

**ONLINE LEARNING COMMUNITIES:  
A STRATEGY FOR IMPROVING LEARNING**

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**ABSTRACT**

This paper presents the findings of a study exploring the nature of online learning from lecturers' and students' perspectives to identify successful ways to facilitate learning in a New Zealand university. The study is part of a project to understand the pedagogical and implementation issues that promote high quality online teaching-learning. Data was collected through a survey and interview of 37 students attending online classes of 10 lecturers at the School of Education. Building a learning community was key in facilitating online student learning. This has implications for the design and implementation of online courses.

## INTRODUCTION

Online learning is rapidly gaining popularity as an alternative to traditional forms of higher education. Research on online learning has made clear that simply providing students with access to the Internet is no guarantee that worthwhile learning will take place (Fischer, 2003). Many researchers have argued for more integrated approaches which have the potential to redefine and transform fundamental aspects of online teaching and learning.

Research in online learning, in the past decade, points towards the idea of a learning community as an alternative to previous traditional pedagogical models. Although not a novel idea in education (see Bielaczyc & Collins, 1998; Brown & Campione, 1998; Wells & Chang-Wells, 1992), learning communities have been suggested as models for thinking about pedagogical strategies based on the increasing recognition that the social phenomenon of the community can facilitate and support the learning process in online learning (Palloff & Pratt, 1999).

Socialcultural perspectives of learning encourage the formation of learning communities through its exposition of learning as a matter of how people transform through participation in the activities of the community in terms of their roles and understandings (Lave & Wenger, 1991). A key benefit of participating in the learning community is that of increasing learner responsibility and autonomy in learning. A learning community is characterised by Rogoff (1994) as a learning situation in which all members play active roles. That is, teachers and students have joint responsibilities in the teaching-learning process. The teacher's role is supportive and they act more as a facilitator and coordinator to structure and guide the overall direction for students learning. Students, on the other hand, increasingly learn to participate and manage their own learning and involvement and provide some leadership at times-demonstrating increasing confidence and expertise as they progress from the periphery towards the center of the community (Lave & Wenger, 1991). Rogoff also argues that in a learning community learners take increasing responsibility for learning. Through opportunities to meaningfully collaborate and interact, learners undertake increasing responsible roles for their own learning as well as for the community's overall learning goals. However, not all members in the community have the same degree of responsibility at the same time; roles may vary according to the situation and even from one community to

another. Lastly, communities are characterised by dialogue as learners participate through increasing social negotiation meaning to achieve their learning goals.

With the introduction of the Internet and online technologies, crucial learning collaboration and communication can be facilitated. This also encourages the development of online relationships and unlike the inhibitions posed in a face-to-face setting, can extend the range of communities and even allow individuals to tailor their own communities (Jonassen, Peck & Wilson, 1998).

This paper reports findings suggesting that the explicit development of a learning community is central in developing successful online learning environments facilitating student learning. Additionally, the affordances and constraints inherent in the online technologies allowed for particular important interactions to occur while inhibiting others.

## **THE STUDY**

Since the introduction of the Mixed Media Programme (MMP - a combination of both face-to-face and online learning strategy used in the Bachelor of Teaching (Primary) programme since 1997) in the School of Education, online learning has grown steadily at the University of Waikato, New Zealand.

The research reported in this paper is part of a bigger project to better understand online learning and to develop an intervention to improve online teaching and learning in this institutional context. For the purposes of this paper, only the initial phase of the research - aimed at understanding the nature of online learning from lecturers' and students' perspectives to identify successful ways to facilitate learning- is reported.

The research participants were ten online lecturers and a total of 246 of their students at the undergraduate and graduate levels at the School of Education. The lecturer participants assisted in approaching and providing access to their students. Active online student participation was a requirement for passing in all the lecturers' courses although not all lecturers allocated marks for such participation in their course assessment. Participation was voluntary.

The ten online lecturers consisted of six males (Basil, Ralph, Gerard, Peter, Jake, Tim) and four females (Nola, Marge, Laura, Lesley). Four of them taught only undergraduate courses with online teaching experiences ranging from six to ten years. Three of them taught both undergraduate and graduate level courses and had online teaching experiences from two to fifteen years. The last three lecturers taught only graduate level courses and had online teaching experiences between one to four years.

A total of 37 (or 15% of all the students enrolled in the nominated classes) online questionnaires were returned. Of these, 30 participants provided their background information - 5 male, 25 female, 14 undergraduates, 12 graduates, with 4 students enrolled in other programmes. At least 40% of the questionnaire respondents had taken more than 6 online courses. Twelve students (two males - both graduates, ten females - four undergraduate, six graduates) volunteered to be interviewed.

An interpretivist qualitative methodology was used to frame the collection and analysis of the data. Lecturer data was collected using semi-structured interviews while student data was obtained through an online questionnaire and semi-structured interviews. Questionnaire data was coded and analysed using SPSS. Qualitative data was categorised, coded, and analysed using the comparative method to generate meaningful themes. The central themes reported suggest an alignment with Rogoff's (1994) principles of a learning community.

## **FINDINGS**

Four key themes emerged from the data.

### **Successful Online Learning is Social and Interactive**

All ten lecturers viewed the online interactions between themselves and their students and between their students and peers as an integral part of the learning process. Jake highlighted the importance of the social aspects of learning:

There were a handful of readings that I've given them to read but when we talked about people's personal experiences, they shared a whole series of stories... so something was created in that kind of discussion, a discussion which knowledge was being created (Jake, p.13).

The online interactions also indicated whether students were participating in the learning in their class or otherwise. Marge stressed:

I do worry about people not participating because that precludes them from learning...  
(Marge, p.12).

Five lecturers suggested that more useful and constructive online discussions can occur when a community of learners is formed among the students in their class. Marge reported:

I do think that being involved in a community where ideas can be shared and turned over and thought about helps other people make links for themselves and that's where this online community comes through (Marge, p.21).

From the students' perspectives, eight survey participants and 12 interviewees confirmed the value of social interactivity when learning online in providing the sharing of multiple ideas and expertise and a means of social-emotional support. Geraldine stressed:

Interaction for students is definitely crucial. You get more insight, highlight some really different ideas, everybody brings with them different philosophies and we exchanged thoughts and areas of expertise (Geraldine, p.6).

Students also supported the development of a supportive online learning community as part of the social process of learning online. Seven students reported the community provided a sense of belonging, friendships, support and help, and focused them towards shared goals. Leslie and Rob attested to these:

Community to me, that's how it felt...those people who were online with me, going through exactly the same thing as what I was... was where I got my strength (Leslie, p.2).

Communities have like goals...a collective of people who are striving for the same thing. In this case, it's striving to do the best in the paper and get reasonable pass at the end (Rob, p.6).

These findings indicate that an active social role on the part of both lecturers and students was important in online learning; a characteristic inherent in learning communities. The second theme is described below.

### **A Learning Community Facilitates Gaining Expertise and Responsibilities**

Learning in the online environment is demonstrated by students becoming more constructive thinkers, better writers and independent researchers as they gain increasing expertise in their fields of study. At least nine lecturers remarked on the learning occurring as students became more critical and reflective thinkers, constructive questioners, and able to link their ideas with expert ideas. Jake reported on students' reflective and critical thinking skills:

It is slightly less spontaneous but in terms of developing careful thinking, that's actually helpful because what I want is students to be careful and critical and reflective in their thinking and so online discussion invites that kind of thinking forward...And that I find is part of the learning value of it (Jake, p.13).

Peter reported on his students' ability to apply theory to practice:

I can see them using their own knowledge and experience alongside the expert knowledge (Peter, p. 12).

Another six lecturers found their students became better writers. Basil quoted:

These [online] people, their mode of communication is definitely written. So at the end of the day, they'll probably be much better writers than the on campus people (Basil, p.14).

Finally, three lecturers reported students' increasing independent research skills when searching for resources from the Internet. Ralph's students developed their technical and research skills:

Well it enables them to communicate immediately with each other in class, it allows them to develop their own skills in using ICT, allows them to keep in touch with the world...through the web (Ralph, p.18).

The students confirmed their learning was demonstrated through critical reflection on the multiple perspectives shared, engaging in helpful professional dialogue, and their successful fulfillment of the course assessments. Five students reported they became more reflective and justified their own ideas while learning online. Daniel said:

... reflect and seriously consider on what you're going to write online, requires some concentrated effort—justify and backing up with evidence (Daniel, p. 2).

These findings suggest that both lecturers and students benefited from the teaching-learning experience with students gaining increasing expertise and responsibility for learning when they participate on a more equal footing in the learning process; a characteristic suggested in learning communities. The next theme is discussed below.

### **Particular Ways of Interacting are More Helpful than Others**

One half of the lecturers cautioned that the class interactions need to be constructive instead of reproductive in nature for learning to occur. Peter was concerned students were merely repeating the lecturer's dialogue:

Some of the discussions really have just been repeating what they've been saying in the modules...there's very little point in that...they have to go beyond what's in the modules and take people further and get them engaging with dialogue and debating about issues (Peter, p. 18).

Two students found participating in professional dialogue valuable in their learning. Kara emphasised the dialogical importance:

I think that in a community of learners, it's not how much you put but the quality of what it is that you contribute...Professional dialogue has professional parameters, so students are debating, discussing, reflecting on the ideas and challenges presented in questioning or wanting clarification of co-learner's idea, looking at the ideas and not at the person...I would consider it non-negotiable...If it was just wiffly waffly, chitter chatter, you're not getting the depth of discussion that is required when you're doing a Masters paper. It is very focused conversations and dialogue that you have either between yourselves or with your lecturers (Kara, p.5).

When the online interactions failed, students were left disappointed. Rob testified:

The disappointing thing was that the discussions didn't really happen. They [the lecturers] didn't make it a place for experimentation, for learning (Rob, p.3).

This theme indicates that particular ways of interacting can be more beneficial than others in the development of a learning community. The final theme is described below.

### **Affordances and Constraints to the Development of an Online Learning Community**

This final theme further revealed the importance of the online technologies in supporting a conducive environment for developing a learning community through providing accessibility, flexibility, and the convenience of asynchronous communication. All ten lecturers felt the technology gave students access to their peers' ideas to make links for themselves, to educational opportunities, and to international experts and resources. Nola reported:

Say we are talking about the price of fish at the fish mart, I can say to one group in the classroom "Well I'd like you to talk about how this impact on the fisherman and what are the union issues and so on around this whole topic" but I mean the union people don't know what that group over there's saying and so forth, whereas online they can. They can go and look at the other issues raised to synchronise their thinking (Nola, p. 10).

The online technology also gave lecturers flexibility in their teaching and allowed for many pedagogical possibilities. Nine lecturers found the flexibility beneficial. Ralph liked the flexibility but was cautious about the need to maintain a professional responsibility to students:

The ability to teach online gives you flexibility...but you still have a professional responsibility for ensuring what's actually happening (Ralph, p.7).

Seven lecturers liked the flexibility of integrating different pedagogical possibilities in their teaching- structuring their classes into different formats (individual or small or big group basis), conducting student presentations or tests online, allowing student digression from set topics to explore new ideas, allowing the submitting of assignments and marks online and reusing the course for the next term. Gerard commented:

This is just another tool...you can teach by drawing imaginary circles in the air and teach by telling people to shut their eyes and imagine the situation. So within the kind of virtual room or real room there are so many pedagogical possibilities (Gerard, p. 6).

Five lecturers found the asynchronous nature of online communication implied a different set of dynamics in their classes- they can observe students' participation in learning, have a permanent record of students' thoughts, and can observe more quality reflective thinking. Basil found the permanent record of students' contributions important:

...because online when you come into a discussion group you will be discussing what the topic is. If you are not discussing the topic, you are not there. That is probably one area that online is truer to the learning process than on-campus in that I can see online whether people are participating in discussions (Basil, p.6).

Nola highlighted the ability to monitor multiple discussion groups:

Often you have the luxury of being able to follow six groups at once. You can't do that face-to-face. You can't be in a classroom with six groups talking and know what's going on in every one. That's not possible (Nola, p. 9).

Another five lecturers found the tools available in the technology (i.e. the *Photo* feature, *Live Message*, *Portfolio*) useful to personalise their interactions and increase individual contact. This compensated for the constraints of learning online resulting in lecturers knowing their online students better than their face-to-face students. Gerard commented on using the *Photos*:

The photos, they did make a qualitative change here...just having a photograph in a sense of who a person is, really, really contributes (Gerard, p. 18).

Students also verified the importance of flexibility, accessibility and the convenience of asynchronous communication in online learning. Twenty two survey responses and nine interviewees valued learning at their own pace when balancing study, work and family commitments. Julie commented:

I don't have to drive 2 hours, I can walk straight into the office at home and turn computer on and start class or if have a thought during the day, [I] can walk to computer and pen it down. I can study at home when children are away at school and be there when children come home from school... [its that] flexibility to schedule studies around home life, learning at own pace (Julie, p.4).

Four other survey responses and five interviewees appreciated the access to resources, their lecturers, peers and technical help:

...the building of helpful and friendly relationships with other students and lecturer through discussions, and on-campus tutorials. Even though you may complete the paper mostly online, [its] feeling like you know others and can approach them for clarification, advice, and help is important.

Finally, four interviewees and two survey responses found the asynchronous communication provided a permanent record of their thinking and discussions, allowed for thinking time and fostered equal participation in class. Daniel considered this:

[the] ability to have discussions out of time...online you can actually, when you think of something, you can just go in and add things in or you can go back to something they said 2 weeks ago and talk about that and just re-raise it as a comment (Daniel, p. 2).

Despite the benefits, serious concerns were raised about technical failure, the impersonal nature of online learning and the hindrances of the asynchronous nature of communicating. These could potentially hinder the development of an online learning community. Six lecturers loathed the communication breakdown with students when the technology failed resulting in the loss of student assignments or the disappearance of various online tools. Nola explained:

The big Classforum crash in the middle of last year when all the data was lost and the boy's hadn't backed it up. It was a devastating experience for staff... it was like a school burning down in a fire and all everything's gone (Nola, p.4).

Another five lecturers found online learning impersonal where the text-based communication removed important non-verbal cues. Lesley felt hindered by this:

In my class ...I can tell by their body language and their hesitancy about who's done a real last minute rush job to meet the deadline, I can tell who's read the article, who knows what the critical points are whereas I cannot do that with the online stuff. (Lesley, p.3).

Four lecturers found the permanent record of offensive online messages distasteful. Ralph explained this and how he had handled it:

When students put up inappropriate comments... despite my earlier comment on they being more considered, they will put things in there that may actually hurt other people. I've dealt with that in two ways...not say a thing, but simply delete the message and that's worked. Or you can say now, so and so's expressed such and such a view, I'm not sure that I agree with this and I think this might have been better handled in such and such a way, so that you twist the discussion round in that way. I guess the other way is to talk to them privately (Ralph, p.16).

Three other lecturers were frustrated by the delayed nature of communicating online as they were unable to clarify a point as quickly with their students. Laura echoed this frustration:

In face-to-face, I go to a class for an hour or 2 hours or whatever, I'm available to them[students] there then in a different way than I am available here[online]...there,

they can just ask me questions, here[online] there's always a delay in the response... everything is deferred because you have to wait in that space and time (Laura, p.16).

Another three lecturers raised the problem with student isolation. Ralph felt lecturers should respond to this:

but students often... are isolated... I think we have to recognise that and compensate for that as best as you can (Ralph, p.8).

Student reticence about participating in class was another constraint. Ralph explained how the permanence of text-based online messages made students' feel shy or overwhelmed about participating in class, resulting in their 'hiding' or 'lurking' or being difficult to engaged with to the extent of withdrawing from the course at times

My most frustrating bit from just teaching my classes, when I lose a student off -line, I can't actually do anything about it. They're not putting any work in, they're not responding to my messages, they're not coming into class discussions (Ralph, p.22).

Similarly, students' were concern about isolation, the lack of technical support, and the impersonal nature of communicating online. Eight survey responses and six interviewees reported on the isolation and loneliness:

I knew it was going to be difficult in some ways and easier in other ways. Difficult in terms of sometimes the feeling of isolation. I like to talk stuff out with people (Sarah, p.8).

Seven survey responses and six interviewees found technical failures disruptive. Beatrice reported:

It is an absolute DISASTER if something goes wrong with my own computer or with my telephone line or with the server (Beatrice, p. 9).

Another five survey responses and six interviewees found the absence of non-verbal cues made it impersonal to communicate online. One survey response commented:

There are times when you wish you were on campus, face-to-face, for more in-depth and spontaneous answers to questions...More difficult to build rapport or working interrelationship with others (students/lecturers).

Lastly, five interviewees felt the impersonal way of communicating can result in misunderstandings. Sarah observed:

I think people who work online have to be very, very careful about the way they word things because everything is very subjective online (Sarah, p.4).

These findings suggest that online technologies provided unique affordances such as access and communication to support important learning interactions. However constraints such as technical failures, feelings of isolation, the potential for miscommunication can affect the learning community's development.

## **DISCUSSION**

This study's central theme indicates successful online teaching-and-learning involves dialogue - the discussion and sharing of ideas construing learning as a social and interactive process. These social interactions need to occur within particular parameters to benefit learning as framed by the course goals. Emphasis is given to quality online interactions involving focused professional dialogue, debates and making links between important ideas. Participants highlighted how the development and active participation in a learning community facilitated learning by supporting them social-emotionally and intellectually. Within an effective community, there exists a specific culture of interacting and participating to negotiate meanings as participants tap into the distributed expertise of the community members and strive towards shared learning goals. Further, the online technology affords communication and interactivity and is instrumental by mediating access to multiple resources, and important social interactions and collaboration leading to the development of a cohesive learning community. However, effective strategies need to be considered to compensate for the constraints inherent in the technology (e.g. impersonal and delayed communication) that can potentially hinder the community's learning goals and need for interaction.

The findings challenge some common online learning myths and assumptions. For example, the communicative and collaborative potential of online learning liberates learning from traditional forms of distance correspondence courses where students learn individually using correspondence materials. With careful planning, the Internet can be used beyond information dispensing purposes to a socially interactive online classroom. Previous literature on successful online learning highlights high levels of student interactivity with the lecturer, other students and the course content as desirable features leading to a more satisfied learning experience (Anderson, 2003; Stodel, Thompson, & MacDonald, 2006). This study contributes to this literature by indicating there are particular ways of interacting and participating that are more beneficial to online learning than others. The democratisation of roles for online lecturers and students is also implied where both collaborate on more equal footing to enhance learning within the structure of a learning community. Further, a more active and interactive role is increasingly recognised from lecturers and students to benefit from learning in the online environment.

These findings support Rogoff's (1994) notion of a learning community and corroborate others who advocate for learning communities in facilitating learning. They have important implications for the implementation of future online courses in the context of the institution studied and highlights the valuable pedagogical role online lecturers have in understanding and fostering learning communities to facilitate successful student learning.

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