



## **Teacher engagement in a Web 2.0 world: Developing your online teaching and learning Community of Practice**

**Flagg, Edward**

Te Puna Ako

Unitec Institute of Technology

**Ayling, Diana**

Te Puna Ako

Unitec Institute of Technology

Recent developments in web-based tools have presented new opportunities for teachers and learners to engage in new ways, not only with their specific discipline, but also with themselves, with each other, and their learning. Online Communities of Practice (CoPs) serve not only as clearinghouses for what teachers already know about a discipline, but also as places where new knowledge and skills are developed. They can be a place where professional identities can be shared and grown as knowledge and skills are grown; they can provide space for ideas to be shared, considered, developed, and then used by all members of the CoP; and they are certainly a place where we are able to confront and develop the ways in which we learn.

The researchers are two academic developers currently at Unitec Institute of Technology. In the Spring of 2009, the researchers, as technology stewards, created “The Teaching and Learning Community at Unitec” (T & L Community), an online CoP (<http://tlcommunityunitec.ning.com/>). The T&L Community is where teachers share and develop teaching and professional resources as well as announce events such as professional development opportunities, conferences, and other gatherings. Members participate in conversations through blog posts and comments, real-time chat and themed chat sessions. This new tool for engaging teachers with each other and their profession resonated with the early members and the CoP began to grow twice as fast as the technology stewards had anticipated.

To accommodate this growth, the site architecture was revamped once and the site was redesigned twice. Today the T&L Community at Unitec is the largest online teaching and learning CoP in New Zealand, with more than 300 members from across the nation and the world. The site hosts a range of resources, smaller communities of practice, information and guidance. The site is well used by the members and the stewards continue to receive positive informal feedback.

This paper explores the background, context and aims of the research, presents preliminary findings, and

presents the methodology for further data collection. The paper draws early conclusions and implications about using online communities of practice in a teaching and learning environment.

Keywords: online community, community of practice, social media, collaboration, teacher professional development.

## Background

In the course of our work as academic developers for a New Zealand Institute of Technology, the authors built a small handful of online Communities of Practice (CoPs) in September of 2009 for our teaching staff. One of these CoPs, “The Teaching and Learning Community at Unitec” (T & L Community - <http://tlcommunityunitec.ning.com/>) had by early 2011 evolved into New Zealand’s largest and most active online teaching and learning CoP, with over 300 members from across New Zealand and around the world.

The T & L Community is a place where teachers share ideas and experiences, create resources, form their online professional identities, join groups and announce events. The site is, as Wenger, White and Smith (2009) remind us, a location for social learning with three basic characteristics, a Domain, a Practice and a Community. It’s domain is Education, more specifically, it requires members to have education as a fundamental core in their professional identity; the Practice is a sustained, shared engagement with other educators in the areas of design, facilitation, assessment, evaluation, professional development, and scholarship; and the Community fosters social learning with relationships built on trust, mutual engagement, well-managed community boundaries, and members willing to take leadership roles to sustain and develop enquiry. The TLCommunity is where teachers connect and it has become an essential part of our work as academic developers.

## Context

Budd told us back in 2005 that web 2.0 technologies can create a richer user experience, where it is easier for people to participate and collaborate. We agree. Taking our lead from Wenger, White and Smith (2009), who trained educators to create online “communities of practice” and encouraged educators to become “technology stewards” rather than transmitters of content, we created the T & L Community so that teachers could use the technology for something Wenger (2009) reminds us is fundamental to our humanity: social interaction. More specifically in our context, we saw it as an opportunity to facilitate the teacher-to-teacher interaction that builds a real sense of community as it builds teacher capability – focused, purposeful, and immediately useful conversations, resources and support.

However, practitioners (of any practice) will not necessarily move easily into an online CoP. Reynard (2009) identifies the key challenge for those who drive a CoP is to ensure that their members have the confidence, learner autonomy and collaborative learning skills to participate in any learning community. An online community invites members to develop the skills of active, engaged and productive participants in their practice and in their own professional development. Often, this can be as daunting as it is inviting – it makes us publically accountable for our practices and for our professional growth. Not every teacher is ready to dive headlong into those waters.

Here is the good news - the online CoP invites teachers to practice the three skills that both teachers and students will need in the future: to be confident in publicly publishing our ideas (representing ourselves and our thinking online as well as creating and developing an online presence); to be autonomous learners (evaluating content, creating and customising professional profiles, maintaining our public workspace and writing reflectively in a public space); and to be able to work collaboratively with others (sharing content, joining groups and networks, making and developing contacts, posting messages, using collaborative tools effectively, and so on).

This, of course, is the very business of a CoP, to share and manage the knowledge, skills and values around a specific practice. For teachers, the invitation is to be engaged and creative in our identities as teachers and practitioners in ways that we expect our students to be in their student identities and in their developing identities as novice practitioners in their disciplines. As the site grew, it became clear that an online CoP for teachers is an ideal way for teachers to build capability.

And grow it did. The first 15 months brought great development for the site and for the researchers (that story is at <http://tlcommunityunitec.ning.com/profiles/blogs/our-story-so-far-the-tampl>). The architecture and design have been redeveloped. The tone and the content of the site has a more global nature than before. We have noticed the growth of special interest groups and the rise in activity in those groups. The site is dynamic and continues to grow and evolve.

What has become apparent is the need to undertake some research to evaluate the quality of the participants' experience, and to ensure we continue to meet their needs. In 2011 we will undertake a small research project to evaluate effectiveness and gather qualitative data on which to base further interventions.

## **Aim**

The aim of this project is to explore the ways in which teachers engage with the Teaching and Learning Community. We have two aspects we wish to explore – individual participation and community cultivation.

In addition, we want to explore the role of the technology stewards in the process and content of the community. We want to know how teachers perceive the planning, resources, organisation of events, responsiveness and contributions of the technology steward team.

## **Method**

This study is of three months duration. It will employ a single survey and an examination of the Teaching and Learning Community website using platform observation and Google Analytics.

In the first phase of the study a literature search was conducted. The review was presented as a topical interest paper at the New Zealand Cooperative Education Conference in Napier in April, 2010 (Ayling and Flagg, 2011).

In the second phase of the research, the researchers have taken a two-pronged approach: we have sent out a survey to all members and we have data-mined the site using Google Analytics and basic platform observation (of resources, member data and other artefacts) to gather basic demographic and usage information.

The purpose of survey is to find out how members are participating in the community, what they would like changed, and what they think of learning and technology from their experiences of participating in an online community. We will also glean data that demonstrates users' understanding of the Domain, application of the site's resources in their Practices, and how their sense of the Community is working in their social learning within the CoP.

The members will be asked to reflect on their engagement with resources in their role as a teacher. Our particular interest is in the development of teachers' confidence and capabilities in an online environment. The site is deliberately designed to support teachers to learn, so this information is critical to assessing the success of the site.

The members will be asked about how they interact with a regular update from the site. This information will provide us with the detail of how teachers participate with the technology stewards and communication. The members are asked to give details of the number of times they have interacted with various tools and processes.

The purpose of this question is to ascertain whether members are at beginner, novice, competent, proficient, or expert level of engagement. The members will be asked for feedback on the privacy settings of the site. This information will ensure the technology stewards respond to the members' desires. The members are asked to comment on how the site is functioning and invited to make suggestions for further improvement

To ensure that the data is academically rigorous, the researchers will triangulate by data mining the website. We have used Google Analytics to gather basic details of the number of people accessing the site daily and the most common use members make of the site. In addition, the researchers will be recording the number of members, new members, blog posts, groups, and exploring data which members have publicly shared on their profile pages. These observations and the results of the Analytics are discussed below.

## **Results thus far**

Who are the members of this online Community? How do they identify themselves? What do they do online and where are they from? They come overwhelmingly from Auckland (81%), which one would expect at an institutionally-based CoP in that city, but members log in from Australia, Fiji, Bahrain, the US, Canada and all around Aotearoa / New Zealand. Not unsurprisingly, most members (81%) report working at Unitec at the time they signed up.

In terms of identity, almost twice as many members (31%) identify as female than as male (17%) while a slight majority of members overall (52%) preferred not to identify their gender. Most members are teachers (34%) or staff developers (29%), followed by institutional researchers (8%), librarians (6%), senior lecturers (6%) and programme directors (4%). The remaining members who provided an occupation at the time of joining the Community were divided between other tertiary institutional positions and private education providers and consultants. Overwhelmingly, the members are front-line teachers, working to develop either students or staff.

In terms of online identity, a simple majority of members (62%) claimed to have an online presence. As we might expect, slightly over half (52%) reported that presence to be on Facebook. A quarter (26%) of the CoP members claimed to have a website of their own while a tenth reported being on Twitter as their main online presence, and a handful each claimed to have blogs (6%) and LinkedIn Profiles (6%).

Interestingly, just over a quarter (27%) had uploaded a photo of themselves to their profile page in the CoP; we feel that uploading an identifying photo is one indicator of a strong presence in any Community, and as the literature show us (Wenger, et. al. 2009), more than three quarters of the members of any online community will take the valid role of passive consumers of community cultural artifacts (resources, knowledge, skills and values). This interests us because on the face of it, this indicator of online presence fits well with the definition of Community of Practice, and we want to know if our members and their online behaviour fit within the model we are using.

The last two indicators of a strong online identity we explored was members' confidence in finding ideas and publishing ideas online. When asked if they had confidence in finding ideas online, somewhat more than half (57%) said they were 'confident' and everyone else (43%) said they were 'very confident'. The more difficult skill is in publishing ideas - Many (30%) said they were 'not confident', about half (51%) said they were 'confident', less than a fifth (17%) said they were 'very confident', and a wee few (2%) said they simply were not interested in publishing their ideas online. As with all CoPs, the TLCommunity has drawn together experts, practitioners and novices into one digital habitat.

What behaviours are evident to indicate a strong online presence and leadership in the Community? Resources are created and developed through our blog posts while discussions on specialty topics in education are held in groups. A strong online presence would be demonstrated by the number of resources a member creates and shares (blog posts) and participation in a variety of discussions the Community hosts (groups).

At the time of analysis, 254 resources (blog posts) had been created, 223 of them (88%) by the two primary drivers of the CoP. Another 25 posts (10%) had been written by four other members of the Community, and the rest were one-offs by various members. While this behaviour seems to contradict members' perceptions of themselves, where a clear majority (68%) claimed they were 'confident' or 'very confident' of publishing ideas online, it seems to line up with the idea that most CoP members would be valued lurkers, reading others' ideas but not sharing any of their own.

The Community hosts fourteen groups, all of them education-related, with an average of 15 participants per group. Many members have overlapping interests so many of these participants will be the same members. This indicates that while there are only a few drivers of the CoP, and most members would prefer to consumer the Community's resources than produce them (again, this is perfectly normal for an online CoP) there is a circle of members willing to develop their knowledge and understanding through conversation. These three circles of participation pretty much define the behaviour of the typical CoP (Wenger et. al., 2009).

Finally, we have usage data for the month of August, which indicates that even though most members are not creating resources or sharing ideas, a great many are accessing what is on the CoP. In August 2011, the site received 904 hits, or slightly over 29 hits per day. With an average of 10% of users accessing the site daily, the large portion of members who do not produce Community resources seem interested in consuming them.

In the end, we have a well-used CoP, characterised by a wee core of members, primarily the technology stewards, driving the Community, who are essential to the sustainability of the Community; a slightly larger group of members trying their hand at sharing ideas and participating in group discussions; and on the vast periphery, the majority reading but not sharing. By all appearances, it is a classic, healthy Community of Practice, creating, developing and managing knowledge, skills and values.

## **Implications**

By analysing basic usage data, conducting straightforward site observation and by anecdote, the T&L Community seems to be a place where knowledge is managed so that members develop their teaching practice, their collaborative skills, and for some, their confidence in sharing resources and ideas. For the drivers of the community, Wenger's 'Technology Stewards', it appears to be an excellent use of time, attention and resources in developing our academic staff. What makes this CoP interesting and successful? We suspect people come for the resources, blog posts, groups, events, and the ability to communicate quickly with colleagues who share the context of being in the CoP. We are hoping to confirm that with our survey.

The last piece of the puzzle for this project will be revealed by our month-long survey, already underway, which asks members about their understanding of the purpose and function of the CoP, their actual behaviours within the Community and their attitudes about its functioning. These findings will be shared with the ASCILITE

community this December in Hobart.

## References

- Budd, A. (2005). What is Web 2.0? A presentation posted to AndyBudd.Com. Retrieved 10 March, 2010 from, <http://www.andybudd.com/presentations/dconstruct05/>
- Reynard, R., (2009, July 22, 2009). Beyond social networking: Building toward learning communities. Blog posted to Campus Technology. Retrieved 10 March, 2010 from, <http://campustechnology.com/articles/2009/07/22/beyond-social-networking-building-toward-learningcommunities>.
- Wenger, E., (1998). Communities of practice: Learning, meaning and identity. New York: Cambridge University Press.
- Wenger, E., White, N. & Smith, J.D. (2009). Digital habitats: Stewarding technology for communities. Portland, OR: CPsquare
- White, N. (2007) Online community builder's checklist, Full Circle Associates, retrieved from <http://www.fullcirc.com/community/purposecheck.htm> White, N. (2009). Technology stewardship and unexpected uses. Blog post to Digital Habitats: Stewarding technology for communities. Retrieved from, <http://technologyforcommunities.com/2009/04/technology-stewardship-and-unexpected-uses/>

**Please cite as:** Flagg, E. & Ayling, D. (2011). Teacher engagement in a Web 2.0 world: Developing your online teaching and learning Community of Practice. In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions. Proceedings ascilite Hobart 2011*. (pp.386-391).

<http://www.ascilite.org.au/conferences/hobart11/procs/Flagg-concise.pdf>

Copyright © 2011 Edward Flagg & Diana Ayling.

The author(s) assign 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(s) also grant a non-exclusive licence to ascilite to publish this document on the ascilite web site and in other formats for the *Proceedings ascilite Hobart 2011*. Any other use is prohibited without the express permission of the author(s).