

Cross cultural comparison: the introduction of new technology with post-graduate students in Hong Kong and in the United Kingdom.

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Abstract: Universities in the United Kingdom are developing collaborations with partners in the East often resulting in academic staff, with little understanding of Eastern cultures, imposing Western designed Virtual Learning Environments (VLEs) and lacking consideration of the learning styles and educational experiences of Eastern students. Nottingham Trent University (NTU) delivers a Professional Doctorate course collaboratively with Hong Kong College of Technology (HKCT). As part of the delivery NTU's VLE is used and accessed by students in Hong Kong. Initially engagement with the VLE by HKCT students was almost non-existent. A recent visit to HKCT with the intention of engaging the students more thoroughly in the VLE revealed disengagement, not in the notion of using the VLE for learning but in the unconsciously ethno-centric bias of the design of course materials and use of the development of the VLE by academic staff. This paper presents interim findings of a research project to develop evidence-informed practice that will encourage HKCT students to engage more effectively with the material to enable a greater use of online learning, a deeper level of learning and a faster pace of progression.

A literature search revealed no specific guidance to academics in relation to this area of practice. Hofstede (1985) opened the debate and stimulated dialogue about cultural differences and the need for culture to be acknowledged in teaching and learning. Carroll and Ryan (2005) assert that there is a need to be explicit about purpose and structure of activities and assessment; while this assertion is based on classroom focused research it impacts on online learning. Brown (2004) drawing on Gestalt cognitive theory asserts that the personal theories of learning and constructs of international students differs widely from the Western norm, which can hamper learning. Maclean and Ransome (2005) identify studying in a second language, adjusting to an unfamiliar educational context and perceptions of workload can impede international students.

Data is being collected over a one year period through observations of the use of the VLE by HKCT students through metrics available via the VLE's software; interviews are also being conducted with the students and analysed thematically. To date the emerging themes are design and presentation of online course materials, use of images, format and layout. The paper will address how the research is impacting on the design of the VLE, the successes and challenges faced by the teaching team and how the changes made to the VLE are engaging the students.

Keywords: Virtual Learning Environments; on-line learning, student engagement, Doctorate level courses.

Introduction

This paper presents initial findings of a longitudinal research project with data being collected over one year, focussing on the engagement of Hong Kong based students enrolled on a course delivered in Hong Kong by Nottingham Trent University (NTU) a post-92 university in the United Kingdom (UK). The purposes of the research are to investigate the use of a Virtual Learning Environment (VLE) which is hosted by NTU. The full project is expected to last for 2 years. The findings presented in this paper represent findings part way through the project.

Context and Background

VLEs have been used in the UK in schools, colleges and universities since the 1990s providing a 'combination of communications tools and file-sharing applications' (Gillespie et al, 2007, p 3) which are designed as an information space in which interactions occur and students become actors in co-constructing the virtual space (Dillenbourg et al, 2002). The development of VLEs in schools and colleges has been supported by the UK Government through substantial investment into broadband to improve connectivity, band width and access, hardware and software, VLE development and e-learning (Boulton, 2008). To further support the introduction of VLEs the UK Government introduced a requirement that by 2008 all schools would have a VLE in place. Becta, a Government funded agency with a remit to support the development of ICT in schools and colleges in the UK, provided information, support and advice on how to use VLEs in learning and teaching. Schools have thus been using VLEs for at least 5 years, many for much longer. The standard of VLE use in schools is varied

and since a change in Government the requirement for all schools to have a VLE in place has been removed. However, VLEs have proven they provide an excellent resource for schools for teacher: pupil, pupil: pupil, (Coppola et al, 2002) and parent: school communications (Boulton, 2008). However, there are a plethora of VLEs that schools have chosen to use, some using free software such as Moodle which they support in-house, and others choosing to purchase a VLE provider such as Fronter and Frog. Schools and colleges have invested differently in terms of staff training for teachers in using VLEs with some schools making the use of a VLE in learning and teaching compulsory, while others encourage the use of a VLE, but recognise that not all departments make use of this resource. VLEs in UK schools have provided an opportunity for a personalised approach to learning (Barajas and Owen, 2000) and developing technologies have resulted in high expectations of students. Therefore UK students arriving at university have generally had some form of experience of a VLE.

The use of VLEs in UK universities has changed the way learning and teaching takes place with an increased use of a range of technologies such as blogs, wikis, twitter, and eportfolios (Hardy and Clughen, 2012). These changes are resulting in new and emerging pedagogy and changes in the way pre-service teachers are prepared for teaching in UK schools and colleges. Standards for new lecturers, set out by the Higher Education Academy (UK) in their Professional Standards Framework have also been updated (2011) to place a greater emphasis on the use of digital technologies and digital literacy skills in UK universities. As universities in the UK compete for students employability is seen as high on the agenda of prospective students, with digital literacy skills listed by many universities as core employability attributes which will be developed during university courses.

At NTU there is a clear expectation that all students will use the VLE, called NOW, which was installed 7 years ago, developed by Desire2Learn, and there is an expectation by students to access and use a VLE. Considerable investment has been made by NTU to provide NOW for students in terms of infrastructure, access, staff training, administration and technical support. Once enrolled on a course NTU students are immediately directed to access NOW where they are able to access information related to their course, modules, student support services, on-line student communities, discussion boards, their own eportfolio, blogs and elearning guides to support use of various core software such as Word and PowerPoint. Indeed a search on the NTU website (ntu.ac.uk) for NOW finds more than 20,000 search results.

NTU have undertaken various research projects to identify benchmarks for staff and students to follow. The expectation of NTU for courses to use NOW is set out through its 'Minimum Standards' policy which provides guidance on the minimum expectation that each course must use NOW, have a course 'learning room' and module 'learning room' for each module. The policy sets out clear expectations for each learning room such as welcome message from course leader, course handbook, assessment and feedback information, reading/resource list and materials for taught sessions.

The NOW VLE, now in its 11th version, is thus embedded into the course management infrastructure with minimum expectations for students at NTU. While NOW has the potential to be used mainly as a process of electronically disseminating information to students there are features which enable increasing blended learning and elearning together with opportunities to build communities of practice within and across courses such as using discussion boards, eportfolios and blogs. The engendering of community is seen as increasingly important in Higher Education (HE) (Wenger, 2005; Abbott et al, 2005; Boulton and Hramiak, 2012).

It is with this background and context of expectations and use of VLEs in the UK that NTU's NOW VLE was introduced into Hong Kong for students at Hong Kong College of Technology (HKCT) enrolled on an NTU-based course through a collaborative agreement. The course is the Professional Doctorate: Education, a 3 year part-time course for students with a Masters level qualification in English, working within a professional context. The aims of the course are to:

- explore both the complex relationships between knowledge, theory and practice, and also the intricate nexus of understanding the world and changing it
- develop students' ability to design and implement a research project at the boundaries of knowledge of their professional and educational fields
- provide students with an opportunity to develop their judgment, foresight and problem analysis by applying theoretical and philosophical skills to the research material derived from their investigations.

In addition it provides students with the opportunity to:

- develop as both reflective and reflexive practitioners who have the intellectual and personal adaptability to be able to deal with the complexities of organisational change and ambiguity
- develop communication skills which enable participants to communicate effectively with both academics and practitioners from the world of education and the communities in which people live
- act as mediators between the constituencies involved.

The course is taught in Hong Kong over 4 weekends each year with supervisory support throughout the academic year and additional support through NOW. The NOW learning rooms are for all Professional Doctorate students, i.e. those in the UK and those in Hong Kong; there is no differentiation of access or materials.

Course delivery in Hong Kong began in 2011 and now has 3 cohorts (n=32). NOW has been used since the outset of the course but with little success in Hong Kong; success being measured at the very basic level of whether students have accessed the NOW learning rooms. A recent visit to HKCT with the intention of engaging the students more thoroughly in the VLE revealed disengagement, a research project was thus established to develop evidence-informed practice that will encourage HKCT students to engage more effectively with the material to enable a greater use of online learning, a deeper level of learning and a faster pace of progression. Research into why Hong Kong students are not accessing and using NOW was therefore deemed as essential by the course team to identify potential developments to support Hong Kong students in engaging with NOW, identifying any potential barriers and in identifying cultural differences, if any.

Literature Review

A literature search revealed no specific guidance to academics in relation to this area of practice in terms of differences in culture. Hofstede (1985) opened the debate and stimulated dialogue about cultural differences and the need for culture to be acknowledged in teaching and learning. Carroll and Ryan (2005) assert that there is a need to be explicit about purpose and structure of activities and assessment; while this assertion is based on classroom focused research it impacts on online learning. Brown (2004) drawing on Gestalt cognitive theory asserts that the personal theories of learning and constructs of international students differs widely from the Western norm, which can hamper learning. Maclean and Ransome (2005) identify studying in a second language, adjusting to an unfamiliar educational context and perceptions of workload can impede international students.

There are many drivers to using new technologies in Higher Education including those set out above. Laurillard (2008, p 1) states 'never before has there been such a clear link between the needs and requirements of education, and the capability of technology to meet them. It is time we moved education beyond the brink of being transformed, to let it become what it wants to be'. However, there are arguments against using new technologies in learning and teaching. For example Kersh, Pachler and Daly (2009, p 2) state that 'digital technologies alone do not facilitate learning. To be meaningful, e-learning needs to be grounded in a pedagogical or educational approach'; Hart states 'we risk therefore becoming rich in information but poor in knowledge' (in Ramsden, 2003, p172) and Ramsden (2003) explores concerns that e-learning is an easier and cheaper form of information-transmission. Indeed, there are many challenges facing Higher Education as expounded by Jisc (2009) 'Effective practice in a technology-rich context comprises a skilful combination of long-established and more innovative strategies in order to engage and empower learners and make learning more accessible, participative and rich' and Beetham and Sharpe (2007, 3) state Higher Education 'should locate the new technologies within proven practices and models of teaching'. Research by Jisc (2009) into students' views of technology developments in Higher Education in the UK show that 'Using technologies in all aspects of their studies, today's digital learners rarely see e-learning as a separate or special activity. They are adept at blending personal and institutionally owned technologies with traditional approaches to learning in ways that are unique to them.'

Methods

As stated above this is an interim report on an evaluative longitudinal research project (Bassey, 1999), that is expected to extend over 2 years. The context for the research is set out in the above section. The students involved in the research are all enrolled on the Professional Doctorate: Education at Hong Kong College of Technology, delivered by NTU, attending weekend workshops, supported by supervisors based in the UK with access to NOW. Students are aged 25 to 68 and comprise 19 males and 13 females.

At the start of the research the students had access to NOW as soon an enrolment was completed. The course ‘learning room’ was for both UK-based and Hong Kong-based students. There was one ‘learning room’ which contained folders for each of the Workshops with materials used in the Workshops. Initial data was gathered from the existing ‘learning room which records access by students.

BERA’s ethical guidelines have been followed throughout this research project with consent from students and ethical clearance from Nottingham University for the research to be undertaken. All students were invited to take part in the research and were able to withdraw at any point. Focus group interviews were carried out at the start of the research with cohorts 1 and 2 to identify how students were using NOW, their overall experience, and how NOW could be developed; cohort 3 had not enrolled at the start of the research. All students were asked to complete a questionnaire where questions were asked relating to their prior experience of using a VLE, whether they were shown how to use the VLE as part of their induction, their usage of NOW during the course, potential developments of NOW that would engage them in using NOW more frequently and any barriers to using NOW. The questionnaire included both open and closed questions allowing for further information in the form of narrative. As stated earlier this is an interim report. Further data collection will include focus group interviews and an analysis of NOW data to identify whether, as developments are made, students do engage more with NOW.

Findings and discussion

This section sets out the initial findings from this longitudinal study. The initial research involved only cohorts 1 and 2 (n=22); cohort 3 had not started the course at this point in the research.

The initial focus group interviews with cohorts 1 and 2 indicated that the students were not using NOW. This was supported by data analysis of access to NOW by the Hong Kong students which indicated 9 students had access NOW in that academic year (2012-13):

Figure 1: access to NOW at commencement of the project.

Student	Number of times accessed NOW.	Number of topics visited	Average time spent
A	17	32	9 hr 38 mins
B	1	0	0
C	6	1	40 mins
D	9	0	0 min
E	6	5	3 hr 32 mins
F	2	2	1 min
G	6	5	14 mins
H	6	3	3 mins
I	5	4	1 hr 9 mins

This reflected very low engagement with NOW.

The focus group interviews indicated that students at HKCT had little or no prior experience of using a VLE; only those students who had studied for a Masters level course at a UK university had used a VLE previously (n=5) only infrequently used the VLE. Data from the interviews indicated that the students were able to access NOW, all having access either at home or work to fast internet connectivity and that 100% of the students felt they needed to be shown how to use NOW as part of the induction. Those that had accessed NOW were unsure where to go to access the documents and said they would value time, with support from a tutor, to access NOW and actively use NOW.

Aspects of differences between western and eastern students coming out of the research are in use of images, format and layout. These will be explored further in the next phase of this research.

Changes that have been made as a result of this research are indicating an increased access to NOW. A major change has been in creating a separate Course Learning Room with course handbook information, and separate learning rooms for the different Documents (called Module learning rooms) which students submit for summative assessment during the course. These comprise 6 Documents each with a different focus. The

Module Learning rooms have been titled to reflect each of the Documents. The Workshops correspond to the Documents. Figure 2 shows the different learning rooms:

Figure 2: Screenshot from NOW: Module 'Learning Rooms'.

2013-14 Flex Prog 1	
SSRM50100: Intro: Project ID and Planning 201314 Flex Prog 1	▼
SSRM50110: Epistemology & Identity 201314 Flex Prog 1	
SSRM50120: Designing Research 1 201314 Flex Prog 1	
SSRM50130: Designing Research 2 201314 Flex Prog 1	
SSRM50140: The Thesis 201314 Flex Prog 1	
SSRM50150: Critical Reflect'n & Reflex'ty 201314 Flex Prog 1	

The second major change was to create a separate and 'private' area in each learning room associated with the Professional Doctorate that only the Hong Kong students could view and access. This was viewed by cohort 1 and 2 students as being significant and highly praised; they now knew where to access their content, and tutors were able to put messages up specifically for the Hong Kong cohorts. The student representative for cohorts 1 and 2 reported to the Course Committee that the students were 'very impressed' by this development.

The Induction for the course has been developed to incorporate time in a computer workshop room to show students how to access and use NOW, with time for students to spend in NOW familiarising themselves with the materials.

Both cohorts 1 and 2 received an additional workshop as a response to the initial focus group interviews where they were shown how to access NOW, and given hands on opportunity to spend some time in NOW while in a computer workshop which enabled each student to work individually on a computer. Evaluations from this workshop indicated that 100% of students were able to access NOW and would in future be using NOW to access course materials.

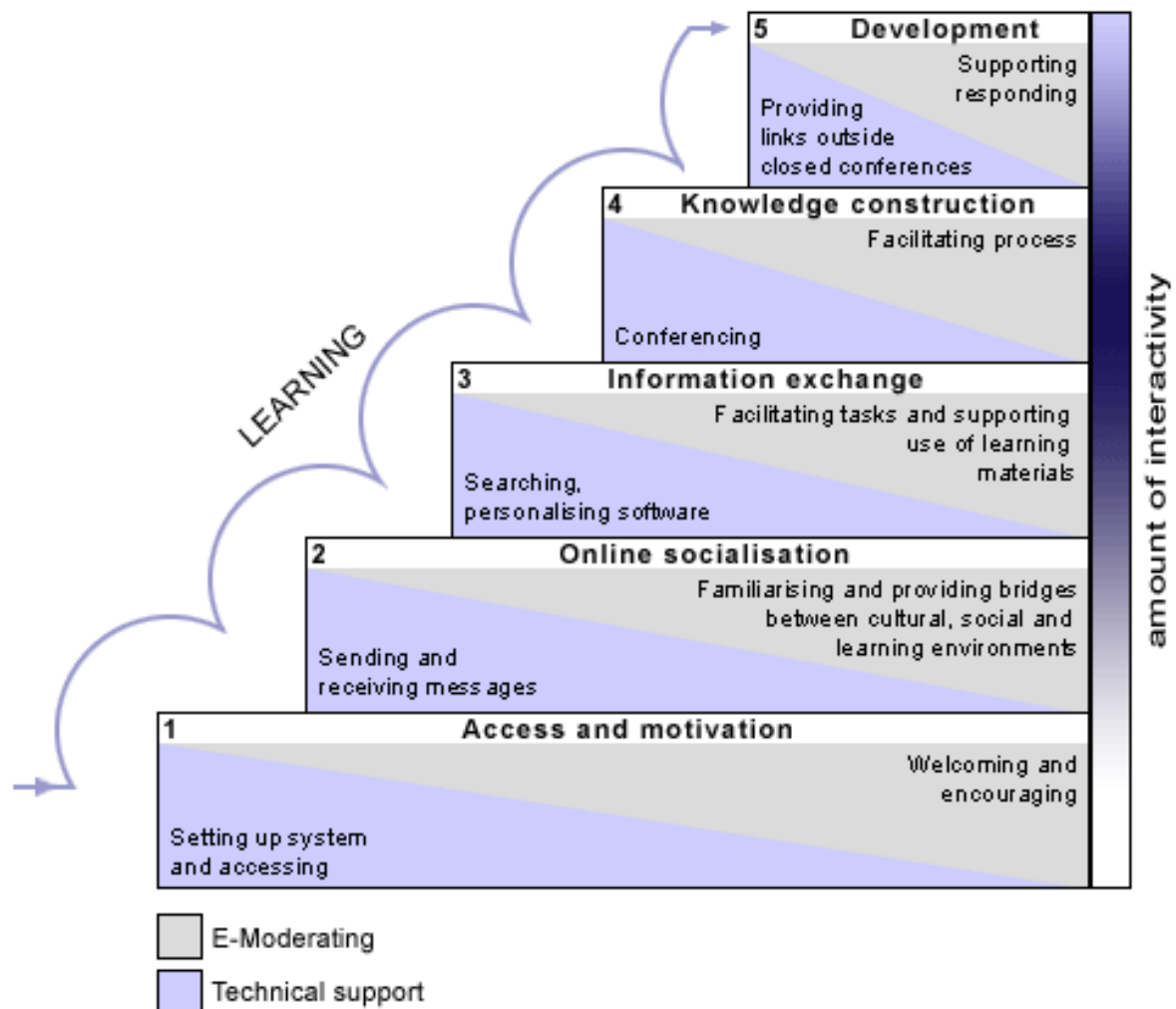
In addition the Course Leader and tutors are ensuring they regularly update materials in NOW to encourage students to access the NOW learning rooms. Rather than emailing Workshop materials these are being uploaded to NOW which is saving tutors time and again encouraging students to engage with NOW.

Prior to this research project assignments had to be posted in hard copy to NTU for assessment. NOW offers a 'Dropbox' facility whereby students can upload their assignments and receive a receipt for submission which is dated. Tutors can then download and mark the assignment online and upload feedback which again is dated. Following the focus group interviews this facility is now being utilised for the Hong Kong students. While this is still in the early stages of adoption both students and tutors have found this to be a good development, reducing feedback time and allowing more careful tracking of assignments.

Throughout the project Salmon's (2000) model for on-line learning has provided a framework for developing NOW for the Hong Kong students (Figure 3). Salmon indicates that the first stage in engaging students with technologies is in ensuring students can access and use the system; this was a failure in the initial usage of NOW in Hong Kong and is accountable for lack of usage by the students. This has now been resolved by building opportunity to access and use NOW into the induction programme. Cohort 3, who have now enrolled and completed this new induction have all accessed NOW and have downloaded at least one document successfully. In stage 2, the socialisation, the development of a 'private' area for the Hong Kong students which includes a Welcome message from the team that delivers the workshops in Hong Kong is helping to develop a community. Plans for the future include regular news items for the students to encourage them to engage with NOW in between Workshops and the development of a discussion board for the students to utilise to provide peer support. At this stage in the research stage 3 of Salmon's model is still developing with planned activities about to be activated. This will form the next part of the research project. It is intended that future developments will also involve stages 4 and 5 of Salmon's model with developments including opportunity for student to co-construct knowledge, share literature searches, and develop their critical reflective practice. Whether NOW features will be used for stages 4 and 5 or whether a link will be in NOW to take students outside NOW to more appropriate technologies will form the next stage in the project following advice from Beetham and Sharpe

(2007, 3) to locate ‘technologies within proven practices and models of teaching’ and the research by Jisc (2009) that students are able to blend technologies.

Figure 3: Salmon’s (2000) Model for elearning and using technologies in learning and teaching.



Conclusion

As stated from the outset this paper reports interim findings of a longitudinal study. The project is focusing on identifying the needs of Hong Kong students enrolled on a UK-based course with different expectations and needs in using a VLE to support their learning, compared to students in the UK. The Hong Kong students prior to the research showed disengagement, not in the notion of using the VLE for learning but in the unconsciously ethno-centric bias of the design of course materials and use of the development of the VLE by academic staff. Ongoing research with the Hong Kong students is resulting in significant changes to the VLE and a higher level of engagement.

Early results indicate that the new cohort of students who are benefitting from the changes and have gone through a process of induction are engaging at a higher level than previous cohorts. Further research will focus on design and presentation of online course materials, use of images, format and layout and identifying any further barriers to using NOW.

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