

Variation in lecturers' experiences of teaching undergraduate on campus courses using the web



Carlos Gonzalez

Facultad de Educacion

Pontificia Universidad Catolica de Chile

This paper presents preliminary outcomes of a phenomenographic research on lecturers' experiences of teaching undergraduate on-campus courses using the web. Eighteen lecturers from different disciplines were interviewed from two research-intensive Australian Universities. Interviews were analysed with the aim of describing lecturers' experiences as they emerge from the transcripts. Three different experiences were identified: 'the web for providing academic and administrative information related to the course', in which lecturers understand the web to provide information or contents; 'the web for communicating with other people involved in the course', in which lecturers conceive it as a space for engaging in online discussions; and 'the web as a space to create, build and share knowledge', in which lecturers see it as a valuable tool which allows sharing and knowledge building. These dimensions represent an increasingly sophisticated way of understanding teaching with the web. Findings are coherent with previous research (Gonzalez, 2006; McConnell & Zhao, 2006; Roberts, 2003) which has identified ways of conceiving the web for teaching ranging from 'informative' to 'knowledge building – sharing' conceptions.

Keywords: phenomenography, teaching in HE, experiences of teaching using the web, e-learning

Background

This paper presents preliminary outcomes emerging from a PhD research (in progress) about University teachers' experiences of teaching using the web. It is related to the phenomenographic line of research on teaching and learning in Higher Education. This tradition has established a relationship between students' conceptions of learning, their approaches to study and eventual learning outcomes (Biggs, 1987; F. Marton, Dall'Alba, G. & Beaty, E., 1993; Saljo, 1979). Related to conceptions of teaching, Kember (1997) established two broad orientations: 'teacher-centred/content-oriented' and 'student-centred/learning-oriented'. Further research demonstrated that conceptions and approaches to teaching were associated. Lecturers who had conceptions related to the 'teacher-centred/content-oriented' orientation were more likely to be on the side of the 'content-centred' approach; while those holding conceptions related to the 'student-centred/learning-oriented' orientation were more likely to be on the side of the 'learning-centred' approach (Kember & Kwan, 2000). Similarly, Trigwell & Prosser (1996) established a relationship between intentions and strategy in the lecturers' approaches to teaching. Lecturers having an intention of 'information transmission' or 'concept acquisition' used a 'teacher-focused' or a 'student-teacher interaction' strategy for teaching; while those with the intention of 'conceptual development' or 'conceptual change' used a 'student-focused' strategy. Besides, relating teaching and learning, the same authors found that there was a relationship between lecturers' approaches to teaching and students' approaches to learning. Where lecturers were focused on transmitting knowledge, students were more likely to adopt a surface approach to learning; and where lecturers were focused on students and changing students' conceptions, they adopted deeper approaches to learning (Keith Trigwell, Prosser, & Waterhouse, 1999).

Despite the body of knowledge developed by this strand of studies to understand teaching and learning in Higher Education, and the rapid up-take of elearning to enhance campus based courses; there is little research on University teachers' experiences of teaching with the web, although some has started to appear. For example, Roberts (2003) established three conceptions of teaching on-campus students using the web: 'the web as a source of information', 'the web used for individual and independent self-paced learning', and 'the web used for group analysis, decision making and dialogue'. These conceptions would indicate an incremental use of technologies for teaching and taken as a whole; represents the definition of networked learning. Moreover, she developed six strategy dimensions related to approaches to teaching using the web: focus of use, nature of use, role of the teacher, time & place of use, role of students; and

relationships with students. More recently, McConnell & Zhao (2006) researched conceptions of elearning held by a group of Chinese lecturers. They found that lectures were the favoured method of teaching. Elearning was not conceived as a proper medium for a good mastering of the courses' contents. Besides, these lecturers conceived networked learning as a sort of resource based learning, in which some materials were uploaded online for the students to use them by their own. I have further elaborated on teaching with the web in my own Master's dissertation (Gonzalez, 2006). This work was conducted in a Faculty of Allied Health Sciences in an Australian University. Findings showed three different conceptions of the web for teaching held by lecturers teaching online distance postgraduate courses: 'as a medium for networked learning'; 'for learning related communication (asynchronous and/or synchronous)'; and 'for individual access to learning materials and information; and for individual assessment'; being the first one the most advanced perspective. The study presented here adds to previous research by increasing the limited amount of knowledge in the area. In doing so, it will help to develop a better understanding on how lecturers experience teaching using the web in campus-based undergraduate Higher Education.

Method

This study follows a phenomenographic approach. It promotes understanding of the relationships that people create with the world around them and the phenomena which constitute it. This strategy facilitates research on people's experiences and how they conceive phenomena in their world. It allows qualitative descriptions of how people experience phenomena in different ways (Akerlind, 2005; Marton & Pong, 2005; Svensson, 1997).

The sample was purposive aimed to recruit lecturers who had the experience of teaching undergraduate campus based courses and used the web in some way in their teaching. Eighteen lecturers from different disciplines voluntarily agreed to participate in the study as interviewees. The number is considered enough to find variation in their experiences and, at the same time, allows appropriate data management, as suggested by Trigwell (2000). Lecturers came from two major research-intensive Australian Universities.

Semi-structured interviews were selected as the data gathering method. They allow a deeper insight into participants' perceptions regarding the process of teaching and what they believe about their experiences. Interviews followed a list of wide topics related with their experiences of using the web for teaching, using questions such as: 'What is a good use of the web for teaching?' or 'How do you use the web for teaching?' From the answers, the interviewer asked for deeper or further descriptions, exploring topics and issues relevant for this study; using questions such as: 'Could you explain more?' and 'What else would you say about this issue?'

A phenomenographic analysis has been carried out to analyse the interviews. It started with a familiarisation with the transcriptions by reading them many times. Then, significant elements in the answers were identified and reduced, grouping similar ones. Categories developed were compared against each other to establish their unique character. In this way, provisional categories of description have been developed as they emerge from the transcripts. It is important to state, however, this is a process not finalised yet. Phenomenographic analysis is accomplished through continuous iteration (Bowden, 2005; Prosser, 2000); therefore categories of description presented here are still provisional ones; and they could be expected to change before reaching a stable outcome space.

Findings

In this section, three qualitatively different experiences emerging from the analysis of interviews are presented: 'the web for providing academic and administrative information related to the course'; 'the web for communicating with other people involved in the course'; and 'the web as a space to create, build and share knowledge'. Quotations from transcripts are used to illustrate the argument. Lecturers' names are avoided to ensure anonymity. A number is provided at the end of each quotation to identify them from different transcripts.

Experience 1: The web for providing academic and administrative information

Lecturers in this category understand the web as a medium to provide students with information or contents related to the course. The web is used to upload papers, lecture notes, examples of exam questions, and links to relevant web bases resources. Administrative information, such as in between classes announcements or exams results, is provided as well. The web is not seeing as a medium in which

the teaching and learning process takes place, but a space that supplement face to face teaching with further materials. Online components of the course are seen as an 'extra'. Convenience of providing materials in this way is highlighted.

The web is fantastic to put information. It is very easy to do... Give some information, extra things. Before, we did it putting things in the library, four copies and people needed to get it and photocopy... But if you wanted to add some extra, something that I found during the semester, I couldn't. Now, I just upload that to WebCT (12)

This use of the web supports mainly an 'information-transmission' approach to teaching. Lecturers who used the web in this way developed their courses mainly around textbooks or much defined syllabus.

The unit is based on a text book. Lectures are based on the textbook... which is very good but difficult. In lecture time I explain the text book, making illustrations based on the more difficult examples... (7)

It was found that even communicative tools, such as discussion boards, were used to provide 'one way' information rather than for engaging in discussions or analysis. An example of this is one lecture that used discussion boards to provide answers to questions related to the course.

We use different discussion boards in this course. For example, to ask questions about class contents or textbook contents, to ask questions about homework questions, to ask questions about administrative questions, to ask questions about exam questions. Students ask questions and then we publish the answers for everyone to see them (7).

Experience 2: The web for communicating with other people involved in the course

Lecturers who emphasise the web as a space for communication engage their students in online discussions. It takes different forms. For example, online asynchronous discussions are used to continue face to face discussions held in tutorials.

We also do online discussions... The plan is that they are follow up tutorials. So that... they do tutorials on Tuesdays, so they have from that Tuesday to next Tuesday to online talk about the tutorial. And they only have one week. At the end of that week they can't continue talking about that topic anymore... It's being very good for students to reflect on the tutorial contents... in the tutorials you only have limited time to speak, but using the online discussions they have more time to reflect. (16)

Discussions can be less structured as well. Some lecturers leave discussions open for the students to propose their own topics of interest.

I have open discussions with them, they propose topics... and because this unit is related to their professional practice, they are really interested. Sometimes I just leave them by themselves, they propose topics and they start exchanging ideas (4)

Another example of the use of discussion boards is to support the provision of feedback.

They post their assignments and then they are required to provide feedback to the work of other groups... A group make an essay and the other provide feedback (9)

Lecturers who conceive the web in this way see their participation in online discussions as a 'teaching' activity. Online activities are connected to the face to face component in a stronger way than in the first category; as, for example, in the case of the lecturer who uses discussion boards as tutorials' follow up.

This way of experiencing and understanding the web for teaching is related to a more 'student-centred' approach to teaching. Students are expected to have a higher level of reflection on the topics of the course. Finally in this point, it is important to state that lecturers in this category do use the web for providing information as well, but their use goes further prioritising online learning related communication.

Experience 3: The web as a space to create, build and share knowledge

Lecturers who see the web as a space to create, build and share knowledge; make an extensive use of its capabilities. They use a broad range of media and tools. They upload materials and provide links to web

based resources as well as use asynchronous discussion boards. However, they go further using a wider range of tools, such as video-conferencing, animations, videos, etc; and experimenting with other ones, not primarily provided by the Universities, such as blogs.

Lecturers in this category engage their students in processes of knowledge building, in which different learning activities (attending a lecture or meeting, participating in online discussions, reading papers, participating in groups) lead to an enhanced experience of learning.

WebCT is vital for this class. In every meeting we do class work... During the semester they are in teams of four people, carrying out projects. These teams have private discussion boards in WebCT. They store their drafts, reviews. They use online space as a repository and for communication. There are lots of postings. Discussion boards are about communicating about the projects... I put lecture notes up (in WebCT) but this is not the main things, they are not really lecture notes but dot points. It is important to be at the lecture. As interactive techniques are used, it is not possible to know where they are going to end up. Lecture time is a discussion time not a traditional lecture, not something to put up in the web. What it is in the dot points it is only a fraction of what is discussed (5).

Technology is used and valued because it affords providing quality learning experiences. The web is not seen as an 'extra' but it is embedded in the courses. Online activities are situated at the same level than face to face activities.

The work they do with WebCT or with blogs is directly related with the work we do in our class time... there is a continuum. We have discussions in class time and then they can continue with discussions in their group discussion board... or they can use the discussions we had in class to improve their projects (5).

Lecturers who conceived the web in this way are reflective teachers, who support 'student-centred' approaches and conceive teaching as a process of facilitating learning. They want their students to develop their own reflective capabilities.

I want students to develop their own voice. Blogs are good to do this. They are less formal, less structured and they enable students to sort of break out the idea that everything they write needs to be based on essay style. They get their own idiosyncratic voice. Blogs allow students' deep approaches to learning in several ways and allow students to develop their own idiosyncratic voices. It gives them a space to connect in a way that it won't be possible in other ways (5).

Discussion

Results presented in this paper reveal an increasing use of the web for teaching. At the lower level the web is used to provide information. At the higher, it is used to share and create knowledge. It is important to note that experiences at the higher levels contain the lower ones. Lecturers using the web for create, build and share knowledge; use it, at the same time, for communicating and for providing information. Besides, lecturers using the web as a medium for communication; use it to provide information, as well. It is possible to state that rather than exclusive and independent from each other, experiences presented are part of an inclusive continuum. This is coherent with Roberts (2003), who established that conceptions she found would indicate an incremental use of technologies for teaching campus-based students and taken as a whole, represents the definition of networked learning (McConnell, 2000). Moreover, ways of experiencing the web found in this research are coherent with findings from the study conducted previously in distance education settings (Gonzalez, 2006). In both it is possible to see lecturers conceiving the web mainly considering its 'informative' features, on one side; and its 'communicative – knowledge building', on the other. Figure 1 represents the inclusive relationship founded among experiences of teaching using the web.

Another relevant issue emerging from the analysis is that the more 'sophisticated' use of the web, the more embedded in the courses in which is used. It is considered an 'extra' when used mainly as a medium to provide information; as such it is not seen as part of the course but an additional. When moving to an experience that considers the web as a medium for communication, it is understood as part of the course. Students and lecturers are able to discuss online, in some cases continuing face to face discussions. At the higher level, when the web is seen as a space to share and build knowledge, it is embedded in the experience of teaching. Students can share and interact online leading to the production of knowledge.

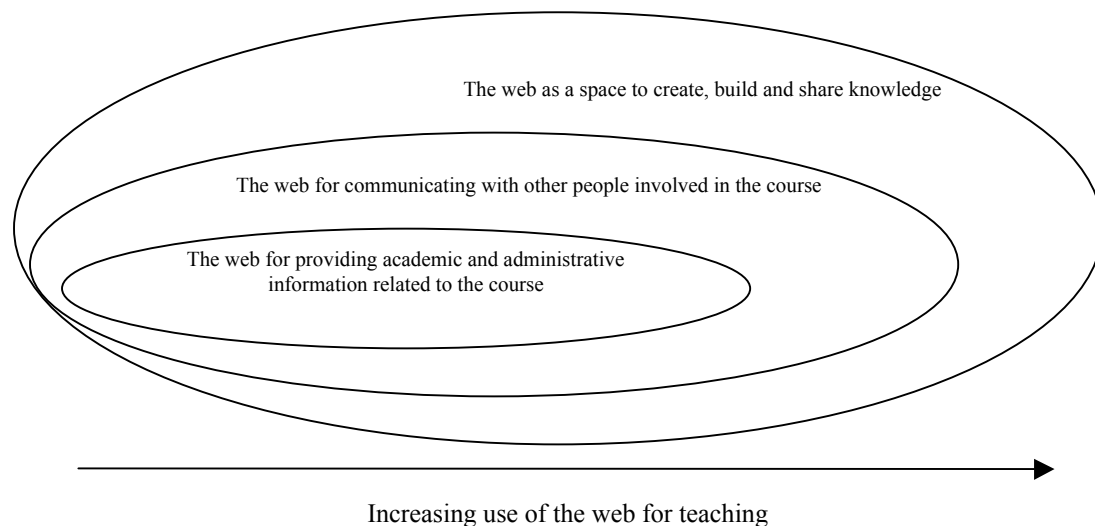


Figure 1: Relationship between experiences of teaching using the web at undergraduate level

Conclusion

This paper presented preliminary outcomes of a study on lecturers' experiences of teaching using the web. Eighteen lecturers from different disciplines in two research-intensive Australian Universities were interviewed. Interviews were focused on their experiences of using the web for teaching on-campus undergraduate courses. Three different experiences emerged: 'the web for providing academic and administrative information related to the course'; 'the web for communicating with other people involved in the course'; and 'the web as a space to create, build and share knowledge'. These ones are conceived as part of an increasingly sophisticated way of using the web for teaching.

Acknowledgement

The author acknowledges the Chilean Ministry of Education and its MECE program for the support provided to undertake this research.

References

- Akerlind, G. S. (2005). Variation and Commonality in Phenomenographic Research Methods. *Higher Education Research and Development*, 24(4), 321-334.
- Biggs, J. B. (1987). *Student approaches to learning and studying* Melbourne: Australian Council for Educational Research
- Bowden, J. (2005). Records of iterative processes in reaching version 8 of the 'success' categories of description. In J. Bowden & P. Green (Eds.), *Doing developmental phenomenography* (pp. 156-170). Melbourne: RMIT University Press.
- Gonzalez, C. (2006). *Conceptions and approaches to teaching online: a study of lecturers teaching postgraduate distance courses in the allied health sciences*. Unpublished dissertation. University of Sydney, Sydney.
- Kember, D. (1997). A reconceptualisation of the research into university academics' conceptions of teaching. *Learning and Instruction*, 7(3), 255-275.
- Kember, D., & Kwan, K. (2000). Lecturers' approaches to teaching and their relationship to conceptions of good teaching. *Instructional Science*, 28(5), 469-490.
- Marton, F., Dall'Alba, G. & Beaty, E. (1993). Conceptions of learning. *International Journal of Educational Research*, 19(3), 277 - 300.
- Marton, F., & Pong, W. Y. (2005). On the unit of description in phenomenography. *Higher Education Research and Development*, 24(4), 335-348.

- McConnell, D. (2000). *Implementing computer supported cooperative learning* (2nd ed.). London: Kogan Page.
- McConnell, D., & Zhao, J. (2006). Chinese higher education teachers' conceptions of e-Learning: Preliminary outcomes. In L. Markauskaite, P. Goodyear & P. Reimann (Eds.), *Proceedings of the 23rd annual conference of the Australasian Society for Computers in Learning in Tertiary Education: Who's learning? Whose technology?* Sydney: Sydney University Press.
- Prosser, M. (2000). Using phenomenographic research methodology in the context of research in teaching and learning. In J. Bowden & E. Walsh (Eds.), *Phenomenography* (pp. 34-46). Melbourne: RMIT Publishing.
- Roberts, G. (2003). Teaching Using the Web: Conceptions and Approaches from a Phenomenographic Perspective. *Instructional Science*, 31(1-2), 127-150.
- Saljo, R. (1979). *Learning in the Learner's Perspective. I. Some Common-Sense Conceptions. No. 76*: Gothenburg Univ. (Sweden). Inst. of Education.
- Svensson, L. (1997). Theoretical Foundations of Phenomenography. *Higher Education Research and Development*, 16(2), 159-171.
- Trigwell, K. (2000). A phenomenographic interview on phenomenography. In J. Bowden & E. Walsh (Eds.), *Phenomenography* (pp. 62-82). Melbourne: RMIT Publishing.
- Trigwell, K., & Prosser, M. (1996). Congruence between intention and strategy in university science teachers' approaches to teaching. *Higher Education*, 32(1), 77-87.
- Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education*, 37(1), 57-70.

Carlos Gonzalez, Facultad de Educacion. Pontificia Universidad Catolica de Chile. Avda. Vicuna Mackenna 4860, Macul, Santiago, Chile. Email: cgonzalu@uc.cl

Please cite as: Gonzalez, C (2007). Variation in lecturer experiences' of teaching undergraduate on-campus courses using the web. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007*. <http://www.ascilite.org.au/conferences/singapore07/procs/gonzalez.pdf>

Copyright © 2007 Carlos Gonzalez.

The author assigns to ascilite and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to ascilite to publish this document on the ascilite web site and in other formats for *Proceedings ascilite Singapore 2007*. Any other use is prohibited without the express permission of the author.