Examining Conceptions of E-Learning in an Intercultural, Sino-UK, Context

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Abstract

Over the past three years, the Centre for Studies in Advanced Learning Technologies, Lancaster University, and the School of Network Learning, Beijing Normal University, have been involved in the development of e-Learning courses and in carrying out research into e-Learning. During this collaboration, we became aware of cultural differences in our approaches to the design and implementation of e-Learning courses. This led us to consider the differences and similarities in our conceptions of e-Learning, and their effects on the design, development and implementation of e-Learning courses. A new comparative research project looking at UK and Chinese higher education teachers' conceptions of e-Learning was set up. This paper reports on preliminary results of phenomenographic interviews with higher education teachers in China and the UK working in conventional, campus-based universities about e-learning and teaching. The interviews were analysed from a grounded theory perspective that resulted in preliminary sets of conceptual categories. Discussion of these categories is presented, illuminating the state of e-Learning in Chinese and UK higher education. We conclude that the dominance of traditional teaching methods in China is unlikely to present the conditions for mainstreaming e-Learning in the near future. The situation in the UK is more dynamic, with conceptions of e-learning being more sophisticated and well theorised, as well as the practice of e-learning being more widespread**.**

Keywords

conceptions of e-Learning, phenomenography, China higher education system, student learning.

Introduction

The UK Higher Education Funding Council has funded a series of inter-related projects in what has now become known as the eChina-UK Programme. In Phase One of the programme there were two main objectives. The first was to foster collaboration between UK higher education institutions and Chinese higher education institutions in the production of Masters level courses using e-Learning for school teachers in China. This involved us collaborating with Beijing Normal University in the joint production of a Masters level module in "Educational Technology and E-Learning". The second objective of the programme was to develop understandings in both countries of cultural change and exchange in e-Learning pedagogy. Members of the various UK project teams (of which there were four) held different views on the importance of this second objective, as did the Chinese partners.

The UK team involved in the production of the "Educational Technology and e-Learning" module, however, believed that this objective was as important as the production of the Masters level modules, if not more important. Our experience of working with colleagues in China made us aware of the complexities of culture and cultural differences in the collaborative production of the Masters level module. We were presented with real challenges related to working across boundaries. The additional problem of language played a decisive role in our negotiations and understandings of what we were trying to achieve. Nevertheless, we did not lose sight of the wider objective of trying to understand culture and cultural change and exchange (see Banks, Lally, Liu and McConnell, 2006) for an examination of our experiences of the processes of intercultural collaboration).

From our work to date in Phase One of the eChina-UK Project it has become apparent to us that we have to develop a shared (that is, 'intercultural') understanding of pedagogy (teaching, learning, e-tutoring etc) if we are to be successful in collaboratively developing e-Learning materials and in generating successful professional educational development in e-Learning. Although 'intercultural' in this context primarily refers to the 'large' Chinese-British cultures, it can also refer to 'smaller' cultures that exist in both countries.

This is a complex process in which our ideas and understandings of terminologies, issues and practices have to be constantly discussed, revisited and renegotiated, and in which new understandings emerge as we proceed. In an intercultural setting such as this collaborative Sino-UK e-Learning project, we are aware that the ideas underpinning the two different cultures of China and the UK distinguish each of us from the other (Dahl, undated). For example, in working together and being exposed to these different cultures we have become more aware of our own teaching and learning culture in the UK and that of our colleagues in China. We have started to understand this process, but much remains to be done. We call this "Intercultural Professional Development", and an in-depth, critical examination of it is the focus of our combined work in Phase Two of the Programme. The results of this new project will be of direct benefit to both UK and Chinese higher education systems by making use of the synergy of ideas and resources available in joint project developments. In Phase Two, we have agreed to carry out research aimed at developing our understanding of intercultural e-Learning pedagogy as the core of the project work.

In this paper, we report on the comparative analysis of the interviews with the Chinese and UK higher education teachers who work in "conventional", campus-based institutions. We examine the ways in which these teachers think about e-Learning and e-teaching, the beliefs they hold about their "e" practice, the ways in which they implement e-Learning, the problems they face in incorporating e-Learning into their courses and the ways in which they perceive e-learners.

Approach to the Study

Our research approach was based on existing research methodologies which emphasise a phenomenographic stance to the elicitation of teachers' views of teaching and learning (for example see Marton, & Booth 1997; Prosser, Trigwell & Taylor, 1994; Roberts, 2001) followed by a grounded theory approach to data analysis and the development of categories of conceptions. We interviewed 24 higher education teachers in China, and 15 in the UK. Our contacts in China provided us with access to higher education teachers, and we approached them via email or telephone to seek their participation in the project. Similarly in the UK: we used existing networks in order to approach higher education teachers who might be interested in taking part in the study.

The interviews were aimed at examining the phenomena of e-Learning from the perspective of each individual participant. All those interviewed were involved in promoting or developing e-Learning in their higher education institution. Typically, they were e-Learning teachers, staff developers, researchers, e-Learning specialists and the like. The selection of participants was very important as we wanted to be sure that all interviewees had direct experience of designing and running courses that use e-Learning in one way or another so that they could talk knowledgeably and in depth about their experiences and views. By e-Learning we mean the use of digital devices such as computers, the Internet, the Web, Virtual learning Environments (VLE's), hand held devices and so on to organise or carry out learning and teaching.

This paper considers the preliminary results from the comparative analysis of interviews of higher education teachers in China and the UK.

Interviewing the Higher Education Teachers

There were three stages to each interview:

1. History: at the beginning of each interview we asked participants to relate a short biographical history of their teaching career. As well as acting as an icebreaker, the biography gave voice to participants. Biography "can help bridge the gap that has grown between the practice of teaching and the practice of studying teaching" (McEwan, 1995: 166)

2. Case Study: this was the central part of the interview, where participants talked about their learning and teaching practice, ideas, beliefs of e-Learning. Teachers' knowledge of their beliefs, values and practices is likely to be in part tacit. Beliefs exist "at an implicit level and may therefore be difficult to articulate and identify and hence difficult to unearth and examine" (Tann, 1993: 55-56, as cited in McConlogue, 2003). Because of this, we tried to help teachers unearth their views and understandings by the use of stimulated recall in which we asked them to think about specific examples of their teaching as it relates to e-Learning so that they could bring this to the fore as a source for discussion. Stimulated recall is a way of discovering what a person was thinking at a 'critical' moment' of action.

3. Future: We asked participants to tell us about future plans for using e-Learning in their teaching. This allowed them to think ahead to where they thought e-Learning was going, and to consider what they might be trying to achieve in their future practice. This also acted as 'closure' to the discussion, allowing us to thank them for their time and participation and for them to ask us questions about the project.

Each interview took place in the participant's office or other suitable place, and took between one and two hours. Each interview was audio recorded with the permission of those taking part.

The interview method was piloted in China in January and February 2006, and revisions to the methodology carried out. The first full set of interviews was carried out in March to June 2006. The interviews were conducted in Chinese and audio recorded with participants' permission. Transcripts in Chinese were prepared from the recordings, and these were then translated into English for analysis. The UK interviews were carried later in 2006/7.

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Study Outcomes

The open-ended, wide ranging nature of the interviews allowed participants to explore the topic of e-Learning in relation to the particular higher education contexts in which they taught. In this paper, we discuss preliminary sets of categories of conceptions from the UK and China teachers.

The China context

The findings from the interviews in China are categorised into five headings: *The centrality of the lecture; Online co-operative learning; Network Learning; Student Learning; Infrastructure and access*

The centrality of the lecture: Every teacher we talked to emphasised the importance of the lecture method in the Chinese higher education system. The traditional 2-3 hour long face-to-face lecture method is for many of these Chinese teachers still the favoured method of teaching. Even when there is good student access to technology, and where arguably e-Learning could be implemented, many of the higher education teachers interviewed said they still prefer the lecture, and indeed many still consider it to be the method most likely to lead to "mastery" of theoretical material and good quality learning outcomes. We cannot over emphasise the importance attributed by these teachers to the lecture method in the Chinese higher education system. It seemed impossible for these teachers to imagine a Chinese higher education system that did not place the lecture at its centre. From this position, all other considerations about teaching and learning seem to flow.

Online co-operative learning: The incorporation of cooperative learning methods into e-Learning strategies appears to be reasonably well understood by many of those interviewed. This form of e-Learning was described by them as involving the teacher delivering a face-to-face lecture, which is followed by students working online, often in groups, on cooperative tasks suggested by the teacher in order to consolidate their learning. Our analysis of the interviews shows that Chinese higher education teachers think that the introduction of online cooperative learning into their teaching practice helps the teaching and learning process in a number of useful ways. For example, it 'excites' learners; it helps overcomes the boredom associated with lectures; it compensates for the teacher centred lecture method; it help students learn how to work together; it improves the efficiency of lecturing.

There are however some problems associated with this method: it is time consuming; in practice, it often leads to poor learning outcomes; students do not readily participate in online group work without the teachers direction; it is still inherently teacher centred; many students still prefer the lecture method.

Network Learning: This is described as a form of resource-based learning, where material (often in the form of a text book) is placed online and students are expected to learn it on their own; it is a form if "individuation" which can be applied to the masses. It is a way of providing courses to the public, who are off-campus. There was scepticism about the quality of this form of e-Learning, with questions about its ability to 'improve' learning. It is not of a high quality. Yet from what those interviewed said, it seems ubiquitous throughout some parts of China.

Student Learning: The ways in which students are asked or expected to learn by teachers is an important aspect of the change that occurs when e-Learning is introduced into higher education. Questions were raised by some of those interviewed about the ability of the Chinese student to participate in forms of e-learning that are based on "self-study" methods. It seems Chinese students are not well equipped for this kind of learning. The cultural shift required by students to cope with self-study would be enormous and for many beyond their present ability. Teachers said that the shift away from teacher-led, teacher-focused methods to "innovative" methods that call on students to exercise greater agency in their learning will be slow to emerge, even in face-to-face contexts.

Infrastructure and access: Effective e-Learning necessarily relies on there being a well-resourced technical infrastructure, and for those involved having consistent and stable access. The situation in China with regard to these issues is changing. It appears to be very patchy and seems to depend on the resources and social and political context of each institution. The higher education teachers that we interviewed work in reasonably well-resourced universities. But even here infrastructure and access can be poor, or poorly supported, so making the promotion of effective e-Learning problematical. Although infrastructure and access are important determinants of effective e-Learning, there are also important cultural and political issues that also intervene.

The UK Context

Emerging preliminary categories from the UK interviews are labelled: "community", "rhythms and design" and "leadership and strategy".

Community: In this conception, there is a strongly held view that e-learning affords, supports or works best when the focus is on developing learner and teacher relationships, developing community and working together, and where there is a sense of equity between teachers and learners. There is little mention of technology by those interviewed: the interest and focus is on learning and teaching in its widest possible context, and the relationships that can be built online and the collaborative forms of learning that can underpin e-learning. This conception of e-learning as 'community' foregrounds the learner who is at the centre of the teaching and learning process. The teacher mediates or facilitates learning processes that encourage collaboration, dialogue and community. The 'dark' side to all of this is the feeling that the facilitation of learning relationships as a valuable educational online process is being appropriated by some in a cynical way: it has become a band-wagon, a fashion with financial funding attached which some teachers and managers in the higher education sector are taking advantage of.

Rhythms and Design: Here e-learning is viewed as a process in which the designer of the online learning course or event offers the opportunity to groups of learners to develop their understandings of how they are working online, with the intention of them understanding the rhythms of their personal and group interactions. The belief is that by doing this, learners will come to know the group and its processes, and that this knowledge will help

them in their collaborative learning ventures. It is thought that the invitation to reflect on the group learning processes can have beneficial effects on the learning process itself.
In many online learning contexts, learners are often provided with guidelines on how to interact with each other, or on what is 'acceptable' behaviour and what is not acceptable. These are sometimes called "etiquette guidelines", and are prescriptions on what is 'acceptable' and 'un-acceptable' in these contexts. An alternative to this, being suggested here, is to enable learners to reflect on their participation and interactions, and for them to develop their own protocols, grounded in their experiences of working together. The belief here is that the rhythms of those involved – the ways in which they come and go online, and their preferences for participating - will differ according to personal requirements and circumstances. If learners can 'stand back' and examine these patterns, and reflect on their understanding of them, they will be able to see the rhythms and begin to understand how the members of the group are working together. From such a reflective analysis, they will be in a better position to develop their own forms of etiquette – forms that take into account the personal and the group needs in their particular context.

Leadership and Strategy: This conception relates closely to the perceived need for professional development in e-learning. There is the belief that leadership is needed in order to embed e-learning into higher education practice. Universities have to take a strategic approach to e-learning, and this has to relate strongly to the over riding academic approach and particular institutional cultures in which practitioners work. There is the belief that university lecturers are not resistant to change and to the move to e-learning; but they require leadership in making the transition. Those in leadership positions need to develop models of how change can be achieved, and work with lecturers in bringing about change.

Discussion

This research into the views and beliefs of higher education teachers in China and the UK concerning e-learning provides a fascinating, but necessarily partial window into the world of higher education e-learning in China and the UK today. Because of their particular position as e-Learning practitioners and advocates for e-Learning in their university, those interviewed are university staff who we might expect to be knowledgeable about e-Learning and who are in a position to implement it in their own practice, and to influence its implementation in their department or across their particular institution.

In China, the teachers we interviewed exist in a teaching and learning culture that has been dominated by the lecture method for centuries (Gu, 2006), and without exception each of them acknowledged the overwhelming centrality and sheer power of the lecture in the Chinese higher education system. This perception of teaching and learning is not uncommon in China. Indeed, anything other than the traditional, campus-based form of higher education is universally considered second or third rate (Gu, 2006). E-Learning seems to be relegated by many teachers to a third class form of education. Even the traditional correspondence course is considered by many to be of a higher quality:

BEST AND HIGHEST QUALITY----------		WORST AND LOWEST ----------QUALITY
The Lecture Method	Correspondence Courses	Network (e-learning) Courses

Teachers interested in e-Learning in China face many issues that will impinge on their ability to incorporate the use of information and communications technologies into mainstream higher education. Incidentally, it is interesting to note the different meaning of network learning in the Chinese context, where it refers to a largely resource-based form of online learning in which learning material is "broadcast" to the masses and in which there is little student-to-student communication, and even less student-to-teacher communication. It is a delivery system in which individual students receive course material and are expected to learn it on their own. This is in contrast to UK network learning practice which involves "learning in which information and communications

technology (ICT) is used to promote connections: between one learner and other learners; between learners and tutors; between a learning community and its learning resources." (Goodyear, Banks, Hodgson and McConnell, 2004: 1). There is little if any sense of "community" in the Chinese meaning of network learning.

Another feature of the Chinese higher education system that may impact on the incorporation of e-Learning into mainstream practice is the way in which teaching is organised. The teachers interviewed in this study organise and run courses by themselves. There seems to be little understanding of team teaching or of how courses can be produced and taught by teams of teachers working together. Higher education institutions appear to provide little support for working in this way. In the UK there is greater awareness and practice of team teaching. In China there appear to be few opportunities for higher education teachers to benefit generally from staff development initiatives. In the UK staff development is highly developed, with many opportunities for teachers to learn about e-learning. There are institutional and national awards for innovation in teaching, including some for e-learning. There are networks that support the practice of, and research into, e-learning. The move towards e-learning (or a blend of face-to-face and e-learning) is supported by universities, and many teachers use university supported virtual learning environments for some aspect of their teaching. However, it appears that it is difficult for any individual teacher working in a conventional on-campus setting in China to find out about innovations in learning and teaching generally, and about e-Learning in particular, in order to assist them in their professional development and to make the move from the traditional face-to-face lecture to online or e-learning.

The issues faced by teachers are of course only one part of the picture. Students have to be open to change and need to have an understanding of the potential benefits to them of innovations in learning and teaching, especially those requiring them to participate in socially situated collaborative and cooperative forms of learning. We have seen that in China, students' ability, or willingness, to participate in forms of learning that require them to be more autonomous and to manage aspects of their own learning is a potential barrier to the introduction of forms of e-Learning that are widely practised in western countries. In the UK, there is a growing interest among many e-learning practitioners in the development of online learning communities, or communities of practice, as a way of providing rich and engaging environments for learning. Group work is also considered beneficial in the online learning context. Many students seem to appreciate these pedagogic trends, and engage with other learners in collaborative and cooperative forms of e-learning.

This adds another complex layer to what is already a complex situation in the culture of teaching in Chinese universities. As long as the lecture method dominates, and as long as the teacher continues to be seen as the sole expert disseminator of knowledge and as long as the end of course examination continues to be the major important source of judgement about learning outcomes, forms of e-Learning that have become widely established in western countries are not likely to become easily established in the Chinese context.

Another issue faced by these teachers is the level of technical support offered by their universities. In China, most higher education institutions do not seem to have the appropriate technical infrastructure to support e-Learning. In the UK universities have benefited from well resourced and supported infrastructure for many years. Access by students and teachers to computer networks and to online library resources is now taken for granted, both on campus and off campus. Many of those interviewed in China teach in reasonably well-resourced institutions (by Chinese standards), but even in these contexts student access to computers is very low, and the on-campus e-Learning infrastructure is weak and cannot easily support large numbers of online learners. The resources that teachers can provide online are still poor. Students studying at the post-graduate level have little access to research resources such as e-journals and research data-bases. Full access to the Internet and the resources available on it is still problematic for most campus students, and indeed for the wider society in China, although this is changing.

Conclusion

In this study, we set out to investigate the state of e-Learning in higher education in China and the UK by interviewing teachers who use e-Learning in their day-to-day practice.

The *lecture method* is still central to the Chinese higher education system and is unlikely to be superseded by any other method in the near future. The lecture is considered by many teachers to be the only way to pass on knowledge of any substance. In the UK, there is a growing emphasis on socially situated collaborative and cooperative forms of learning, such as those that occur in learning communities. Nevertheless, *online co-operative learning* methods are being introduced by small numbers of teachers in China wishing to innovate in

their practice and who have the resources and understanding of how to organise learning in this way. Learning outcomes are not always, however, at the desired standard. The most ubiquitous form of e-learning in China is *network learning*. Unlike its western counterpart, which has a focus on promoting connections, and in networking students and tutors in the context of a rich variety of resources, the Chinese conception of network learning is a form of learning in which packaged learning material is broadcast to masses of off-campus students. Students and *student learning* are of course at the centre of any form of higher education. There is some concern about the ability of Chinese students to adapt to self-study methods and other forms of self-management that may be required in e-learning contexts. There is still a high teacher dependency culture in China that militates against student autonomy. In the UK, students have a greater understanding of self managed learning, and higher education teachers expect their students to take some responsibility for their learning. Finally technological *infrastructure and access* to computers in China is still poor compared with that in the UK. The state of e-learning in the universities in which the teachers we interviewed work is however dynamic and changing.

Our interviews suggest that those who are already involved in the field of e-Learning in China share a common future model of e-Learning. This might best be described as the "Lecture plus Online Work" model. This model involves the teacher giving a face-to-face lecture on theoretical or conceptual issues, followed by 'homework' carried out by students in an online learning platform. The online homework may involve students participating in group tasks and discussions, with opportunities for students to ask questions of the teacher. Similar methods are also used in the UK, but those interviewed in this study placed greater emphasis on student centred approaches to e-learning that involve socially situated learning that takes place in groups and communities. However, the "Lecture plus Online Work" model points to a radical shift in the Chinese higher education learning and teaching process. E-learning in both countries is dynamic and developing, and its practice is clearly influenced by culture, values, beliefs and context.

References

Banks, S, Lally,V. Liu, B. & McConnell, D. Intercultural e-learning: Reflections on Developing a Collaborative Approach to Pedagogy and Educational Technology in a Sino–UK Context. In Banks, S., Hodgson, V., Jones, C., Kemp, B., McConnell, D., & Smith, C. (Eds.) *Proceedings of the Fifth International Conference on Networked Learning 2006*. Lancaster: Lancaster University ISBN 1-86220-182-X. Available at:http://www.networkedlearningconference.org.uk/abstracts/pdfs/03Banks.pdf

Charmaz, K. (2000). Grounded theory: objectivist and constructivist methods. In The Handbook of Qualitative Research. N. Denzin, and Lincoln, Y.S. (eds). Thousand Oaks, CA, Sage Pubs. Inc.: 509-535.

Dahl, S. (undated) *Intercultural Research: The Current State of Knowledge*. London: Middlesex University Business School.

Goodyear, P., Banks, S., Hodgson, V., & McConnell, D. (2004). Research on networked learning: an overview. Pp1-9 *in Advances in Research on Networked Learning*. In Advances in Research on Networked Learning P. Goodyear, Banks, S., Hodgson, V., & McConnell, D.(editors) London, Kluwer Academic Publishers.

Gu, Y. (2006) An Ecological Model of e-Learning in Chinese Context-Critical reflections of 5 years' practice of e-learning management in IBOE. Studies in Continuing Education, 28(2): 99-120

Marton, F., & Booth, S. (1997). *Learning and awareness*. Mahwah, N. J.: Lawrence Erlbaum and Associates.

McConlogue, T. (2003). *An Investigation into the Educational Beliefs and Knowledge of Distance Education Online Tutors*. PhD thesis, University of Sheffield (supervised by D. McConnnell).

McConnell, D. (2006). *E-Learning groups and communities*. SRHE/OU Press.

McEwan, H. (1995) Narrative understanding in the study of teaching. In McEwan, H. and Egan, K. (eds) Narrative in Teaching, Learning and Research. New York: Teachers College Press pp166-183

Prosser, M., Trigwell, K. & Taylor, P. (1994). A phenomenographic study of academics' conceptions of science learning and teaching. *Learning and Instruction,* 4(3), 217-231.

Roberts, G. (2001). *Teachers' Conception of, and Approaches to Technologies for Teaching and Learning*. PhD thesis, Lancaster University, Lancaster, UK.

Tann, S. (1993) Eliciting student teachers' personal theories. In Calderhead, J. and Gates, P. (eds) Conceptualizing Reflection in Teacher Development. London and Washington, D.C.: The Falmer Press. Pp53-69

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