding the students; inaccessibility of electronic notes by students; the use of electronic notes will encourage plagiarism; and the effect of notes on classroom attendance.

4. WHAT WE MEAN BY "ELECTRONIC NOTES SYSTEM"

Varieties of online notes system are reported in literature today. The variety seems to be characterized by the type of technology used, the method of delivery, and the perceived facilitation of learning that the system has on students. Widely reported systems for the distribution of lecture notes seem to focus on the provision of web-based notes, where the lecturer uploads static notes, and which the students are able to download either before or after a classroom session. In this system, there is limited or no online interactivity between the faculty and the students. A commonly reported system that is gaining popularity today is based on video and audio recordings of lectures (see for example (Preston, Phillips, Gosper, McNeill, Woo, & Green, 2010; Taplin, Low, & Brown, 2011)) which can then be streamed (Fardon, 2003) to enable the students to listen to the missed lectures online or to download them for revision purposes. Yet, others emphasize the importance of interaction between the faculty and the students, further supplementing the face-to-face classroom meetings (Picciano, 2002). In order to

understand the context of the findings of this study therefore, it is important to clarify what the ENS is and how it is used at UNAM.

At UNAM, an ENS is a web-based course management system that is dedicated to delivering and sharing of lecture notes between instructors and students. The system merely enables digitization and uploading of lecture notes, without employing instructional designers to ensure that the content is pedagogically sound. The system is not in any way intended to replace classroom lectures, but is seen as a way of supporting the teaching and learning activities. Prior to the electronic notes system, faculty who wanted to share their lecture notes with the students were encouraged to do so via Copy Centre. Submission of the lecture notes required the lecturers to print out a hard copy of the lecture materials, and deliver it physically together with all the other required information to the Copy Centre. Students wishing to make use of the lecture materials would then queue up at the Copy Centre, where they would either have to make an order for the content and pick it up later, or queue up and wait while the copies are being made available.

The lecture notes at the Copy Centre did not have a specific prescribed format of presentation. As a result, faculty were at leisure to submit the notes as using software tools such as Microsoft word documents, Portable Document File (PDF) and presentation tools such as PowerPoint. The ENS is seen as a simple means of distributing notes and other classroom materials to the students; it also does not necessitate a specific format of the notes. The incorporation of internet-based tools to provide online class notes is thus not a significant departure from the traditional method of providing paper-based notes to the students. As Grabe (2004) argued, the use of web-based tools to distribute online notes is simply a supplement to an already established academic routine, rather than serving as a basis for a radically new pedagogical approach to learning.

5. METHODOLOGY

The methodology used for this research was predominantly discussions gathered from faculty members that attended eLearning presentations as well as loosely structured interviews with selected faculty. Since the constitution of the eLearning Committee in 2004, several eLearning awareness campaigns aimed at introducing eLearning to the academic community of UNAM were organized. Before each campaign, the Committee sent an email to all UNAM users informing them of the event that would take place, and requesting them to indicate their availability to attend such presentations, well in advance. After the introduction of the ENS and the observed poor adoption rate however, eLearning awareness presentation were given at Faculty Board meetings, which are compulsory for every UNAM faculty member. Presentations were given at three of the seven faculties that were at UNAM in 2010. At each presentation, the committee introduced the purpose of the ENS, and gave a practical demonstration of how the learning management system works. Awareness of the support provided by the eLearning Committee in the process of digitizing and uploading the notes was also raised at such meetings. At the end of each presentation, the faculty members were allowed to voice their concerns and their perceived challenges of using the ENS. After the three presentations, loosely structured interviews were also conducted with all the faculty members from the Computer Science department that participated in the presentations. During the interviews, the faculty were reminded of the issues raised and were requested to elaborate on the specific issues. After the interviews, a literature review was conducted to identify which of the raised issues may be classified as ethical concerns. The issues were then categorized, and the four main ethical concerns were identified from those categories.

6. NEGATIVE PERCEPTIONS OF THE FACULTY MEMBERS ON THE INTRODUCTION OF ELECTRONIC NOTES SYSTEM

6.1 Spoon feeding

The faculty likened the ENS to "spoon-feeding" the students, a term which held a negative connotation among the academic community and was perceived to lead to educational detriment of the students. From the faculty's perspective, provision of lecture notes through the ENS will provide the students with all the information needed to ensure passing of assignments and examinations, making it unnecessary for the students to conduct individual, lecture-based research themselves. From the perspective of UNAM management, provision of lecture notes through the ENS could enable the students to go through the content themselves, leaving more time for the lecturer to focus on other parts of the curriculum during the allocated teaching time. If the students have gone through the content, they would find it easier to interact with their teachers during the lecture presentations. The faculty however seemed to want the students to conduct individual research on the content, and to take individual notes during the class sessions. Just like the interviewees described in Dugdale (1997, pg. 102) however, the faculty felt that the "electronic environment offered a dangerous level of direction and interaction between material pre-selected by faculty, which could easily lead to the non-reading of more peripheral material and damage the educational process".

6.2 Quality of Learning

The second ethical consideration raised is of quality of learning from the online notes. The faculty argued that if the students are provided with online notes, they may tend to focus on the notes only, ignoring the support provided by the faculty. A similar observation was also reported by Kauffman, Zhao & Yang (2011), where students working in online environments felt that they were provided with too much information to process, with very little or no instructional support from their lecturers. In these circumstances, students may be overloaded with information, making it difficult for them to learn because of the required complex cognitive overload. Kauffmann, Zhao and Yang (2011) therefore argued that in these circumstances, students need to be highly self-regulating (i.e. able to locate and organize information efficiently and infer relationships from information that seems to be important) in order to cope in such environments.

6.3 Inaccessibility of lecture notes

Another ethical consideration raised by the faculty was that

of inaccessibility of lecture notes once they are made available online. UNAM has a dedicated student space containing about 100 computers connected to the Internet, located at the university's Information and Learning Resource Centre (ILRC). Students are however allocated limited computer time per day, to ensure equitable access to computers for all students. During the presentations, the faculty argued that their students have limited access to the Internet, making it impractical for the lecture notes to be distributed electronically. This argument was also supported by Gulati (2008), who observed that that Internet access at home determines who has access to online learning and who the real beneficiaries of online learning are. According to a recent review of the Namibia telecommunications sector, only 47% of the households in Namibia had access to electricity, and 11% had access to a computer. With regard to Internet connection, the review found that only 3% of the population had Internet connection at home, and attributed this to the once-off financial resources and the monthly commitments that are required to keep the Internet line, while also not ruling out the educational barriers. With the low penetration rate and the high cost of internet reported in Namibia, it is not a surprise that the faculty were concerned about how the availability of online lecture notes will translate to tangible results to the students in the end.

Bradshaw et al. (2007) argued that lack of access and inequalities in information technology represents clear moral and ethical issues because of their correlation to other types of poverty. According to them, information technology is associated with features that characterize societal development, but it is inequitably distributed among the citizens of the world. They argued that if those who have access continue to utilize it for their own benefit, they will do so at the expense of the poor.

6.4 Classroom Attendance

Class attendance was another important ethical consideration that the faculty raised on deciding whether to provide online lectures or not. According to the UNAM regulation, a student is required to attend at least 80% of all contact lecture sessions and to complete all the other required elements that contribute to the continuous assessment mark in order to be allowed to sit for examinations (UNAM, 2011). While the responsibility of making up for the lost lectures lies with the student, students are still required to apply formally to the office of the Registrar in order to be allowed to miss lectures sessions. Such application is however only approved and leave is only granted in emergency cases, provided that the student has supplied the necessary documentation such as medial certificate, death certificate of a close relative, etc.

Just like the faculty reported in Grabe (2004), the faculty at UNAM feared that the provision of instructor notes to students may be used as an alternative or a substitute to class attendance. Faculty are not required to keep an attendance register for their courses, apart from the part-time faculty that are mandated to do so for payment purposes. However, the faculty still feared that low attendance rates would be observed once the students had access to the lecture notes. These concerns have also been raised in (McNeill, Woo, Gosper, Phillips, Preston, & Green, 2007), where teachers have reportedly raised a concern on the relationship between the use of technologies and the quality of learning, as well as the effect of reducing lecture attendance.

There is however evidence that the provision of lecture notes does not necessarily result in poor lecture attendance. Babb and Ross (2009) for example demonstrated that the mean attendance of class was higher when the students were provided with the notes before the lecture for the courses that did not include attendance points as part of the students' final grades. Although their research found no difference in exam performance for when the lecture notes were available or unavailable, their findings led them to conclude that making lectures notes available to students before class leads overall to better attendance and participation in the lecture sessions. McNeill et al. (2007) also argued that low lecture attendance may be attributed to other reasons including work and family commitments, as well as time-table clashes.

7. CONCLUSION

Technology-enhanced learning is believed to have huge potential for developing countries. Following the realization of this potential, UNAM introduced eLearning to its academic community and ensured that they had the necessary equipment and skills for online teaching. Despite these efforts however, the uptake of eLearning has been appallingly slow. The main goal of this research was to identify why faculty members at UNAM have been hesitant to integrate technology in their teaching activities. The paper highlighted some ethical concerns that discouraged faculty members from using the Electronic Notes System. The faculty are worried about the impact of the electronic notes on the students including: students' access to technology, quality of lectures, spoon feeding, as well as lecture attendance. The concerns of the academic staff members raised seems to be genuine, but the students' decision to approach management through their Student Representative Council is also a clear indication that the students are determined to use web-based technologies to supplement their course materials. It is therefore important that UNAM addresses these concerns by providing more opportunities for students to go online and download the notes. In addition to the training currently given, faculty also need to be encouraged to rethink their teaching methods by adopting innovative techniques and strategies that are appropriate for technology enhanced learning without resorting to spoon feeding or reducing the quality of learning.

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