Damaged and refractive teaching and learning practices in international developing university contexts

Uzair Shah, Vivien Hodgson

Department of Management Learning & Leadership, Lancaster University, UK

s.shah2@lancaster.ac.uk, v.hodgson@lancaster.ac.uk

Abstract

While research is available that explores teachers' use of learning technology within western contexts, there is less research that provides insights into teachers' use of learning technology within non-western contexts. Currently we know little about higher education within developing contexts in terms of the prevailing pedagogical understandings and practices, the use of learning technology, and the contexts within which these practices are embedded. Similarly although there is evidence available on potential barriers faced by teachers in using learning technology within western contexts, we know little about the nature, scope, scale and influence of potential barriers teacher may face when teaching in less developed contexts. We do however know that there is within the field of networked learning an increased recognition that contextual aspects both influence and effect pedagogical practices.

This paper consequently aims to shed light on teachers' experience of using learning technology in less developed countries and, more specifically, elaborates on the influences contextual realities have on the use of learning technology and pedagogical practices. It builds on previously reported work that examined the variation in pedagogical understandings of using learning technology in a public university in South Asia. In that study five different ways of teachers' understandings of using learning technology were identified. Further analysis and review of the data identified an additional aspect influencing the ways teachers understood and experienced the use of learning technology which is 'response to contextual limitations'. This aspect is associated and related to the socio-economic and technical context within which the teachers operated. In the paper we examine the teachers' different responses to contextual limitations within their pedagogical practices in more detail. The teachers' descriptions of experiences suggested their response to the contextual limitations varied from passive to active. Further some participants described their teaching experiences as 'damaged' as the contextual limitations prevented them from using learning technology and teaching students according to what we describe as their embodied pedagogical understandings. In the paper we argue that due to these contextual limitations, the teachers' actual practices are *refractive* practices, as their actual practices seem to bend away from their pedagogic understanding and intentions. The paper elaborates on the two notions of damaged teaching experiences and refractive practices and concludes with potential implications for networked learning in universities located in less developed countries.

Key words:

pedagogical practices, learning technology, networked learning, less developed contexts, Pakistan, damaged teaching, refractive practice

Introduction

While research on higher education within western contexts continues to be readily available, there is less evidence available about higher education and particularly the use of learning technology within less developed countries (Bataineh and Baniabdelrahman, 2006). We know little about higher education within developing contexts in terms of the prevailing pedagogical understandings and practices, the use of learning technology, and the contexts within which these practices are embedded. Also, while there is an increasing amount of research that highlights barriers relating to the use of learning technology and networked learning within teaching

practices (see Boon & Sinclair, 2012; MacKeough & Fox, 2009) there is little understanding on the kinds of barriers and limitations teachers face within less developed countries and their influence on daily pedagogical practices. These are important considerations when there are a growing number of examples available of collaborations and partnerships between universities found in western contexts and universities located in relatively less developed countries (see for example Fahmy et al. 2012). Possibly more important however, as Lawless and Pellegrino (2007) suggest, there is still an 'absence of empirically grounded knowledge about how to best integrate technology, instruction, and learning into a coherent whole'. And this applies particularly to our understanding of the introduction of learning technology and pedagogical approaches such as networked learning within universities in less developed countries.

This paper is intended to extend our understanding of the experience and issues teachers in less developed countries encounter in their use of learning technology in their pedagogical practice. It builds on the previously reported study of teachers' use of learning technology in a South Asian context (Shah 2014). The focus of this paper is on the ways contextual limitations influence and affect the mundane, daily pedagogical practices and the use of learning technology in a South Asian university in a developing context.

Previous work such as Louisy (2001) while set in the context of Caribbean universities, emphasizes the importance of regional institutions to engage in research activities, as she states the regions 'would benefit tremendously from the ready availability of a sound, well researched body of knowledge on the social, economic, political and cultural realities of the region'. Furthermore, Larbi-Apau and Moseley (2012) suggest that 'with purposeful practice and enabling environment, they [the teachers within the public universities in Ghana] can manage technology-oriented proficiencies and professional performances effectively'. Although such comments imply the presence of contextual limitations, their research does not provide insights into specifically the pedagogical use of learning technology faced with various contextual limitations. Little is known about the scope and scale of contextual limitations, and how the limitations influence pedagogic practices at a micro-level. This paper, based on a phenomenographic study, focuses specifically on contextual influences on pedagogical practices. The teachers' descriptions of their experiences reported in the paper illustrates how the issues around access to information and the technological infrastructure negatively affect the quality of the participants' research as well as their daily teaching practices. As will be discussed later, this limits the potential contributions of such universities to the region in the ways Louisy (2001) suggests.

Background study

The research discussed in this paper derives from a phenomenographic study of teachers' experience of learning technology in Pakistan (Shah, 2013). Existing phenomenographic research exploring teachers' experiences of learning technology reports more or less similar teachers' conceptions of using learning technology. Generally speaking the findings indicate three main categories of experience from seeing learning technology for 'providing information', for 'independent self-paced learning' and for 'engaging in communication-collaboration-knowledge building' (see Roberts, 2003; Ellis et al., 2006; Lameras et al. 2012; McConnell & Zhao, 2009; Gonzalez, 2009, 2010). These studies have been useful in contributing to our understanding of variation in experience in the use of learning technology; they are however largely based in western contexts. Also, these studies tend not to report contextual influences on the experience and use of learning technology and do not illuminate the pedagogical underpinning intentions and rationales for different ways of using learning technology. Shah's (2013) phenomenographic study of teachers' use of learning technology on the other hand is based on the relatively unexplored and a less developed context of a South Asian Pakistani university, called Hazara University (HU). Recognizing the growing influence and use of learning technology within higher education especially within western universities, his study explored how teachers were using learning technology in their pedagogical practices in a context where technological infrastructure and its availability was relatively more limited. What is more his research also explored teachers' pedagogical intentions associated with their experience and use of learning technology.

This paper is based on the findings from Shah's study, in which he conducted twenty-nine phenomenographic interviews of teachers of both genders who belonged to different Faculties, departments, academic positions, and with varying lengths of teaching experiences. Such a range of participants was chosen purposively to 'exhaust the variations in experiences' (Booth, 2001). During the interviews, teachers were invited to describe

Proceedings of the 9th International Conference
on Networked Learning 2014, Edited by: 272
Bayne S, Jones C, de Laat M, Ryberg T & Sinclair
C.

ISBN 978-1-86220-304-4

fully their experiences and understandings of using learning technology within their pedagogical practices. Their descriptions of experiences were analysed using the framework of intentionality, or as it is also known the *what/how* framework (Marton and Booth, 1997) to illuminate both variation in teachers experiences of using learning technology and their underpinning intentions. This framework assumes that every action is associated with underpinning intentions, and in order to comprehend and conceptualize peoples' actions, it is useful to analyse the associated intentions as well. Shah (2014) reports that using this framework facilitated a better understanding of how teachers conceptualize and understand their actions and underpinning intentions; and in so doing it highlights the meanings they describe and give for using learning technology (i.e. the *what* aspects). Also, it illuminates the intentional aspects, or *how* aspects which were seen as affecting/influencing teachers' understandings and use of learning technology within their pedagogical practices. Shah's study identified five categories of description of using learning technology, of which three categories are similar to those that have been identified and discussed in the extant literature. These were Professional Skills Development, Information Enrichment and Connectivity. However, the other two categories of description identified of 'Retaining Attention' and 'Omnipotential' had not previously been reported in the literature. Shah (2014) explains that an omnipotential conception of using learning technology encompasses all the other categories of description and argues that this level of experience may facilitate a relatively smoother transition into online, networked learning settings. The 5 categories identified appeared to suggest that the teachers were digitalizing their practices in more or less complex ways and, in addition highlight the growing importance of use of learning technology within pedagogical practices within less developed countries such as Pakistan.

Contextual Limitations

As some of the conceptions of using learning technology found in Shah's study have already been reported in the literature, this suggests that while there are differences, there are also similarities and commonalities found within the pedagogical practices of using learning technology at HU and in studies of teachers from western universities. However, previous phenomenographic studies have tended not to describe the intentional aspects of experiences of learning technology. While the intentional aspects, or *how* aspects reported in Shah's study are specific to the experiences of using learning technology at HU, it can perhaps be assumed that a similar range of pedagogical intentions can also be found in a western-based study of teachers' use of learning technology. Phenomenographic research does not attempt to establish any 'co-relations' between categories of experience and/or the *how* aspects. However, descriptions of experiences identified are generally hierarchical and, as in this study of using learning technology, became increasingly complex. The *how* aspects help to demonstrate this complexity as in, for example, teachers description of prior exposure to technology was relatively more or less sophisticated, or their teaching appeared more or less research-informed and they perceived the scope of technological use as more or less broader (see Table 1 and Shah, 2014 for further details)

In addition to the five categories of description identified Shah's study also illuminated the messy contextual socio-economic and technological limitations that affected teachers' use of learning technology and their pedagogical practices. It is these contextual limitations that the current paper examines in more detail. The limitations at HU ranged from availability of reliable and quality in-class technological equipment such as multimedia, computers, internet connectivity, to disproportionate (limited) access to research journals, equipment and instruments, as well as irregular and interrupted supply of electricity. Teachers described these limitations as being responsible for 'damaging' their teaching experiences and this appeared to *refract* their pedagogical practices. While such limitations are likely to be missing within many higher education institutes in western countries, teachers at HU have to deal with these contextual issues and limitations affecting their pedagogical practices on a daily basis. Closer analysis of the teacher's descriptions of their experience of using learning technology led us to identify a further *how* aspect to the 3 identified in the original study. This fourth *how* aspect was based on how the teachers responded to and worked with the contextual limitations they encountered on a daily basis. Some teachers described conscious efforts to attempt to circumvent the contextual limitations to facilitate a richer student learning experiences. These teachers appeared relatively more active and engaged and to some degree, creative in dealing with the contextual problems. These teachers' response to contextual limitations could thus be described as relatively more *active* as they were using the available resources to go beyond the contextual limitations they faced and explore ways to limit the negative influence of this aspect on their pedagogical practice. However, other teachers appeared quite accepting or *passive* in their responses to the contextual limitations and seemed to have accepted the damaging effects of contextual

Proceedings of the 9th International Conference
on Networked Learning 2014, Edited by: 273
Bayne S, Jones C, de Laat M, Ryberg T & Sinclair
C.

ISBN 978-1-86220-304-4

limitations within their practices. The full list of categories of descriptions, including this fourth how aspect are summarised in Table 1 in increasing order of complexity with Retaining Attention category as the least complex and Omnipotential the most sophisticated category.

Table1: *What* and *How* aspects of teachers' experiences of using learning technology

Category of descriptions	*What* aspects	*How* aspects			
		Prior exposure to technology	Research-informed teaching	Perceived scope of technological use	Response to Contextual limitations
Retaining Attention	To retain the attention of students during lectures	Less Sophisticated	Less Informed	Limited	Passive
Professional Skills Development	To allow students to be better practitioners				
Information Enrichment	To access multiple sourced information				
Connectivity	To connect and collaborate with other knowledge islands				
Omnipotential	As a means and tool for numerous possibilities and opportunities	Sophisticated	Informed	Broad	Active

In general it appeared that respondents with richer and more sophisticated pedagogical understandings of using learning technology appeared to be relatively more *active* in exploring ways to respond and deal with contextual limitations and to facilitate richer learning experiences. For example, one of the participants described:

> Then there is a person in an IT institution in Rajasthan in India. Through the Internet, he became my friend with whom I interact about such things [technology applications]. That is a great help to us. An example would be that there are many things that we cannot normally access here and so through them we can access those materials. Suppose there is a new paper and we cannot access it here. They will download the book and send it to me. (Faculty of Law & Administrative Sciences, 2)

In the above description, the teacher explains the value and importance of his 'connectivity' and use of learning technology to actively respond to the contextual limitations and contact other academics, via the Internet, and thus access academic material that is unavailable at HU. It also elaborates his understanding of how using learning technology can assist him to overcome the prevailing limitations which have been described as important in contexts like HU. However as already mentioned, there were also descriptions of experiences where teachers appeared to *passively* accept the contextual limitations and described how they are unable to circumvent the limitations. For example, one respondent while describing his 'Professional Skills Development' use of learning technology stated that 'So this [technology] is very important for the students – if we have access to these technologies, students can learn better' (Faculty of Arts, 11). He seems to have accepted the limited technological infrastructure and appears relatively 'passive' in his response to deal with the limitations.

It is our belief that the intentional or *how* aspect of 'response to contextual limitations' highlighted the embeddedness of contextual limitations within the teachers' pedagogical practices. Which as we will now discuss in more detail had for many resulted in *damaged* teaching experiences of using learning technology and *refractive* pedagogical practices where the teachers felt unable to teach according to their preferred or embodied pedagogical understandings.

Proceedings of the 9th International Conference on Networked Learning 2014, Edited by: Bayne S, Jones C, de Laat M, Ryberg T & Sinclair C.

ISBN 978-1-86220-304-4

274

Damaged teaching experiences of using learning technology

In this section we will further elaborate on the nature of damaged teaching experience and the affect contextual limitations had on their pedagogical practice, as described by the teachers. Their descriptions of experiences highlight that the technological infrastructure available at HU is less developed which negatively affected their teaching practices, student learning and research activities, and consequently the quality of higher education, at HU. Due to the contextual socio-economic and technological limitations at HU, the teachers described their teaching experiences as damaged as they are unable to use learning technology and teach according to their intended ways, and as they would if located within their perceived ideal technological setting. This is further exacerbated by the prevailing national energy crisis. The specific influence of contextual limitations on their use of learning technology is elaborated below:

- **Impact of irregular energy supply**

Teachers were frequently unable to use learning technology in their daily teaching in ways they intended due to the unpredictable supply or electricity as one teacher explained:

> As our electricity system is not dependable all times, we cannot use PowerPoint slides as well in the teaching, although it is beneficial for us … we cannot do so every time, cannot do so because the system is not dependable and then we have to use the whiteboards. (Faculty of Science, 9)

Thus while recognizing the potential benefits of PowerPoint slides, teachers are frequently unable to use them in their daily teaching.

- **Access to learning technology**

Damaged teaching experiences were thought by some to potentially negatively affect career prospects of HU students. HU students come largely from the relatively less privileged segments of the population; one of the respondents described his own experience of studying in a public university as:

> Unfortunately, universities which have not done so [included technology in their teaching] will suffer as their product [students] in the market will not be acceptable and will be wasted. As in my case, we were 40 students in the class, and now I think there are only 3 people in the field. The other 37 are out of the field … now some are shopkeepers, schoolteachers, some have gone back to the villages and started agricultural activity, and some are sitting idle now. (Faculty of Arts, 13)

This reinforces Keogh's (2001) claim, amongst others, that 'unless the issue of access is addressed, the ICTs will increase divisions within societies'. This becomes more worrying as with the ever-increasing emphasis on the digitization of pedagogic practice, the teachers seem to be caught on the horns of a dilemma. On the one hand, they recognize the importance of using learning technology within pedagogic practice, but on the other, the technological infrastructure is limited and does not support their practices according to their pedagogical understanding and preferred approaches or practices. The teachers described adjusting their planning and design of daily teaching lessons and overall modules in light of the contextual limitations affecting the university. The prevailing contextual limitations not only affected their teaching but also their research practices.

- **Influence on research led teaching and research practice**

Sawyerr (2004) and Olukoju (2002) suggest that many African universities face the challenge of limited access to the latest academic research and knowledge, which affects their capability and capacity to explore and create knowledge. This issue also surfaced within the descriptions of teachers experiences at HU. While the participants describe their interest and willingness to engage in research activities, the contextual limitations seriously affect the scope and quality of their research. One of the participants explains:

> If we have the facilities, then we can do quality work here … When I was working in Japan, we had the facilities and there I was able to publish after every 6 months in journals of impact factor 7. Now I am here at HU – the same person – but cannot publish because of the limitations. Here I would publish in a journal with an impact factor of 2 or less. (Faculty of Science, 6)

Proceedings of the 9th International Conference on Networked Learning 2014, Edited by: Bayne S, Jones C, de Laat M, Ryberg T & Sinclair C.

ISBN 978-1-86220-304-4

275

Limited disproportionate access to latest research publications and facilitates was described by many participants to hamper their research practices and output as they are unable to produce quality research publications. The financial standing of the university limits their access to online journals. One of them described this problem as: 'I think there are several journals which are not open and only give the abstract. So in our research, we have to rely on the abstract only' (Faculty of Science, 1). Also, according to a World Bank report cited by Lewis and Simmons (2010), the regional institutes in developing countries may struggle as a result since:

> ...a critical "initial disadvantage" of these [developing] countries is that they start with a poor baseline where scientific inquiry is concerned, by not having the necessary intellectual culture needed to sustain it. This disadvantage could be especially acute where the intent is to create research universities. (Lewis and Simmons, 2010)

The teachers while acknowledging the prevailing contextual limitations also highlighted the limitations on the quality and quantity of skilled academic staff at HU. Sustaining and supporting research interests of research-active teachers is seen as challenging, and will require further investments at HU.

Refractive Practice

Review of the literature of research within less developed contexts tends to give an impression that teachers in such countries have relatively limited pedagogical understanding and interest in research activities. However, some of the teachers' descriptions of experiences in this study suggests otherwise. The teachers' descriptions of experiences in this study frequently highlighted sophisticated understanding of teaching, research and intended contributions to regional development. Furthermore, the higher management at HU are willing and interested in promoting and developing an academic research culture within the institution. However, they are also mindful of the scope and scale of contextual limitations, i.e. unequal access, lack of facilities and technological infrastructure at HU. While this study illuminates the ubiquitous nature of learning technology within higher education institutions, including in less developed countries, it also highlights the different ways a less developed technological infrastructure affects research and teaching practices. The participants frequently expressed 'annoyance' and 'agitation' at the contextual problems, and in particular the irregular electricity supply due to the national energy crisis.

It appeared to us that the embeddedness of these contextual limitations within pedagogical practices results not only in teachers' damaged experiences of using learning technology but, in addition, due to these contextual limitations, the teachers' actual practices could be said to be *refractive* practices. That is, their actual practices seemed to be at a tangent to their embodied pedagogic understanding. The term 'refractive' is borrowed from the field of optical science that explains the phenomenon when a ray of light changes direction/ bends/ refracts as it passes through a different medium. Using this idea we argue that the teachers' actual use of learning technology is refracted from what could be described as their embodied understanding of pedagogical practice, due to the contextual limitations. This is not to say that these contextual limitations influence a change in pedagogical practice in an embodied sense, but that these limitations influence and refract their actual practices, affecting them to *bend away* from their embodied pedagogic understanding.

Previous phenomenographic based studies that have examined embodied understanding to study professional practice and competence assume that professionals' actual practice is reflective of their embodied understanding of practice (see Dall'Alba, 2002, 2004, 2005; Dall'Alba & Sandberg, 1996; Sandberg, 2000; Sandberg & Pinnington, 2006; Lamb et al., 2011). For example, Sandberg and Pannington (2006) identified 4 ways of practising and being a professionally competent corporate lawyer which are hierarchically related. These studies however unlike the current study do not consider the contextual influences or limitations on professional practice. It appears to us that while as suggested in previous studies the teachers embodied pedagogical practice is reflective of their pedagogical understanding their actual practice is often *refractive* (rather than reflective) due to the contextual limitations they encounter on a daily basis.

To further elaborate when the teachers apparently lose or have reduced opportunity to use learning technology according to their embodied pedagogic understanding, they have to adjust according to the contextual reality.

Proceedings of the 9th International Conference
on Networked Learning 2014, Edited by: 276
Bayne S, Jones C, de Laat M, Ryberg T & Sinclair
C.

ISBN 978-1-86220-304-4

The ways in which the teachers adjust their practices and respond to contextual aspects, are however influenced by their pedagogic understanding. As mentioned earlier, teachers with relatively more complex pedagogical understandings describe actively engaging with their contextual reality and using learning technology and other available resources to facilitate richer learning environment for the students. For example, within connectivity and omnipotential conceptions of using learning technology, teachers described using online forums, blogs, Facebook in the absence of an official, university-provided Virtual Learning Environment for discussions with students and other academics. The teachers also described using learning technology omnipotentially to serve and affect the local community's prevailing understandings and mindset via the use of learning technology, and design their courses accordingly. One teacher described incorporating FM radio programmes into a course curriculum, and interviews with experts from different fields being broadcast on a radio frequency available to the local community. The topics of these interviews are such that the teacher perceives they will interest and be useful to the local community. These are broadly around agriculture, education and social issues. In relation to this, he states that without the use of technology, it is difficult to 'walk with the developed, advanced countries' (Faculty of Arts, 12), which highlights his views on using technology to achieve such a feat. While these teachers attempted to circumvent the contextual limitations, considering the scope and scale of contextual limitations at HU which are most likely to be missing within western contexts, their teaching experiences were *damaged* and their practices *refracted.*

Concluding Comments

The continuous digitization of pedagogic practices, on one level has facilitated many aspects of teaching and research, but on another level it has increased our dependence on the use technology for learning. Teachers' descriptions of experience highlight that their perceptions of academic success are increasingly influenced by and dependent on the availability of a sound technological infrastructure. This study highlights however that while learning technology in itself will not solve many educational issues, its adept and rich use within pedagogic practice can facilitate providing a richer student learning experience.

While contextual limitations on staff at HU were found to damage teaching experiences of using learning technology, there were some teachers who actively dealt with their contextual realities in relatively innovative ways to attempt circumventing some of the limitations they faced. These teachers also described sophisticated pedagogical understandings that emphasised research, discussions, interactions, and forming connections with students and/or academics from within and/or outside the university to enrich and develop their professional practices. They also expressed an urge to compete in and contribute to their respective research communities. Their descriptions of experiences suggested awareness and recognition of the significance of 'online social literacy as well as digital and information literacy' that Hodgson et al., (2012) consider important for the successful practice of networked learning.

Further the study highlights that the experience of a phenomenon (in this case learning technology) is always immersed in a particular context, and that the contextual 'messy' socio-economic and political realities affect the experience and the use of learning technology and teachers' daily practices. This study illuminates teachers' varying responses to the contextual limitations, which are influenced by their pedagogical understandings. Due to these contextual limitations, the teachers described their teaching and learning experiences as damaged, and their practices as refractive. This study highlights how research considering influences of contextual dimensions on professional practice can provide additional and new insights into studies of professional practice.

The study also highlights that teachers' perceptions and ideas about successful pedagogical practices increasingly recognise the importance of the availability of learning technology supported by stable and sound technological infrastructure. It remains the case however that teachers in universities in less developed countries that experience financial and technological limitations of the kind described in this study may struggle to provide richer opportunities for student learning and for academic research they associate with access to learning technology. This raises a number of issues for those universities where there is limited access to learning technology, and where there is an apparent thirst for but poverty in academic information (and with damaging contextual limitations). Arguably the increased reliance on pedagogies such as networked learning and educational policies that promote the greater use of learning technology may only serve to reinforce the digital divide and potential deprivation and marginalization of the less privileged areas of the world As this study illustrates the embodied pedagogical practice of many teachers in less developed countries is more

Proceedings of the 9th International Conference
on Networked Learning 2014, Edited by: 277
Bayne S, Jones C, de Laat M, Ryberg T & Sinclair
C.

ISBN 978-1-86220-304-4

sophisticated and developed than what is often assumed but is often damaged or refracted due to the contextual limitations they encounter on a daily basis.

References

Bataineh, R., & Baniabdelrahman, A. (2006). Jordanian EFL students' perceptions of their computer literacy. International Journal of Education and Development using ICT, 2(2).

Boon, S., & Sinclair, C. (2012). Life behind the screen: taking the academic online. In Exploring the Theory, Pedagogy and Practice of Networked Learning (pp. 273-287). Springer New York.

Booth, S. (2001). Learning computer science and engineering in context. Computer Science Education, 11(3), 169-188

Dall'Alba, G., & Sandberg, J. (2006). Unveiling professional development: A critical review of stage models. Review of Educational Research, 76(3), 383-412.

Dall'Alba, G. (2005). Improving teaching: Enhancing ways of being university teachers. Higher Education Research & Development, 24(4), 361-372.

Dall'Alba, G. (2004). Understanding professional practice: investigations before and after an educational programme. Studies in Higher Education, 29(6), 679-692

Dall'Alba, G. (2002). Understanding medical practice: different outcomes of a pre-medical program. Advances in Health Sciences Education, 7(3), 163-177.

Ellis, R. A., Steed, A. F., & Applebee, A. C. (2006). Teacher conceptions of blended learning, blended teaching and associations with approaches to design. Australasian Journal of Educational Technology, 22(3), 312.

Fahmy, S. S., Bygholm, A., & Jaeger, K. (2012). Issues in Internationalization of education: The case of a Danish Business School exporting a blended learning MBA program to developing countries. In V. Hodgson, C. Jones, M. de Laat, D. McConnell, T. Ryberg, & P. Sloep (Eds.), Proceedings of the Eighth International Conference on Networked Learning 2012 (pp. 276-283).

Gonzalez, C. (2009). Conceptions of, and approaches to, teaching online: a study of lecturers teaching postgraduate distance courses. Higher Education, 57(3), 299-314.

González, C. (2010). What do university teachers think eLearning is good for in their teaching?. Studies in Higher Education, 35(1), 61-78.

Hodgson, V., McConnell, D & Dirckinck-Holmfeld, L. (2012). The Theory, Practice and Pedagogy of Netowrked Learning. In Exploring the Theory, Pedagogy and Practice of Networked Learning (pp. 219-315). Springer New York.

Keogh, K. M. (2001). National strategies for the promotion of on-line learning in higher education. European Journal of Education, 36(2), 223-236.

Lamb, P., Sandberg, J., & Liesch, P. W. (2011). Small firm internationalisation unveiled through phenomenography. Journal of International Business Studies, 42(5), 672-693.

Lameras, P., Paraskakis, I. & Levy, P. 2008. 'Conceptions of teaching using virtual learning environments: Preliminary findings from a phenomenographic inquiry'. Paper presented at the 6th International Conference on Networked Learning, May 5–7, in Thessaloniki, Greece.

Lameras, P., Levy, P., Paraskakis, I., & Webber, S. (2012). Blended university teaching using virtual learning environments: conceptions and approaches. Instructional Science, 40(1), 141-157.

Larbi-Apau, J., & Moseley, J. (2012). Computer Attitude of Teaching Faculty: Implications for Technology-Based Performance in Higher Education. Journal of Information Technology Education: Research, 11(1), 221-233.

Lawless, K. A., & Pellegrino, J. W. (2007). Professional Development in Integrating Technology Into Teaching and Learning: Knowns, Unknowns, and Ways to Pursue Better Questions and Answers. Review of Educational Research, 77(4), 575-614.

Lewis, T., & Simmons, L. (2010). Creating research culture in Caribbean universities. International Journal of Educational Development, 30(4), 337-344.

Louisy, P. (2001). Globalisation and comparative education: A Caribbean perspective. Comparative Education, 37(4), 425-438.

Proceedings of the 9th International Conference on Networked Learning 2014, Edited by: Bayne S, Jones C, de Laat M, Ryberg T & Sinclair C.

ISBN 978-1-86220-304-4

278

MacKeough, K. & Fox, S. (2009). Strategies for embedding e-learning in traditional universities: drivers and barriers. Electronic journal of E-learning, 7(2), 147-154

Marton, F., & Booth, S. (1997). Learning and Awareness. Pr. Routledge.

McConnell, D., & Zhao, J. (2006, December). Chinese higher education teachers' conceptions of e-Learning: Preliminary outcomes. In Proceedings of the 23rd Annual Ascilite Conference: Who's Learning? Whose technology? (pp. 513-23). The University of Sydney.

Olukoju, A. (2004). The crisis of research and academic publishing in Nigerian Universities. Africa Universities in the Twenty-first Century, 2, 363-75.

Roberts, G. (2003). Teaching using the web: Conceptions and approaches from a phenomenographic perspective. Instructional Science, 31(1-2), 127-150.

Sandberg, J. (2000). Understanding human competence at work: an interpretative approach. Academy of management journal, 43(1), 9-25.

Sandberg, J., & Pinnington, A. H. (2009). Professional competence as ways of being: An existential ontological perspective. Journal of Management Studies, 46(7), 1138-1170.

Sawyerr, A. (2004). African universities and the challenge of research capacity development. Journal of Higher Education in Africa, 2(1), 213-42.

Schofer, E., & Meyer, J. W. (2005). The worldwide expansion of higher education in the twentieth century. American sociological review, 70(6), 898-920.

Shaikh, Z. A. (2009). Usage, acceptance, adoption, and diffusion of information & communication technologies in higher education: a measurement of critical factors. Journal of Information Technology Impact, 9(2), 63-80.

Shah. U. (2014). Teachers' Use of Learning Technology in a South-Asian context. In V. Hodgson, D. McConnell, M. de Laat & Th. Ryberg (Eds.), The Design, Experience and Practice of Networked Learning. Springer.

Shah. U. (2013). Teachers' Understandings of using Learning Technology at Hazara University, Pakistan. Unpublished doctoral dissertation, Lancaster University, UK

Proceedings of the 9th International Conference
on Networked Learning 2014, Edited by: 279
Bayne S, Jones C, de Laat M, Ryberg T & Sinclair
C.

ISBN 978-1-86220-304-4