Establishing and Maintaining a Dynamic Learning & Teaching Community via an Online Learning Management System Platform

ABSTRACT

Teacher Learning Communities (TLC) have been recognised as key factors in achieving high level engagement and quality outcomes for both teaching staff and for students. Their purpose is to create a shared space in which disciplinary knowledge and issues of practice can be shared and discussed. However, in the context of issues in our institution, such as lack of time, space, funding, and a highly casualised working environment, establishing and maintaining such a community is a challenge.

Creating an online community offered a solution to a number of these issues. The Learning Management System at our institution was chosen to establish a TLC for the following reasons: it was immediately accessible to all staff members and offered a range of tools for cross communication. Further, it provided staff with a selection of specialised pedagogical resources and enabled collection and collation of action research. From a design perspective, the project was informed by current research which has found that users make decisions on the usefulness and user friendliness of online learning systems based on their reactions to the environment. Thus a secondary aim was that the site should act as an exemplar of a highly engaging LMS, one which motivates by being aesthetically pleasing, well organized, and inclusive of multi-modal content.

Regular activities are designed to promote knowledge building, exchange of ideas and to embed a significant level of reflection to encourage teaching staff to adapt and improve their practice. This enables staff to take an active role in collecting and sharing their own observational research thus integrating both praxis and reflection.

Moreover, the use of the LMS platform gives staff the opportunity to explore a range of e-learning and teaching tools and to practice using such tools to create engaging course content. The Teacher Learning Community via the Blackboard platform thus integrates both the technological and pedagogical aspects of professional development.

AUTHORS

Carmel Nicholas and Sandra Caon-Parsons English Language Centre, Professional and Continuing Education, University of Adelaide

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Introduction

Over the past twenty years Teacher Learning Communities (TLC) have been recognised as key factors in achieving high level engagement and quality outcomes for both staff and students.

Their purpose is to create a space in which disciplinary knowledge and issues of practice can be shared and discussed. Thus an overarching pedagogical framework can be maintained and professional development embedded.

Within such communities, collaboration provides a suitable educational context for critical thinking processes which then enables deep learning to take place. As noted by Kanuka and Garrison (2004), this form of constructivism in which shared knowledge and meaningful interactions occur, is an essential element of higher order learning. Participants are able to observe differing perspectives and reflect on their own views, creating the opportunity for the building of new meanings. A key component, reflection, is important in helping participants take personal control of professional development. This in turn, encourages self-monitoring of performance and problem solving approaches.

Without critical reflection, unexamined interpretations and assumptions become embedded in practice (Larrivee 2000). The reflective process can assist in bringing about a more conscious approach to teaching methods and initiate a more student-centred, flexible and innovative learning environment (Kroll 2010). Richards and Lockhart (1996) concur with this view and propose that when critical reflection is seen as routine and a continual process, teachers can become more confident in trying different options and are in a better position to discover if there is a gap between what they are teaching and what their students are learning.

The desire to fully integrate these concepts into the practice of teaching staff at our University English Language Centre (ELC) provided the catalyst for the development of a formalised TLC. Its purpose was to make available in a centralised source, a diverse range of activities and resources that support higher levels of learning. Moreover, by linking teachers to this central body, a learning environment could be

promoted, in which participants supported each other through interaction, reflection and inquiry.

However, the establishment and maintenance of such a community is an extremely complex endeavour, affected by a range of factors. Firstly, the majority of teaching staff in our university work unit (approximately seventy) are employed part-time on a sessional basis and many staff work across sectors. Therefore, meeting times, meeting places and professional development sessions are increasingly difficult to arrange and to fund. When they do occur they rarely have all staff present and are always held under significant time constraints.

In our centre, creating an online community offered a solution to a number of these obstacles. An online platform offers time flexibility, a shared space and a number of technological tools to enhance engagement. The main goals of collaborating, learning from each other, negotiating and constructing meaning are all possible in an online setting as the tools exist to allow and encourage these types of interaction (Tu & Corry 2002). Furthermore, it enables dissemination and collation of both information and ideas, a place for reflection and the development of Information Communication Technology (ICT) skills to take place. These skills are now essential as across the university, teachers are expected to deliver quality programs not only in a face to face context but also as a mixture of blended and fully online courses.

TECHNOLOGICAL CONSIDERATIONS

Initially, research was undertaken in order to decide on the best platform to utilise. The use of a website was not an option due to lack of funding. A secure system which was free and accessible to teaching staff was required. Moodle and Blackboard Learning Management Systems both fitted this category. A number of studies indicated that both instructors and students preferred Moodle (Machado & Tao

2007). Reasons cited range from finding the system more dynamic in terms of sequential construction of activities for instructors to easier to navigate for both instructors and students (Corich 2005).

These findings correlated with our own experiences of the technologies. However, a number of other features needed to be taken into account. The long term viability of the platform was a fundamental consideration. The fact that Moodle is an open source system means that it does not have support in the same way as a fee paying system. In addition, the Discussion Board was seen as superior on the Blackboard LMS (Unal & Unal 2011). Another feature of Blackboard is that it gives opportunity for meetings to be arranged synchronously if required. It also provides a number of other embedded tools such as Voice-board, used for language development and feedback, and Turnitin used for developing awareness of plagiarism issues.

A further point in favour of Blackboard was that the storage capacity is far superior to that of Moodle (Corich 2005, p158). Thus Blackboard was chosen as the platform, even though it was felt to be somewhat less user friendly than Moodle. The Blackboard platform offered capacity, the availability of a wide range of e-learning and teaching tools, long term viability, a technical support system and was immediately accessible to all staff members. Furthermore, as the Blackboard LMS is used in our centre, utilising this platform for our TLC means that staff would be able to explore and develop their skills further using the environment they use for teaching.

ARCHITECTURE AND DESIGN

As in the non-virtual world the success of group meetings can either be inhibited or enhanced due to simple aspects such as the quality of the space and seating arrangements. Therefore, during the construction phase, as the TLC co-ordinators, we took on the roles of architects and designers. Our goal was to create a strong structure with fixed multiple "rooms" which had a simple interface, that is, were easy to enter and exit from. These areas were designated to be used as either co-ordinator uploaded content zones or interactive zones for members to upload to. In order to preserve the integrity of the structure the locus of control was established by enrolling participants as students whilst the TLC coordinators were assigned instructor status.

Design was a key feature in the initial development of the online platform. This involved further research and decisions in regard to graphic elements such as colour, font, images, organisation and layout (see Figure 1). Contrary to the view of Lynch (cited David & Glore 2010), that there can be hesitation on the part of academics to integrate aesthetic elements within their work for fear of being judged as "hiding poor scholarship", the site seeks to model elements required to achieve engaging as well as pedagogical content. A considerable body of research indicates that heightened levels of communication and engagement can be derived through the integration of aesthetic elements (David & Glore 2010; Junk, Deringer & Junk, 2007).

Figure 1: View of entry page



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PEDAGOGICAL CONTENT MANAGEMENT

In addition to the roles of architect and designer, it was necessary for the co-ordinators to take on pedagogical and managerial roles (Junk, Deringer & Junk, 2007).

These roles, also known as "cognitive presence" (Kanuka & Garrison 2004, p21) imply a level of decision making on the part of co-ordinators of online communities. This is undertaken in the knowledge that simply establishing the platform does not guarantee the participation in and success of an online learning community. In fact, even the best designed site may not encourage discussion and collaboration (Hung & Chen 2001).

The central function of the Online Teaching and Learning Community draws on the work of Garrison and Kanuka (2004, p 99). They caution that in order to achieve higher levels of learning in an online environment, it is necessary for more than an exchange of views to occur. Thus a range of activities are made available to ensure participation is diverse and meaningful. These involve requesting responses to research articles or video content, discussion forums, practicums, surveys, guided reflection and peer mentoring opportunities (see Figure 2).

In addition, staff are encouraged to establish blogs to share resource links. Such activities are not only designed to develop knowledge and enable an exchange of ideas, but also to embed a significant level of reflection to encourage teaching staff to adapt and improve their practice (Kroll 2010). An example of this is a set of guided reflection tasks which ask the members to reflect on their practice and then join a discussion on what they have learned and brainstorm how they might modify their future practice.

RESEARCH CAPACITY BUILDING

An additional feature of the online teaching and learning community is its ability to provide a permanent storage facility for research material. A library of relevant quality source material is regularly updated and made available to staff. Collection and collation tools have also been made available within the platform. Staff are encouraged to share and consolidate their own observational research via Blogs and Discussion Boards. This type of research is a valuable resource and is instrumental in enabling and supporting teachers to integrate their research into their practice (Cochrane-Smith & Lytle, 1993 in Showler 2006).

Figure 2: Using a Wiki for Reflection and Discussion



14_ Internationalising Classrooms - Teacher Discussions ©



Joan. M.Mas CC
Hi everyone, the idea is to create a Wiki Mosaic

- · scroll to the base of the page and open and watch the video
- · think about how the video content can inform our classroom practice
- · take some notes whilst watching it
- . add your comments to the Wiki Space (minimum 7 comments) below click to open it
- · write directly into the table, use one box per comment
- it doesn't matter if others have written similar comments
- if you have any difficulty accessing the video try copying the link and putting it in a new browser if this fails please let me know

Thanks from Carmel



E-LEARNING AND E-TEACHING DEVELOPMENT

The online model also offers the opportunity for professional development of Information and Communication Technology enhanced teaching practice. As highlighted by Hughes (2005 in Hew & Thomas 2007, p227) "teachers need to have technology supported-pedagogy knowledge and skills base, which they can draw upon when planning to integrate technology into their teaching". This goal is in keeping with the work of Shin (2007) whose research found that the more teachers perceive the usefulness and ease of use of ICT, the more positive their attitudes will be to integrate ICT into their teaching. So in our context, by building teachers technologysupported-pedagogy, the challenge is to lead the teaching staff towards understanding the need for change and to consequently revise their professional practice. This will encourage confidence in replacing traditional learning content delivery without depleting curriculum coverage (Hew & Thomas 2007).

Rather than skills development focusing on the way the technology is operated (Watson 2001) the online TLC seeks to model as well as give opportunity for practice which can then transfer directly to their classroom (see Figure 3). Through participation, teaching staff are able to utilise a range of tools and be exposed to a variety of online exemplars. This means that staff are able to develop their ICT knowledge and skills in an integrated manner. This experience of ICT based pedagogy in the role of teacher learner is intended to assist teachers to gain confidence and to encourage them to adopt ICT into their regular content delivery as a way to enhance their teaching. This integration of delivery mode with embedded practice is also one which has been adopted by a number of teacher training courses (Jung 2005).

SOCIAL ENGAGEMENT

A further essential factor in successful online interaction, referred to by both Bonk and Dennen (2005 in David & Glore 2010) and Junk et al (2007) is the need to provide a social environment. At the ELC, staff members may not know each other as there is a degree of dispersion in the work in environment. To overcome this anonymity, members are asked

Figure 3: Example of Discussion using Table Format in WIKI

Confidence	The self-confidence comes from drawing out their skills and making them aware that they are actually able to communicate successfully with students from other cultures, including the local students	international students are risk takers but need more support to develop confidence	The students come with good study skills so it seems important that we foster and instil confidence and a belief in themselves	Different styles of education make it hard for Ss & educators. However, all international Ss are risktakers & need confidence. As educators, we can assist Ss in gaining confidence	How can we practically ease the process of transition and transformation in students? Both local and international students are shifting to a global perspective.
Group work	Students need to discuss with each other what they feel are their strengths in a group activity. This may be facilitated with a guided handout. After a group activity, such as the OP, they need a chance to reflect on how they performed in the group	Think about projects that can involve around 5 students in a group activity. The film suggested this was a good size for effective group work	Rather than the teacher laying down the law, give time for students to create clear rules for group work. Guide them to think about what should happen if one member of the group is not pulling their weight	The teacher, or an appointed class leader needs to explicitly organise groups to avoid clustering of nationalities. More mature outgoing students will naturally dsire this anyway	Include a "group work participation" box on the OP rubric (or any assessed activity that involves group work)

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Figure 4: Example of Personalised Discussion Board

10/07/13 16:20	Geap 4/5 Shona	Shona Grant
08/07/13 17:13	GEAP 1 - Suria	Suria Mc Gee
30/06/13 20:52	GEAP 2 ANNA P.	Anonymous
27/06/13 14:24	GEAP 2 RED	Meather Hannath

to utilise the Blackboard LMS personalisation tool. Individuals upload their own image which then indicates their presence visually in discussions, blogs and wiki pages etcetera. This means all entries show a staff member's entry alongside an image of them (see Figure 4). This enhances the contact between members by enabling staff to recognise each other in corridors and lifts and face to face meetings. This is also done in part through aesthetic design, as discussed earlier.

but also requires activities, information and opportunities for interchange which encourage collaboration and community building. Moreover, the Online TLC site goes beyond the immediate community by providing links to connect participants with relevant communities of practice.

This is further illuminated by Charalambos, Michalinos and Chamberlain (2004) who list several very important characteristics that must be taken into account when designing online learning communities. These involve strategic, ongoing efforts by the convenors to encourage teacher to teacher interaction, as well as teacher to convenor interaction. They also reinforce the need for "a joint vision, control and ownership of the community, [and that] its goals and artefacts are equally shared among the members of the community" (Charalambos, Michalinos & Chamberlain 2004, p138). All teaching staff particularly new staff, benefit from the social aspects as well as the content, activities and discourse. In addition, the engagement of such staff members means they are able to bring a fresh perspective into the forum, thus increasing the knowledge and awareness of their more experienced colleagues.

CONCLUSION

The aim of developing our online TLC was to facilitate a depth of knowledge building and creation of a place of exchange where practice is shared and inquiry and reflection encouraged. It sought to resolve issues of isolation and bring staff together in a meeting place free of time and space constraints. A key challenge is to maintain a long term viable system which is technically supported. Moreover, the maintenance of engagement levels and achieving openness in forums are also key concerns. This means careful attention has to be taken to ensure that the tasks do not become onerous and that a connection to professional development is evident. It is important to take into account studies which indicate that membership of these types of learning communities are usually voluntary (NTCE 2010). However, a lack of time can be a strong inhibitor even for volunteers. Therefore, in order to encourage involvement and participation levels, activities have been incorporated as asynchronous components of regular paid meeting times. Another challenge is the time demands on the coordinators to manage the site by keeping it up to date, relevant and sustainable.

However, though there have been some challenges in the Stage One phase, it is a positive step forward that there now exists a place in which quality communication and professional development can occur. Furthermore, it is a place in which teaching staff can actually practice using e-learning and teaching tools specific to the University's learning management system.

Stage Two of the project will seek to gather data to measure participation levels and any professional development benefits derived for our centre.

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Charalambos, V, Michalinos, Z & Chamberlain, R 2004, The Design of Online Learning Communities: Critical Issues. *Education Media International*, viewed 22 February 2013, https://vrasidas.com/wp-content/uploads/2007/07/communityemi.pdf.

Coopman, SJ 2009, A critical examination of Blackboard's elearning environment, *First Monday,* Volume 14, Number 6 - 1 June 2009 [ONLINE], viewed 1 June 2012, http://firstmonday.org/ojs/index.php/fm/article/view/2434/2202.

Corich, S 2005, Is it time to Moodle?, Conference Paper, Conference of Computing & Information Technology Research & Education, Tauranga, New Zealand, viewed 1 June2012,https://www.citrenz.ac.nz/conferences/2005/concise/corich_moodle.pdf

David, A & Glore, P 2010, The Impact of Design and Aesthetics on Usability, Credibility, and Learning in Online Courses. In J. Sanchez & K. Zhang (Eds.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, 2010 Chesapeake, VA: AACE viewed 18 September 2012, http://www.westga.edu/~distance/ojdla/winter134/david_glore134.html

Garrison, R & Kanuka, H 2004, Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), viewed 8 May 2012, < http://www.sciencedirect.com/science/article/pii/S1096751604000156>.

Hew, KF & Thomas, E 2007, Integrating technology into K-12 teaching and learning: current knowledge gaps and recommendations for future research. *Education Tech Research Dev 55*. 223–252 DOI 10.1007/s11423-006-9022-5, viewed 24 September 2012, https://santersero.pbworks.com/f/ Integrating+technology+into+K_12+teaching.pdfs.

Hung, DWL & Chen, D 2001, Situated cognition, Vygotskian thought and learning from the communities of practice perspective: Implications for the design of web-based e-learning, Education Media International, vol 38(1), 4-12, viewed 14 October 2012, http://giddet_ie/biblioteca/disenio_ins/situated_cognition.pdf

Jung, I 2005, ICT-Pedagogy Integration in Teacher Training: Application Cases Worldwide. *Educational Technology & Society*, 8 (2), 94-101, viewed 13 September 2012, < http://www.ifets.info/journals/8_2/ets_8_2.pdf#page=99>.

Junk, V, Deringer, N & Junk, W 2007, Techniques to engage the online learner, *Proceedings of Hawaii International Conference on Education*. Honolulu, Hawaii, viewed13 September 2012, http://www.w.aabri.com/manuscripts/10597.pdf

Kanuka, H & Garrison, R 2004, Cognitive presence in online learning. *Journal of Computing in Higher Education,* Spring 2004, Vol 15(2), 21-39, viewed 15 March 2013, https://link.springer.com/article/10.1007/BF02940928#page-1.

Kroll, K 2010, *Reflective Practice*. Technology Resource Teachers; Frederick County Public School, viewed March 2012, http://sites.fcps.org/trt/content/reflective-practice.

Larrivee, B 2000, Transforming Teaching practice: Becoming the critically reflective teacher, *Reflective Practice: International and Multidisciplinary Perspectives*, 1:3, 293-307, DOI:10.1080/713693162, viewed 28 Jan 2013 http://www.tandfonline.com/doi/pdf/10.1080/713693162.

Levine, TH 2010, Tools for the study and design of collaborative teacher learning: The affordances of different conceptions of teacher community and activity. *Teacher Education Quarterly*, 37, California Council of Teacher Education, viewed 15 March 2013, http://files.eric.ed.gov/fulltext/EJ872652.pdf.

Machado, M Tao, E 2007, Blackboard vs. Moodle: Comparing User Experience of Learning Management Systems, October 10 – 13, 2007, Milwaukee, WI 37th ASEE/ IEEE Frontiers in Education Conference S4J-7, viewed 18 September 2012, http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4417910&tag=1

Richards, J & Lockhart, C 1996, Reflective teaching in second language classrooms. Cambridge University Press, UK.

Showler, J 2006, Case Study of Classroom Practice: A "Quiet Form of Research" *The Qualitative Report*, Volume 5, Numbers 3 & 4, October, 2000, viewed 18 February 2012, http://www.nova.edu/ssss/QR/QR5-3/showler.html.

Smith, MK 2003, 'Communities of practice', the encyclopaedia of informal education, viewed 20 February 2012, <www.infed.org/biblio/communities of practice.htm>

Shin, HJ 2007, EFL Teachers' Perceptions and Perspectives on Internet-Assisted Language Teaching. *CALL-EJ Online*. 8, (2), viewed 24 October 2012, http://eprints.usq.edu.au/1924/1/Shin_Son.pdf

Teacher Learning Communities, The Council Chronicle November 2010, National Council of Teachers of English, University of Michigan, Illinois, viewed 14 May, <12http://www.ncte.org/library/NCTEFiles/Resources/Journals/CC/0202-nov2010/CC0202Policy.pdf >.

Tu, CH & Corry, M 2002, Research in online learning community. *E-journal of Instructional Science and Technology* vol 5 (1), viewed 18 February 2012, http://www.ascilite.org.au/ajet/e-jist/docs/Vol5 No1/chtu.html>.

Unal, Z & Unal, A 2011, Evaluating and comparing the usability of web-based course management systems. *Journal of Information Technology Education*, 10, 19-38, viewed 15 June 2012, http://informingscience.org/jite/documents/Vol10/JITEv10p019-038Unal904.pdf.

Watson, DM 2001, Pedagogy before technology: Re-thinking the relationship between ICT and teaching. *Education and Information Technologies* 6(4), 251-266, viewed 12 June 2013, https://cursa.ihmc.us/rid=1129290598718_1343349371_1835/watson_pedagogy_bef_technol_2001.pdf>.

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