BLENDED LEARNING IN ZIMBABWEAN TERTIARY INSTITUTIONS: OPPORTUNITIES AND THREATS

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ABSTRACT

Blended learning also known as mixed mode, hybrid, flexible or distributed learning, is gaining acceptance and being adopted throughout higher education institutions in the world. The aim of this paper is to identify opportunities that are brought by practice on blended learning in Zimbabwean institutions of higher education. An analysis on the preparedness for blended learning by learners in institutions of higher learning is conducted. Challenges on the adoption of blended learning are also outlined making recommendations to guide future policy, practice and research.

Keywords:

Blended-learning, Opportunities and challenges, blended-learning and University Education, Universities in Zimbabwe

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INTRODUCTION

Universities are continuing to go through rapid socio-economic and technological changes. These changes have brought about a need for universities to examine carefully their educational practices from a new perspective and to face the challenges that lie ahead in knowledge-based societies (Pittinsky, 2003). These challenges include: a large population of learners from different backgrounds, needs, motivations, abilities, learning preferences, time availability and course content requirements; a greater number and variety of higher education places without corresponding increases in funding (Phillips, 2005); a demand for more "client" responsive and flexible courses; and the drive to use information and communication technology (ICT) in teaching and administration (Challis, Holt & Rice, 2005). Despite the evident growth and potential of ICT in higher education (Green, 2004; Gibbons, 2005), some studies (e.g. Fox & Herrmann, 2004) have highlighted the limitations of teacher and student uptake of ICT for educational purposes. As a result, many university students and teachers make only limited formal academic use of ICT in teaching and learning (Selwyn, 2007). ICT implementation in higher education is not a simple technological adoption, but involves the consideration of a number of issues, such as infrastructure, obstacles, student learning, organizational culture, organizational structures, operational strategies, and appropriate policies (Duderstadt, Atkins & Houweling,2002; Guri-Rosenblit,2005).

Purpose of the Study

This study aims to identify the challenges that cause blended learning to be implemented in learning institutions in Zimbabwe. It also identifies the opportunities that are brought by blended learning to both students and lecturers.

Research Questions

What are the opportunities that a brought by blended learning?

What are the challenges of implementing blended learning?

What implications does blended learning have on faculties and departments?

What are students' perceptions towards blended learning in Zimbabwe?

WHAT IS BLENDED-LEARNING: A THEORETICAL FRAMEWORK

There is an emerging trend in higher education to combine online and face-to-face modes of learning, often referred to as blended learning (Garrison & Kanuka, 2004). The term "blended learning" refers to courses that combine face-to-face classroom instruction with online learning and reduced classroom contact hours (reduced seat time) The latter point is an important distinction because it is certainly possible to enhance regular face-to-face courses with online resources without displacing classroom contact hours (Dziuban et al, 2004).

Blended learning is the integration of face-to-face and online learning to help you enhance the classroom experience and extend learning through innovative use of information and communications technology. Blended strategies enhance student engagement and learning through online activities to the course curriculum and improve effectiveness and efficiencies by reducing lecture time (P. Tittenberger, 2007).

Garrison and Vaughan, authors of *Blended Learning in Higher Education*, state that: Most importantly, blended learning is a fundamental redesign that transforms the structure of, and approach to, teaching and learning. The key assumptions of a blended learning design are:

- Thoughtful integration of face-to-face and technology mediated learning
- Fundamentally rethinking the course design to optimize student engagement
- Restructuring and replacing traditional class contact hours. (R. Garrison and N. Vaughan, 2008)

Though the definitions of blended learning are many and various (Deng & Yuen, 2009), Garrison and Vaughan (2008) define blended learning simply as the thoughtful fusion of face-to-face and online learning experiences. "The basic principle is that face-to-face oral communication and online written communication are optimally integrated such that the strengths of each are blended into a unique learning experience congruent with the context and intended educational purpose" (Garrison & Vaughan, 2008, p. 5)

Opportunities

There are various documented and well understood reasons for implementing blended learning for adult learners. Institutions of higher education seek to increase student success and retention,

provide greater access to students, address funding challenges and provide learning opportunities which meet the needs of the diverse learners. P. Tittenberger (2008) states these as:

There are three generally agreed upon reasons for designing blended courses:

1. Improve learning outcomes (e.g. through alternate pedagogical approaches)
2. Increase access (space and time dependence)
3. Reduce costs

Adult learners

Attending school may present additional challenges and a significant commitment for adult learners, as they have many responsibilities, including taking care of family and working. As David Skelton notes in *Blended is Still Best*, "For many modern students, the problem or barrier is not geography, but time." (Skelton, 2009)

With the other commitments, many adult learners are seeking other alternatives besides face to face classroom learning. The change comes from the need to have flexible and convenient learning times. With the coming of online courses, students have been able to learn at their best suitable times. This enabled learners to complete their course work from work or home and has lessened costs for students - travel, parking, child care, etc (Bea Clark, 2011). Studies show, however, that attrition rates for online courses are high; many students begin but do not complete online learning activities (S. Folinsbee, 2008).

Flexibility and Convenience:

The needs and responsibilities of adult learners have prompted postsecondary institutions to examine course delivery methods. Fully online learning meets the needs of many adult learners, but may not always be perceived as the best form of delivery, given the lack of face-to-face interaction with faculty (Bea Clark, 2011). Some learners are not prepared for online learning. Blended learning seeks to combine the best of both worlds- the nature of face-to-face interaction with the convenience of online studies.

A number of potential advantages to blended learning are emerging. Some of these revolve around accessibility, pedagogical effectiveness and course interaction. Many of today's college students are non-traditional, attempting to balance family, jobs and university life. Coming to campus is often difficult for many of them and reducing the number of required face-to-face hours can help students manage (L. Lloyd-Smith, 2010).

The Association for Career and Technical Education's publication *Expanding Career Readiness through Online Learning* states: "At the postsecondary level, online learning can be particularly beneficial for non-traditional students, many of whom are adults who are citizen students or students concerned with working and paying taxes, supporting families, and other responsibilities associated with the everyday role of a full-time citizen." (Association for Career and Technical Education, 2010).

Satisfaction and Engagement:

Increased student engagement is cited often as a key consequence of well designed blended delivery courses. Students taking a blended delivery course in a teacher preparation program at the University of Idaho found that "...as learners they changed their normal roles from being passive to more active" (P. Tittenberger, 2007)

Blended environment offers a less intimidating forum for student participation" (Lloyd-Smith, 2010). The anonymity provided by the online course work, along with the time to formulate and prepare responses, makes it more comfortable for some learners to participate actively. Students who are reluctant to participate actively in a traditional face-to-face class are encouraged to do so during the online instruction in blended learning.

A research conducted at the University of Illinois also compared student performance in blended, fully online and face-to-face delivery courses and found no significant difference in student performance. Both the blended and online versions of the class compare favourably to the face-to-face versions, in terms of student satisfaction, learning effectiveness and faculty satisfaction (D. Larson et al, 2009).

The blended learning model provides a high quality teaching experience, higher quality interaction between faculty and students compared to traditional in-person courses, and a "community of inquiry" through flexible course design (Ho et al., 2006; Vaughan, 2007).

Challenges for Students

Although there are many benefits that can be derived from blended learning, it can also pose challenges for adult learners. Concern about use of technology, lack of self-confidence and preference for face-to-face instruction are among the challenges cited.

Technology and Confidence

Issues on the use of technology lowers the confidence of adult learners in blended learning and can create challenges for both the students and the institution. Some students worry that they do not have the computer or internet skills to be successful during the online instruction. Other students dissatisfied by feeling overwhelmed and an increased workload, despite the benefits of greater flexibility that comes with blended learning.

Struggles with technology usually occur in the opening weeks of a course. Students need to ensure they have the knowledge and accessibility to resources necessary to be successful with the online components. Second, students may experience a lack of motivation to complete coursework (Vaughan, 2007).

Implications on faculties and departments

Faculties and departments considering migrating to blended learning are, in essence, are redesigning their courses and their approach to engaging students. Moving from the "sage on the stage" to the role of faculty as "facilitator of learning" requires considerable planning and effort. It is transformative. Just as students have to relearn how to learn, faculties have to relearn how to teach (C. Dziuban, et al, 2004).

Training and Development

There are various benefits that accrue with blended learning; same are the challenges on implementation. These challenges include the time required to redevelop and redesign a course and the requisite training for lecturers in faculties and departments. Designing a blended delivery course is not as simple as merely introducing online components into a traditional course or a quick "cut and paste", but rather it is a total instructional redesign (Bea Clark, 2011).

The redevelopment of courses from a traditional face to face delivery to blended learning format requires considerable time, effort and support, as well as a different perspective on instructional delivery. Ability to use the technology effectively, as well as ongoing technical support, is also required.

METHODOLOGY

One hundred and twenty questionnaires were sent to learning institutions. The respondents were informed of the benefits of this research both to the institution and the student, so they were cooperative. All questionnaires were attended to. Thirty (30) personal interviews were also conducted with teaching staff as well as administrators. The data was then further analysed to produce the following tables.

RESULTS

Table 4: Learning methods preferred by individuals

Face to face only	82 (54.6%)
Blended	68 (45.6%)

From the table above, students' overall attitude towards learning online without face-to-face lectures was rather negative. Learning online was similar to learning by themselves, which put considerable strain on their self-discipline and time management skills. The traditional lecture was considered more effective by many students in grasping concepts and principles. This was the case for undergraduate courses mostly. Postgraduate students seemed to appreciate the relevance of blended learning.

Table 3: Rating of the effectiveness a blended system

	Rating of blended system's effectiveness	Total

	0-20%	21-40%	41-60%	61-80%	81-100%	
Number of Respondents	18 (12 %)	21 (20.7%)	36 (24%)	52 (34.7 %)	13 (8.6%)	150

Most of the respondents (34.7%) rated the blended system as a system that falls between 61-80% when it comes to its effectiveness. Meanwhile, the web-based platform was acknowledged as a flexible and convenient resource when downloading course notes and submitting assignments. It was concluded that ICT might be better as a supplement to face-to-face class rather than a replacement (Yuen, Deng & Fox, 2009), as Larkin (2010) argues similarly that "students in general, do not aspire to replace lectures with downloadable, online versions.

Table 2: Responses on the effectiveness of virtual classrooms

Question number	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5.Do you agree that using videos is the same as face to face lectures	6 (4%)	33 (22%)	48 (32%)	39 (26%)	24 (16%)
9.Do you agree that students are more concentrating using videos than face to face learning	30 (20%)	39 (26%)	9 (6%)	43 (28.7%)	29 (19.3%)
17.After using virtual classrooms would you recommend them to other schools and colleges	12 (8%)	23 (15.3%)	15 (10%)	51 (34%)	49 (32.7%)
19.Do you think learning through videos can substitute face to face lectures	11 (7.3 %)	37 (24.7%)	31 (20.6%)	43 (28.7%)	28 (18.7%)

From the table above, 26% of the respondents disagreed that the use of videos is the same as face to face lectures, whilst 42% agreed. Also, 66.7% of the respondents recommended the use of videos to learning institutions, but 23.3% rejected the idea. Others (10%) remained neutral.

47.4% of the respondents believed that videos can substitute face to face lectures, whilst 32% rejected the idea, and 20.6% remained neutral.

From class observations conducted, the ICT facilities in the university were found to be not very advanced. The video clips were played on a desk-top computer with a 15-inch monitor, and it was difficult for 10 students to look at such a small screen all together for 10 minutes. Students sitting away from the computer could not view the videos clearly. There were only one projection facility in some rooms but some did not have projectors at all.

The following statistics summarise the research findings.

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Test V	143.96	150	16.319	2.308
Test F	**144.50**	**150**	**15.639**	**2.212**

From paired sample statistics it shows that those who used face to face lectures have a greater mean value than those who used videos and we conclude that they were more effective than those who used videos. However there is a small difference in the mean values hence we conclude that if the two are used together quality results will be obtained

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	**Test V & Test F**	**150**	**-.210**	**.010**

Hypothesis H0: Blended classrooms are effective in learning institutions

Below is the testing of the above hypothesis and whether it was accepted or not and this was done using SPSS

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	99% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	TestV – TestF	-.540	24.860	3.516	-7.605E0	6.525	-.154	49	.879

From the above paired sample test at 95% confidence interval we reject any value below the lower bound which is -7.605 and any value above the upper bound which is 6.525.We accept anything between the two boundaries. Hence since we have got the significance value of 0.879 we accept the null hypothesis, blended learning is effective in learning institutions.

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