1. Title:

Is Blended Learning as effectual as it is deemed to be: Webct or no Webct for students … that is the question! (With apologies to William Shakespeare)

As part of the project on e-learning, I have placed certain modules of Personnel Management year 3 and year 2 onto 'My Blackboard'. Personnel Management is a programme in the National Diploma in Human Resource Management; NQF exit level 6

2. Context:

Although I have been seriously thinking about ways to improve the effectiveness of learning in my situation, it was only thorough my introduction to 'Webct' that really got me thinking about local and/or international trends that could be used as a trigger for my investigation. I found the following that assisting my thinking and reflection. The first trend that came to mind was that of Blended learning. I was the National Training Manager for the PERM Building Society and we embarked on Blended Learning, way back in the late 1980's; we introduced what we called CAT i.e. Computer Assisting Training, using computers to replace the 'mundane' aspects of training and for certain assessments that had to be undertaken by managers before they could attended certain management development courses. The name has changed over time (being now known as e-learning) and the technology has certainly evolved, but the principles are very similar. I have been in contact with various people in industry and they inform me that their organisations want to use e-learning more and more. (Cloete, F, Nedbank: Executive head of e-learning; Bluen, S, H R Director, SAB Miller 2008). Also, Mari Pete, the acting head of CELT at DUT: e-learning, has recently been to the U K and she concurs that the trend of using 'My Blackboard' is a growing trend in England, Ireland and South African academia (Pete, M 2009).

After introduction to Webct, I read more about Blended learning, for example, as espouse by Rossett, Dougls and Frazee (2003) and Mason (1998).

Another trend that triggered my investigation and one that I hold very, very dear is that of 'Applied learning' (or as it is known: Authentic Learning). I do believe that as lecturers, we have to prepare students for the real world of work (as I have espoused later in this paper) and in every module I present, I relate the theory to what actually happens in the workplace (and sometimes it differs) and I present many examples of what happens in the workplace. I have spent almost twenty years in the corporate world and I keep in contact with people in industry and so I do believe that I am well qualified to know what happens in the world of work. It is vital that our students know what happens 'out there'; this is one
of the distinguishing hallmarks that separate a University of Technology from a Traditional University - applied learning (authentic learning). Donovan, Bransford and Pellegrino (as cited in Mims 1999) have researched this trend and the work of Lebow and Wager (as cited in Herrington et al 2004: 8) concur with the statements I have made, based on my twenty years of experience in industry.

3. Challenges:

The great challenges in my teaching and learning environment are based around large numbers of students, who have to be assessed and need to be exposed to different learning methodologies. DUT has a mandate that all assessments are to be returned to students within ten working days and it is a great challenge to ensure this happens with every assessment. We have presented multiple choice questions in tests and examination and these can be placed on ‘My Blackboard’ for ease of accessing and receiving instant feedback, something, which the modern generation (Gen ‘Y’) need, according to reports by specialists such as Carolyn Martin and Bruce Tulgan: ‘Managing the Generation Mix: From Urgency to Opportunity’ (as stated in Kessler R: 2008, ‘Competency – Based Performance Reviews: 92)

It is also good teaching and learning practice to expose students to new ideas and technology, not just for the sake of it, but to enrich their experience, understanding and learning. In this regard, Blended learning can encapsulate the best of both world’s i.e. traditional learning and electronic based learning

As I stated elsewhere in this paper, some of SAQA’s Critical Cross Functional Outcomes relates to having learners take more responsibility for their learning and electronic based learning, such as ‘My Blackboard’ is ideally situated for this to happen.

There are also, great opportunities for students to link into appropriate web sites to reinforce and enhance their learning, from ‘My Blackboard’.

4. THEORY:

When I embarked on this ‘voyage’ of what was then known as ‘Webct’ the theory that really real kick started the process was the ’on – line assessment’. As its name suggests, on – line assessment necessitates the use of computers and or the world – wide- web to manage the process of student assessments. Students’ log – on to the system and are directed in how to take the assessment on – line. Instant and detailed feedback can be obtained and it allows for far more flexibility than the traditional method of assessing students. Assessments questions can be chosen to give a random selection, for each student.
Another theory which ‘drove’ this investigation is the ‘Blended Learning’ theory. ‘Blended learning is an integrated method of learning. There is no specific combination, but rather a variety of methods’ (Rossett, A., Dougis, F and Frazee, R. V. 2003). The methods chosen should complement each other and can be either formal or informal; with the main thrust being to meet the overall needs of the students. Blended learning, thus, unites varying methods and approaches to meet ever-changing needs. A major characteristic of Blended learning is that it is able to cater for the different learning style of students by presenting information in flexible ways. Finally, Blended learning allows for far more flexibility and independence and as Rossett, Dougis and Frazee: 2003, state ‘it allows learning to go much farther than the classroom and can be tailored for your needs e.g. action learning.

A third theory that drove my research is ‘Authentic Learning’. ‘Authentic Learning is a pedagogical approach that allows students to explore, discuss and meaningfully construct concepts and relationships in contexts that involve real-world and projects that are relevant to the learner’ (Donovan, Bransford and Pellegrino (as discussed in Mims 1999). I really do believe that learning should be real-world learning and not just theoretical concepts and I believe it is the responsibility of lecturers at DUT to prepare students to enter the real-world of work, thus better equipping them than Traditional Universities.

Some of the other key characteristics of authentic learning are that learning is ‘learner centred’ and facilitated by lecturers and learning extends beyond the lecture room, to be based on authentic situations.

Herrington et al (2004:11) indicates that there are ten points that describe authentic activities and some of the major points, which are relevant for my investigation are:

1. Authentic activities have real-world relevance
2. Authentic activities comprise complex tasks to be investigated by students over a period of time
3. Authentic activities provide the opportunity for students to examine the task from different perspectives, using a variety of resources

The final theory that drove my investigation is the one of ‘Motivation’. There is a plethora of definitions for motivation and particularly, the strategies and I do believe that the one being presented here is the most appropriate for my investigation. It is based on the model by Victor Vroom (1964) called the ‘Expectancy Theory’ and later developed by Porter and Lawler. A definition of motivation is ‘to get movement from an individual’ in other words to get people doing something, hopefully something worthwhile. I would, however, like to focus on the strategies used to get people moving.
Vroom (1964) stated that people generally will only put in effort if they perceive an adequate reward commensurate with the effort they put in. Vroom called this 'valence' i.e. the reward is *worth* the effort. (as stated in French et al 2008). This theory does not advocate that rewards have to be extrinsic, since often; intrinsic rewards have a far greater pull than extrinsic. (Newton 2009: unpublished). I really do believe that it is this valence theory that applies particularly to students using 'My Blackboard'. It is a new concept for the students to adapt to and, having spoken to a sample of them, the valence theory really comes to the fore, it may not be stated in these terms but the principle is evident. If students are asked to engage in a process which is 'foreign' to them, they need to know that the 'reward' they receive is *worth* the effort they put in. Here are some of the rewards that they can receive: Flexible time to access; knowing they are becoming more technically advanced; they can keep abreast of the latest developments in e learning and it can make their life easier, by working smarter not harder (a most desirable reward for the 'common' student!)

5. METHODOLOGY:

According to O'Brien (1998) action research is defined as 'learning by doing. It addresses real - world problems learners may have, and in trying to resolve them. Action learning is one of the pillars that a University of Technology is founded upon (Du Pre: 2004) and therefore, should be a hallmark of what we embark upon at DUT. These principles have been cornerstone of my approach to the introduction of 'My Blackboard'.

In the 'My Blackboard' group project, that was undertaken in 2008, we used the action research methodology's structure, as determined by O'Brien (1998). He states that action research has a cyclical methodology embracing these phases:

- The diagnosis of the problem
- The planning of alternative courses of action
- The choice of a specific course of action and its implementation
- The evaluation of the consequences of the action
- The interpretation of the action findings which is undertaken to assess the relative success of the action

As a group we discussed the major problems we encountered in our respective disciplines and arrived at numerous problems. These problems had to be trimmed down to a manageable number. Individually, we worked through each of our problems and analysed the feasibility of finding solutions to the more pressing needs. We each chose one major problem that needed to be addressed urgently and embarked on planning different courses of action, to address the problems; this was undertaken by 'mind storming' individually and then 'brain storming in the group. We thought it prudent to choose two or three alternative courses of action for each of our problems.
After input from the group, we went away individually to think through the choice of the most effective course of action we could undertake, to solve our problem. Since we were in close proximity to each other, it was easy to ‘bounce’ ideas around; even though there was little synergy regarding our disciplines, we could give input on a general level to allow the group member to really think through issues. After we chose the most effective course of action, we embarked on planning the implementation of it. I decided that the best approach was in the form a Gantt chart, giving the objective, action plans, resources needed and deadline dates.

The action that was decided upon was analysed more in-depth, from the perspective of examining the consequences of pursuing this action. I personally looked at the proposed action highlighting risks as low, medium and high. With the high risk actions I examined ways of reducing the risk and if it was out of my control to reduce the risk significantly, I decided on other courses of action. The medium risk was analysed to reduce the risk and the low risk was not examined.

In the final phase of action research, I set out the criteria which was to be used calculate the success of the proposed action, since success can be measured in many and varied ways. I decided that if the work could be placed on 'My Blackboard' and there wouldn’t be a drastic negative impact on the students, I could replace one period per week, contact time, with the students accessing 'My Blackboard'. This is a qualitative measurement and so I solicited the opinions and views of the students, on the process that was adopted. The overwhelming opinion was that it didn’t affect their learning in a drastically negative way.

I have also quickly examined the Test results of a sample of students from Test 1 and Test 2; the latter being administered after the introduction of e learning. I do realise that there are other variables at work, that could affect the results; but as I stated I wanted a qualitative evaluation and I am relatively pleased with the opinions of the students, I say ‘relatively’, because I will continue to strive to enhance the learning process in all aspects, not just on e learning.

DESIGN:

6.1 My Vision:

My vision for Blackboard is to develop on-line ‘classrooms’ for the National Diploma students, which is interactive and after it has ‘bedded down’ to develop an on-line diploma (NQF exit level 6) and an advanced diploma (NQF level 7) to be used by students throughout South Africa and, where appropriate, throughout the world. (If time and energy permit, I would envisage putting a post graduate qualification onto the system, such as a module - based Masters degree)
6.2 Active Learning

The modules I am placing on 'My Blackboard' in the future will encourage active learning, in as much as the students will not just learn content, but will be actively involved.

I envisage the following occurring:

- Activities that the students will have to become involved in, such as: reading a case study and writing a suggested answer for the case study online.
- Engaging in basic research of topics, both from a library perspective and occasionally researching in the community/industry.
- The use of multi-facetted Assessment as part of the modules, to reinforce learning and application.
- Linking to web sites, so that the students can follow certain processes that are already in place; and to link into relevant information they can summarise and utilize in modules and assignments.
- Using the concept of 'Constructivist Learning' (as presented by Professor Peter Taylor of Curtin University, Perth, Australia (DUT: 2008))
- Bringing the 'Discussion tool' into action so that the students are able to discuss certain topics between themselves and also enter into dialogue with myself.

6.3 Working Smart:

I as stated earlier, in my assumptions, I envisaged that the use of 'My Blackboard' would alleviate some of the time spend face-to-face in lectures. I do not infer by this statement that lectures are unimportant or that I do not like face-to-face contact; I affirm in the positive that they are vital. What I wanted to achieve is getting a balance in face-to-face and technology-based interface.

I have scheduled three lectures per week where the students do not attend a set lecture time, but use 'My Blackboard'. (The three lectures are derived from the three groups I lecture each week: one lecture per group).

I also envisage that summative assessments will be accessible for the third test for PM 3 and PM 2 students (around October 2009). The assessment will give instant feedback to the students and alleviate my having to mark this part of the test.

In the event of my attending conferences, being absent from work due to illness or having to reschedule lectures due to unforeseen, or even, foreseen circumstances, the learning system will be invaluable, since no learning time will be adversely affected.
I would like to add, that at the time of writing (12 June 2009), we have a public holiday on Tuesday 16 June and on this day there are three lectures scheduled for PM 2 students (They only have four lectures per week) and they will not be here and so I am putting information that I would have covered in the lectures, on 'My Blackboard' for the students to access at any time during that week. This is invaluable, because the amount of time 'lost' in the year really builds up. The timetable and schedule is very 'tight' and we all need to work smarter in this regard. 'My Blackboard' has certainly enabled me to work smarter!

6. 4 Blended Learning:

The great challenge with Blended learning is to ensure there is a balance between the traditional learning methods and electronic learning methods. I firmly believe that face-to-face interaction is vital and cannot really be totally replaced by electronics that are not 'real-time'. The interaction afforded by face-to-face is essential and this will be retained. I envisage that the so-called 'drudgery' aspects of traditional learning could well be used by 'My Blackboard' in addition to some traditional aspects. Let me elucidate what I mean here by 'drudgery': in PM 2 we traditionally have the first question in each test in the multiple choice questions format and My Blackboard would easily be more effective than my marking, because the students would have a set period of time in which to access the assessment and they would receive instant feedback. When it comes to other, so-called 'holy cows' aspects of teaching and learning, My Blackboard could be utilized for reading, analysing and recommending action in the case study methodology, instead of performing this in lecture time and also certain constructs could be catered for electronically.

I also envisage that the 'scaffold' technique of learning could well be applied in 'My Blackboard' to great effect i.e. we 'build' the scaffold on 'My Blackboard' and push forward in lectures with the learning that needs to take place, in-depth. At least the basics will have been covered!

I do foresee that in the future I will utilize 'My Blackboard' far more widely than I am at present. Two constraints are placed on me at present: one is my lack of technical expertise and the second constraint is allocation of time to be able to do all that I envisage. I do, however, regard these constraints as challenges, not insurmountable obstacles.

7. IMPLEMENTATION:

7.1 Pilot Activity:

I have launched 'My Blackboard' live into the third and second year programme. I had been thinking of implementation for a while and I was to attend a conference and be away from DUT for a week, and so, I knew this would be the most appropriate time to launch 'My
Blackboard'. I contacted Denise O'Dwyer, the 'My Blackboard administrator', to ensure all the students could access My Blackboard. I printed notes on how to access the relevant modules and handed them out to all students in the target group. In the event of problems arising, either from a technical aspect or 'student finger' problems, I asked Elaine Giddings, the departmental secretary to stand by to assist where necessary. (Elaine, was the most appropriate candidate because she was one of the most advanced students on the Pioneer programme and secondly because she is our departmental secretary)

I placed slightly more information on 'My Blackboard' than was necessary in the time allocated, just in case some students wanted to go the 'extra mile'. The students were aware of the scope of the information that needed to be studied.

I also placed an assessment (multiple choice questions) on the system, to be used in conjunction with the lecture notes. For each module I lecture, I give the students some kind of formative, self reflection exercise, half way through the module and at the end of the module and placing these exercises on 'My Blackboard' has really helped this process; the students receive instant feedback on how they have performed.

The feedback I received from the students was that the process was an overwhelming success, in as much as, the students had access to my slides, just as if in the lecture room, at any time and did not have to adhere to set times. A total of 125 students had access to 'My Blackboard' and only six were unable to log on to the system. (I checked with Denise when I returned to work and she informed me that there should have been no problems in this regard). At the time of writing, there are still three students who are unable to log on and this is highly disconcerting; both for the students and myself! I have enquired from the IT people at Riverside and there seems to be little they can do. I will, however, continue to attempt to resolve the situation. Until a solution is found I have advised the students to sit with a colleague who can access 'My Blackboard'.

On a technical note, I learned that the most effective way to upload information was to save it in 'pdf' format and then create it in 'Media Library'; it is then transported to 'Learning Modules'. This process enables the information to be accessed immediately and it enlarges the information, for 'easy viewing'.

7. 2 Relevance:

The relevance of the pilot activity is that it is designed to find solutions to the problems and challenges that were identified in the group project and these were:

- Assessment takes too long to mark and give back to the students in order for them to have the benefit of timeous feedback
- How can we have a comparable standard of assessment if we use other forms of assessment, for example 'My Blackboard'?
- How can the 'drudgery' be replaced in traditional lecturing and learning?

I do believe that the pilot activity has addressed the problems identified in the group project and, in fact, has exceeded the scope. Assessment has been piloted with success and what is needed now, is to further extend the process, to include a variety of questions, such as multiple choice, matching and true/false questions. This will enable the students to reflect from different perspectives.

The so-called drudgery challenge has also been addressed in that information has been placed on 'My Blackboard', in order to replace one lecture per group. The information has relevance and is appropriate to the information given in lectures. I spend a few minutes each lecture, following the 'My Blackboard' visits by the students, to recap and reinforce the principles covered and answer any questions or concerns that may have arisen.

8. REFLECTIONS:

8.1 Assumptions

My main assumption was that each student would have access to the information I would use in the actual 'classroom' situation and they would read the Information (slides), make notes and really digest the contents. I thought it was a terrific opportunity to introduce 'Blended learning,' and prepare the second year students to utilize the facility in 2010.

I also anticipated that one or two students would not be able to access the system, either through non-commitment or genuine problems and this proved to be realistic.

My third assumption was that it would introduce the students to be able to work independently and not be overly reliant on the lecturer, as they tend to be. This third assumption aligns totally with the governments, through SAQA's, Critical Cross Functional Outcomes: 'organising and managing oneself and one's activities responsibly and effectively'.

My fourth and final assumption was that I would be able to utilize 'My Blackboard' to replace some lectures. My thought process being thus: "What is the point of putting information on 'My Blackboard' for the students to digest and still present the same information in lectures?" (I do realise that there are ways of integrating the information).
8. 2 Future adjustments:

The greatest lesson I learnt was that some students merely printed out the slides and the information flow was from the computer screen to a printer, with little or nothing passing through the student's brain/ mind (and this was certainly not the intention!)

It was also evident that when I returned to work, and spent some time reinforcing the work that had to be covered, some students missed some of the lectures because, I found out, that they had the lecture notes from 'My Blackboard' so why attend the lectures.

In the light of this I have continued to place material on 'My Blackboard' but in a format that does not just include content; it also contains activities to be involved in. (This was to eradicate the previous ineffective information flow). There are also relevant web links for the students to access.

I will continue to put bullet points on 'My Blackboard', in addition to more and more activities that the students are to perform in the allocated time.

I also need to utilize the electronic medium to its greatest extent, for example, using all the facilities, such as 'Discussion Tools, Calendar; Mail; Media Library and Web Links.

Perhaps, the greatest lesson I have learnt is that I need to put more and more emphasis on allowing the students to really think through real - world issues to solve and to enable them to enhance their creativity, through various type of exercises.

8. 3 Impact:

I do firmly believe that, overall, there has been a positive impact on the learning process, in Personnel Management, for all the parties concerned. It has certainly enabled me to introduce 'Blended 'learning' into my programmes and this is the first time it has been introduced in this programme.

As far as the learners are concerned it has introduced them to the concept of 'Blended learning', and also given them more responsibility for their own learning and this surely will enable them to 'grow' as individuals

As far as the curriculum is concerned it has enabled me to have far more flexibility in the curriculum in that I am now able to have more in depth discussion in the areas that are appropriate and have more in depth participation from the students (since, in some instances, they have notes available to them before the lecture commences)
I am sure that DUT has benefitted from this exercise and will continue to benefit, in that it has allowed me to free up some time, to be able me to focus on research and publications; and also it has increased the image and profile of DUT. This exercise has also ‘brought’ DUT into the forefront of using technology in learning. Because the students have benefitted from this exercise, there must be a ‘spin off’ for DUT, in such ways as increased throughput rate. (It would, perhaps, be an excellent opportunity for research to be done in this area!)

Finally, we are a University of Technology; and using this technology in teaching and learning is aligning our operations to our vision.

8.4 Lessons learnt:

The lessons I learnt during the year must be given in the context of my attending the sessions each Tuesday. I must admit that I wasn't overly enthusiastic about attending the 'My Blackboard' sessions (which, it was pointed out to me during my interview with Lorna McCullough and others, that it was compulsory for the Applied Management department), since it meant I had to add two hours onto an already hectic Tuesday morning of three, one hour lectures; I also didn't perceive the benefits from the final product. I reluctantly, attended and I am pleased, that I did, great value has been added; as the information in this paper bears witness.

Overall, I have learnt some incredible lessons from becoming an on-line facilitator. I have since 'changed my mind' (a new panorama has opened up) and see the unending possibilities of using this technology in learning. I have also learned to view material more through the eyes of the learners, since I will not be present when they access 'My Blackboard' and this has certainly sharpened my focus in this area.

I have also learnt that perseverance, both from myself and students, is necessary to really benefit from this technology. There has been a very steep learning curve for me personally, since I am not a technological 'whiz kid', The learning was daunting in places and I made as many notes as I could, but it didn’t always work out the way I wanted it to work out. I found that the most effective way for me to go forward, was to practice as often as I could. Unfortunately, I didn't put in the amount of practice that was really needed, because of other commitment, which I might add, were valid commitments.

I am now a dedicated follower of the 'My Blackboard' movement, although I think calling it a movement is probably a misnomer, because movements rise and fall (and are often classified as 'flavours of the month' and are quickly replaced by other 'flavours of the month'); but 'My Blackboard' is here to stay and grow and enhance learning. I conclude with the well known victory chant .... 'Viva 'My Blackboard'!!!
9. BIBLIOGRAPHY:


4. Kessler, R: 2008, 'Competency - Based Performance Reviews: Career Pres USA:


11. Taylor, P, 2008: Lecture on Transformative Learning presented at DUT. Curtin University of Technology, Perth, Australia