

Blended learning at The University of the West Indies, St Augustine: A first look at policy implementation

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One of the strategies identified in 'The University of the West Indies' (UWI) strategic plan 2007-2012 is to promote the use of technology to enhance teaching and learning. This follows on strategies started in 2005 to promote the use of blended learning on the St Augustine campus, Trinidad and Tobago. Several researchers hold the view that universities have not begun to realise the power of information communication technology (ICT) in higher education and that the right blended learning model can improve teaching and learning and reduce costs - but are we there yet? The St Augustine campus has intensified efforts to incorporate technology in teaching and learning with a newly drafted blended learning policy. Since 2006 there has been no review of the status of blended learning on the St Augustine campus to see what gains have been made. This is a largely descriptive paper, which draws on publications on the implementation of blended learning at UWI, St Augustine and a review of data on current courses. The paper presents the findings of the first phase of a study that reviews the status of blended learning and identifies the gaps that need to be filled to achieve future objectives with regard to the new blended learning policy. It outlines the status of the implementation of blended learning on the St Augustine campus and emphasises the need to fill gaps in institutional support; identify hindering and facilitating factors, and complete a comprehensive costing model that can drive the process. This can ensure buy-in from stakeholders and sustainability of the initiative.

Key words: blended learning, elearning, online learning, hybrid learning, policy implementation.

Introduction

“Although it is impossible to see what the future holds we can be pretty certain that the trend toward blended learning systems will increase” (Graham, 2006, p.7). This quotation captures the general sentiment that has promoted the growth of blended learning in higher education in many institutions. That is, the need to follow a trend which seems set to define the teaching and learning landscape, and which threatens to leave behind those who are not prepared.

Blended learning has become one of the buzz terms that define the combined use of face-to-face and online technologies for teaching and learning. Dziuban, Hartman and Moskal (2004) note that blended learning should be viewed

as a pedagogical approach, which combines the effectiveness and socialisation opportunities of the classroom with the technologically enhanced active learning possibilities of the online environment. The Sloan Consortium defines blended courses as students having between 30-79% of their course content (i.e. subject matter and activities) delivered online, with the remaining portion of the course content delivered by face-to-face instruction or other non web-based methods, such as paper textbooks (Allen, Seaman & Garrett, 2007). Allen, Seaman and Garrett (2007) also point out that “perceived by some as a ‘best of both worlds’ approach compared to fully online courses, blended learning may have a higher acceptance and a higher perceived value (closer to face-to face learning) than online courses” (p.2).

In keeping with global trends, The University of the West Indies (UWI) has been making efforts to offer more courses using a blended format. To this end the Strategic Plan 2012-2017 states that “Blended learning, besides improving the quality of instruction, will free up physical classroom space thus reducing the need for additional capital expenditures on physical infrastructure” (UWI, 2012, p.26). This highlights the University’s continued commitment to the use of technology. In Trinidad and Tobago, UWI’s foray into blended learning commenced as early as 2004, with a mandate from the then Principal of the St Augustine (STA) campus to develop online and blended courses and programmes with the intention of increasing access for students, reducing seat time and staying abreast of trends in higher education. This policy was reviewed and revised in 2010 with the development of a blended learning policy. The issue of wider access and flexibility for students, enhancing the quality of teaching and learning and reducing costs, which underlie UWI’s 2010 policy review, have been identified by Bates (2000) and Uys (2000) as among the main motives for implementing elearning or blended learning. Based on the current policy, UWI’s definition of blended learning is:

...the appropriate organisation of face to face approaches with web-based and other information and communication technologies for advancing student-oriented, active, collaborative teaching-learning processes.

(The University of the West Indies, 2012, p.1)

In this paper, I examine the current status of blended learning at The University of the West Indies, St Augustine, Trinidad and Tobago by reviewing the situation in 2006 in relation to the current status, in the context of frameworks for implementation of blended learning.

UWI STA’s blended learning initiative

UWI STA’s blended learning initiative officially commenced in 2004 with a mandate from the Campus Principal that each faculty must have online material to support courses. The result of this mandate was the uncoordinated offering of a number

of online courses and components of courses of varying quality (Edwards-Henry, Thurab-Nkhosi & Jackson, 2006). At the time there was no articulated standard in place for the quality assurance of these courses and the campus had invested in the use of the learning management system, WebCT, at a cost of approximately US\$40,000 per year. The approach involved the Campus Information Technology Services (CITS) and the Instructional Development Unit (IDU) of the campus providing the training and support for lecturers and administrators in the use of WebCT. By 2005 there were 156 of a possible 3686 courses in WebCT, spanning five faculties and the then Distance Education Centre. There were 68 courses from the Faculty of Engineering, 23 courses from Science and Agriculture, 19 courses from The University of the West Indies Distance Education Centre (UWIDEC), 17 from the Faculty of Social Sciences, 15 from Medical Sciences, and 14 from Humanities and Education.

In 2007, for mainly financial reasons, a decision was taken to move to the use of the open source software, Moodle, which was free of licence fees. Wood-Jackson, Mahabir and John (2008) comment that the use of Moodle is “the best thing since sliced bread” (p.1) given its ability to provide online tools for course management as well as pedagogical tools, without the high costs accompanying the use of WebCT. With the move to Moodle, an elearning strategy was adopted and STA’s instance of Moodle was branded *myeLearning*. The approach involved development of support systems through a campus IT helpdesk, online training courses for lecturers and students entitled *myeLearning 101 for students* and *myeLearning 101 for lecturers*, the use of student monitors for training of students in the use of the software, customised training for staff and assistance in migration of courses from WebCT to Moodle. At the same time as the St Augustine campus was streamlining its use of the new learning management system, UWI took a policy decision that

To achieve the level of coherence desired, as of Academic year 2008/2009, the Open Campus shall be the vehicle through which online programmes are delivered to students not studying at or attending one of the pre-existing campuses. Thereafter all new courses and programmes delivered to these students shall be developed by and/or in conjunction with the Open Campus. The process and timeframe within which existing online courses and programmes delivered to these students shall be brought under the ambit of this policy shall be mutually agreed by the parties concerned.

(UWI, 2008, p.3)

Notwithstanding this decision it was agreed that campuses could continue to enhance teaching and learning with the use of technology and also offer programmes in a blended format. The St Augustine campus therefore took a decision to formalise its own approach to blended learning by developing a campus

policy on blended learning and an approach, which would move the implementation forward.

STA's blended learning policy

The vision for blended learning on the St Augustine campus is grounded in a responsibility to enhance teaching and learning by offering students and staff greater flexibility; more opportunities for engagement, and wider choices consistent with varying teaching and learning styles and needs. The blended policy for UWI STA is intended to “promote the use of ICTs to enhance teaching” (UWI 2007-2012, p.14). The policy embraces the seven quality elements for online learning identified as institutional support; course design; course development; teaching and learning; student support; faculty support, and evaluation and assessment (IHEP, 2000). Human resource issues, which impact on these elements, have been added to the policy framework. The initiative is envisioned as a three-year project with preparatory work in 2012 to facilitate roll-out of implementation in 2013.

Goal of the blended learning policy

By September 2015 each faculty is expected to offer at least one blended programme. A blended programme refers to a programme that comprises a substantial number (between 50-75%) of courses, which are offered using a combination of face-to-face and online modes of delivery. For example, in a Bachelor's degree comprising 30 courses, between 15-20 of these courses must be offered in blended format for the degree to be considered a blended programme. Each individual blended course should also be designed to ensure effective teaching, as is consistent with the guidelines for blended courses developed by the IDU and the STA's blended learning policy. (This is not to prevent lecturers who want to blend individual courses from availing themselves of the training and support available).

Model to be adopted and implementation approach

In a report on the blended learning project, *Program in Course Redesign*, conducted in 30 institutions in the United States, Twigg (2003) identified varying characteristics of blended courses. The five models of blended learning identified by Twigg (2003) were the supplemental, replacement, emporium, fully online and the buffet model. The supplemental model is the most basic of the models, which retains the basic structure of the traditional course but adds technology-based out of class resources and activities. There is limited online interaction. This model is particularly useful for providing easy access to course documentation and is suitable for those who may not have the skill, or facilitating context, to incorporate technology in a more interactive way. The replacement model involves a reduction in class meeting time, replacing rather than supplementing face-to-face time with online, interactive activities. The replacement model is ideal for those who have the skill and work under conditions, which allow for online interaction and can therefore facilitate greater flexibility for the student who can access 'class' without being physically

present. The emporium model involves the removal of all class meetings and their replacement with a Learning Resource Centre featuring online materials and on-demand personal assistance. The fully online model involves fully online course delivery with the assistance of course support personnel. (Both the emporium model and fully online model are potentially costly models, which are better suited to a virtual campus). The buffet model offers students a range of different options that match their individual learning styles. This model, while having the potential for adding value, requires skill on the part of lecturers and students and a facilitating context to ensure effectiveness.

The model to be adopted for the pilot implementation at STA is the replacement model based on its potential for cost and teaching effectiveness. In this model, online content and activities act as a replacement for time that would have been spent in a lecture hall. Instead of traditional lectures, in-class time is freed for more interactive, collaborative learning experiences (Twigg, 2003). This will be done with the use of *myeLearning* as the learning management system and the use of the “three I’s” framework, i.e. Image, Interaction and Integration of video with web and course resources. The three I’s framework is a design tool that can help academic developers make informed decisions on their use of video and web resources that take into account both pedagogical and technical considerations (Young & Asenio, 2002). It suggests that the combination of visual images with online interaction and integration of multi-media elements can encourage online collaboration, and create a community of online learners within a specific context.

Blended and online learning frameworks

Owston, Garrison and Cook (2006) and Wallace and Young (2010) note that the online and blended course delivery in universities requires the re-assessment of existing administrative practices and protocols. This reassessment is an essential forerunner to the pedagogical or teaching and learning issues such as re-designing courses that must be addressed. The major administrative issues identified by Wallace and Young are divided into three categories:

1. Management and organisational related to goals, course selection, resources and intellectual property
2. Faculty/academic responsibilities and workload
3. Student access and support

Suhail and Mugisa (2007) describe several frameworks which exist for the implementation of elearning in higher education. One of those identified is the framework proposed by Khan (2001) which has eight dimensions, namely institutional, pedagogical, technological, interface design, evaluation, management, resource support, and ethical considerations.

Table 1. An e-learning framework: Adapted from (Khan 2001)

No	Dimension	Explanation
1	Institutional	Institutional readiness, Institutional matters, Collaboration, Administrative matters, Organisational, Academic, Infrastructure availability, and Planning
2	Technological	Availability of Technology Infrastructure
3	Pedagogical	Teaching/Learning requirements, Content Management Systems
4	Resource Support	Online, Offline technical support
5	Evaluation	Assessment of learners, Instructions and programs
6	Interface Design	Overall look and feel of E-learning programs
7	Management	Maintenance of learning environment, Distribution of information
8	Ethical Considerations	Social and Cultural diversity, Copyright and so on

Source: Suhail and Mugisa (2007, p.305)

Table 1 outlines the elements of Khan's framework. In addition to Khan's model, several other frameworks exist which focus on factors not considered by Khan and which are all applicable in a developing country context. Two of these are the LASO model for technology transformation by Uys (2001) and the Framework for Success proposed by De Vires (2005).

The LASO model integrates top-down and bottom-up and is influenced by the work of Gunn (1998, p.142) who asserts that:

An effective technology strategy works in both directions. From the top down, it is articulated through institutional objectives, sensitive to existing culture, constraints, strengths and weaknesses, and presented as a coherent, achievable set of goals with appropriate incentives and rewards. It must also move from the bottom-up where knowledge of teaching strategies, learning contexts and disciplinary expertise can be translated into action plans geared to achievement of institutional strategic objectives and so creating a sense of ownership at all levels of the institution.

Gunn in this quotation is emphasising the need to have a model that not only reflects a top-down approach in an institution but takes on board a bottom-up approach which considers the strategies adopted by the practitioners, the learning contexts and all stakeholders' views, thereby creating a sense of ownership and greater potential for success.



Figure 1. The LASO model

The LASO model as depicted in Figure 1 suggests that transformation to a blended or online course can occur when there is synergy between leadership and academic and student ownership and readiness. Leadership is achieved through a clear vision, a reward structure and a strategic framework. Ownership and readiness can be achieved by using strategies such as pilot projects, extensive training, establishment of workgroups and learning communities in every faculty and using teams for course development.

The Framework of Success model proposed by De Vries (2005) focuses on five elements, namely technology, content, administration and support, communication and financial analysis. In this model unlike the others, the element that stands out as potentially troublesome, is 'communication'. De Vries (2005) points out that two factors to be considered are change management and marketing communications. While communication may have been implied in the other models it is stated explicitly in this model. The importance of communication has been revealed in such reports as The National Committee of Inquiry into Higher Education (Dearing, 1997), which recommended that all higher education institutions in the UK have in place overarching communications and information strategies. Likewise Souleles (2004) emphasised that the vision for blended learning

should be carefully communicated to all stakeholders. In the UWI context given the challenges associated with earlier efforts to implement blended learning noted by Edwards-Henry, Thurab-Nkhosi and Wood-Jackson (2006), including the view that the thrust is a mandate, without input of lecturers and students, the issue of communication is of even more concern. In 2005 there was no dedicated framework for blended learning on the St Augustine campus. In the revised policy the framework adopted is an adaptation of the IHEP (2000) framework mentioned earlier.

Method

In this initial review of the status of blended learning on the St Augustine campus specifically, secondary sources of data were used, namely statistics generated by the learning management system at UWI STA. These data were used to review the courses available in Moodle and the level of course activity. This was compared with data provided in previous studies done at the St Augustine campus on the implementation of blended or online learning.

The status of blended learning on the St Augustine campus

Number of blended courses

In examining the current status of blended learning at STA it is important to review the status in 2006 in the initial stages of the strategy as a baseline or background against which one can look at the current status. In 2005 there were 169 online courses listed by Campus IT at UWI STA. In 2006 there were 393 courses and of these 136 or 35% were inactive and available in WebCT (meaning there were no actual activities taking place in these courses, even though the courses were available). Five years later in 2011 there were 3489 courses online in *myeLearning* and of these 829 courses were inactive or represented course shells with no pedagogical activity or resources. Although there has been an 89% increase in online courses offered in 2011, 24% of the courses are course shells with no activity and 884 courses (25%) have only one activity. There is no indication of how these courses are related to programmes nor is there an indication of the activities at the level of the faculties. The data suggest that while there has been an apparent increase in the number of courses in the learning management system, *myeLearning*, many of these courses are mere shells with little, and in many cases, no pedagogical activity. There is no added value to teaching and learning since the courses are inactive.

Use of tools in the learning management system

Edwards-Henry, Thurab-Nkhosi and Wood-Jackson (2006) found that 66% of the courses made use of one or more of WebCT's pedagogical tools, namely Calendar, Email, Discussion, Quiz, Chat and Assignment. At the time there was no evaluation of how the tools were used. With regard to the specific tools incorporated into the WebCT courses, the Calendar tool was the most popular in particular for

disseminating information such as schedules. 49% of the online courses utilised the Calendar tool, 48% used Email. 43% used the Discussion tool and 33% used the Quiz tool. The least used tools were Chat and Assignment with 31% using the Chat tool and 28% using the Assignment.

In 2011, *myeLearning* data on specific types of pedagogical activities within each course, such as discussions, journals etc. were not generated. Campus IT services was able however to provide data on the overall or total number of activities per course. According to this data, 2043 (58%) of the courses had between one and 10 activities, however it is not clear which activities were being used and how these activities were used. Interrogation of the nature of online activities and general use of tools, will require a review of each course and the activity generated by each online tool.

Status of issues in relation to the framework or implementation

The policy framework of the St Augustine campus embraces the seven quality elements for online learning identified as institutional support; course design; course development; teaching and learning; student support; faculty support; evaluation and human resource issues. Table 2 identifies the status within each of the areas identified:

Table 2. Status of 7 quality elements of online learning

Elements of the framework	Status
Institutional Support	Costing model to be developed and funding to be resourced. Policy has been disseminated to all faculties and presented to academic board
Course Design and Development	On-going training in course design for all staff. Individual consultations being done with staff of the Management Department involved in the development of the pilot programme. No discussions have been held with regard to incentives for course development.
Teaching and Learning	The IDU is providing updates on best practice through seminars and visiting lecturers
Student Support and Faculty Support	These systems are yet to be enhanced to allow for early registration of students and issues related to late payment of fees. There is also need to address the possibilities of a 24/7 helpdesk. There is a need to appoint trained support persons within the faculties
Student Assessment	This is being addressed in individual consultations with the course developers
Evaluation	These are yet to be devised
Human Resource	No action has been taken with regard to human resource issues

Prospects for implementation

UWI's foray into blended learning is certainly not new and there have been gains over time and with the right attention to the gaps in the current framework. The implementation of the strategy as part of the 2012-2017 strategic plan has the potential to succeed to the benefit of students and lecturers. The experiences of UWI are by no means unique as exemplified in the work of Dziuban, Hartman and Moskal (2004) and Allen, Seaman and Garrett (2007); however, they might be a source of information for other institutions who are ready to embark on similar approaches.

From the data it is clear that the St Augustine campus has made strides with regard to the number of courses available online and supporting facilities such as training for staff. There is a need, however, to evaluate the pedagogical approach in these courses and the impact on teaching and learning. It is also important to take stock of the facilitating and hindering factors to the implementation and consider whether we are, in fact advancing teaching and learning or whether we are indulging in the use of technology to transmit information rather than to transform students and achieve learning. This may apply to other institutions involved in implementing blended learning strategies. Recommendations made in the context of UWI may hold some promise for other institutions embarking on a blended learning approach.

Thus far a mostly top-down approach has been taken, first with the mandate to have at least one course online, and later with the roll out of the blended learning policy. To further develop the policy there is scope for a bottom-up approach for feedback from lecturers and students to ascertain hindering and facilitating factors and determine the way forward. (Souleles, 2004; Uys, 2000; Dearing, 1997). Many lecturers are on board so it is evident that exploration of incentives and other faculty support could encourage more participation by staff (Owston, Garrison & Cook, 2006; Uys, 2007).

The increase in courses in *myeLearning* has also created expectation among students with regard to possibilities for their easier access to course material and communication. This can create a push factor for lecturers and pull factor for students but can also frustrate if not done properly. The gains made must be capitalised on by ensuring that frustration is dealt with by ensuring adequate technical support and access.

The approach of the UWI STA involving implementing a pilot blended programme out of the Department of Management Studies has positive implications as this will allow for a costing model; the development of an evaluation strategy, and student support on an incremental basis which can then provide the model for other similar programmes.

In summary therefore, with regard to charting a way forward and building on the positive strides made there is a need to:

- Address the gaps identified in the framework, particularly in the areas of institutional support, student and faculty support and human resources;
- Review the hindering and facilitating factors, which can inform activities. This requires appropriate research and dialogue with stakeholders in a timely fashion and the involvement of staff at all levels and not just a top-down approach;
- Prepare a costing model and develop evaluation strategy for pilot;
- Encourage continued and increased participation by lecturers and students.

The outcomes of this first look at the blended learning policy at UWI STA have provided a preliminary view on the status of implementation of the blended learning policy of the University and possibilities for the way forward. By drawing on past experiences and highlighting common issues expressed by researchers on the topics it is hoped that the institution's continued implementation can avoid the common hindering factors. It is also hoped that further interrogation of the impact of this policy will be undertaken, given the current status and prospects for the future.

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