

Teacher development in online teaching: A negotiated intervention strategy

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Abstract

This paper reports a case study of a particular strategy for teacher development in asynchronous, online teaching in a tertiary institution in New Zealand. We propose a particular strategy and process for assisting online teachers in promoting changes and designing and executing those changes in their online classes. A negotiated intervention strategy was used to assist an experienced, face-to-face, tertiary teacher re-develop and teach his existing masters paper as an asynchronous, online course. Reflective conversations with the teacher reveal the complexities of working with a teacher to develop his online pedagogical practice, and also highlights the potential of the negotiated intervention strategy as a promising tool for online teacher development.

Introduction

Online learning offers a new and exciting platform for teaching and learning by giving learners the convenience of a learning environment that is independent of time and place. While it is clear that online technologies, through their greater facility for communication and interactivity, offer a wider repertoire of teaching opportunities than traditional forms of distance education (Curran, 2001), how this potential can best be realised for a particular educational task and student population remains the subject of continuing debate and research (Clark, 2001).

In the last few years, concerns have been raised about the need for research on developing effective online pedagogy (eg. Bonk & Dennen, 1999). They are fuelled by observations of teachers eager to engage with new technology, or perhaps coerced into using new technologies, such that the adoption occurs at a superficial, technicist level rather than effecting meaningful change in either the teacher's pedagogical practice or in students' learning (Brown, 2001). Consequently, a recent re-examination of this development has underscored the teacher's role in designing and facilitating online learning programmes (Salmon, 2000).

Making the move from face-to-face to online teaching is challenging for both beginning and experienced teachers and it seems clear that *learning to teach and learn in an asynchronous, online situation*, as with any new context, *requires both teachers and learners to develop new skills and strategies in order to take advantage of the opportunities afforded by these new learning contexts* (LaMonica, 2001).

While appropriate forms of teacher scaffolding or development will help teachers make a successful transition from face-to-face to online teaching, it is common for teacher development for online teaching to take the form of one-off workshops and technical training sessions. It is our experience that these strategies are unlikely to achieve anything more than superficial pedagogical changes. Although short-term, generic training sessions can be quite successful in increasing teachers' content knowledge and technical skills, they often fail to help teachers integrate this knowledge and skill into successful, online, pedagogical practice (Claxton & Carr, 1991). Even though *strategies and skills developed to deal effectively with new teaching situations are clearly important, these strategies and skills derive their character and purpose from the teacher's underlying beliefs about learning and their associated aims and intentions* (Forret, Khoo, & Cowie, in press; Olson & Bruner, 1996). In addressing this issue, and as part of wider research to investigate the characteristics of quality online teaching and learning, we utilised an approach aimed at encouraging teacher change known as the Negotiated Intervention strategy. This paper reports a case study of using this strategy to assist an experienced, face-to-face, tertiary teacher re-develop and teach his existing masters paper as an asynchronous, online course.

The negotiated intervention strategy: A collaborative intervention approach

Our negotiated intervention strategy was originally developed by Jones, Simon, Black, Fairbrother and Watson (1992), who were interested in developing an approach to establish changes in teacher practices in science classrooms in the United Kingdom. The strategy draws from a wide body of literature emphasising the importance of taking into account teachers' subjective reality, opportunities and constraints offered in the classroom or school, and the teacher's expectations and experience, to bring about effective pedagogical practices.

The strategy deviates from the usual modes of teacher development approaches by building on the teacher's existing views and practices in order to promote change, rather than offer specific views and practices in the hope that change may occur. Therefore, it stresses the need for the online lecturer in this case study to be involved in driving this process of change and adaptation instead of it being driven by an outsider to the classroom context. The aim was to use the teacher's knowledge of subject content and pedagogy in the context of planning (Sternberg & Horvah, 1995). The acknowledgment of the teacher's role is critical in promoting his ongoing online teaching professional development, maintaining ownership and growing empowerment in developing and using a repertoire of online teaching and learning skills.

Another unique feature is the iterative series of formative interactions between the online teacher and the researcher. As the semester progressed, these interactions addressed issues arising from the class and bought about gradual progression in teacher development and student learning. The components of the process of negotiated intervention are illustrated in Figure 1.

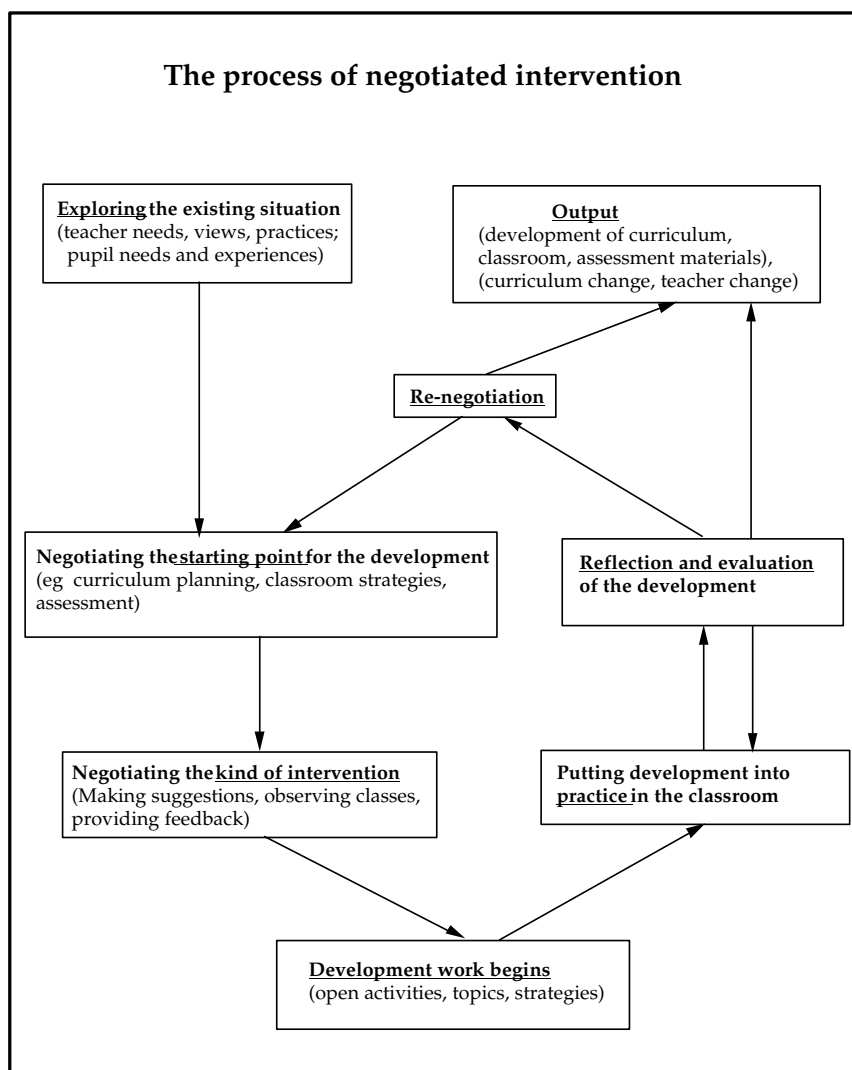


Figure 1: The process of negotiated intervention (Jones et al., 1992)

The research context

The first online course and programme for Teacher Education was introduced at our university in 1997. Since then online teaching and learning has grown steadily to encompass a wide range of partially and fully online courses offered throughout the university. Online courses are offered over the Internet using the *ClassForum* (an alternate version of Web Crossing) platform developed and maintained by an online support team on campus. Access to the class required user authentication. Once in the online class, students are able to access other online assistance such as the library and the technical helpdesk.

In line with the online teaching–learning expansion, our research sought to investigate the characteristics of effective online pedagogy as perceived by lecturers and students, and to develop a strategy for the ongoing development of online courses. The initial phase was to establish a baseline understanding of existing online practices by identifying lecturers’ and students’ perceptions of effective online teaching and learning practices. With data from this phase, the subsequent phase was to develop guiding pedagogical principles applicable to the design and implementation of future online courses. The following section describes this subsequent phase involving working collaboratively with an experienced, tertiary teacher to develop and teach an online masters paper.

Gaining entrée into the setting: Collaborating with Adrian

Adrian (all names used are pseudonyms) is a senior lecturer at a graduate research centre in our university. He teaches the Educational Research Methods course, a compulsory course in the graduate education programme. The course focuses on research methodologies, methods of generating and analysing data and issues of research quality and ethics. Typically 20 students enrol in the course. They are mostly mid-career professional educators seeking additional postgraduate qualifications.

Adrian was keen to participate in the research for the following reasons:

- He has extensive face-to-face lecturing experiences in research methods and had been teaching the course online since 2001. The initial online version of the course (a 12-week course) was developed by converting the course materials used in the face-to-face course into the electronic format. Since then, Adrian had developed insights into the challenges and potential available in the online teaching and learning environment. He was keen to experiment with pedagogical strategies to refine his online teaching and was open to ideas that would improve the quality of the course.
- He was familiar with the functionalities of *ClassForum*.
- He was also familiar with the negotiated intervention process having used it in his own research.

The development of the intervention

Initially, it was necessary to understand Adrian’s existing situation (eg. his view of how students learn, his preferred teaching approaches, his expectations and concerns in teaching the course and how he hoped these concerns would be addressed by participating in the intervention process).

Some concerns Adrian has grappled with when teaching the course in past included:

- Students’ traditional notions of distance education courses. They think it is sufficient to work independently, concentrating on the assessments to pass the course, and are uninterested in the online activities designed to encourage their interacting with one another’s ideas.
- Students’ online communication style. With most students, Adrian observes a sense of hesitancy in expressing their opinions. Those who do so tend to consistently express their opinions throughout the course while others do not log on and/or participate in the online discussions.
- When teaching online, Adrian has not been able to successfully translate the pedagogy from his face-to-face classroom into the online environment. The asynchronous nature of online communication reduces the opportunities for quick immediate teacher-student interactions, makes it more difficult for students to clarify questions, and for him to provide just-in-time assistance in ways that challenge student misconceptions. He finds it more difficult to challenge students’ thinking as they easily “escape or opt out” from participating online due to the lack of imperative to engage with him, unlike the face-to-face setting.

- Adrian also finds that the 12-week period of the online course poses a constraint on his pedagogical approach because he is constantly having to trade-off student interaction and assessments. He is very aware that teaching online can result in longer teaching hours compared to teaching in a face-to-face class.

Adrian's expectations for improvements in the online course by participating in the negotiated intervention research included:

- Refining his pedagogy while retaining the course content. Adrian is interested in exploring ways to translate the pedagogy he found effective face-to-face onto the online environment. This involves implementing pedagogical strategies to prompt more student interactions so students can grasp the "breadth of the area and obtain a broader notion of research literacy". Currently, most student interactions are about assessment-related issues. He anticipates the intervention will make incremental changes to improve his online teaching.
- Implementing a course structure to support new online students who lack confidence or are reticent about participating online. In the past he had found these students posted their questions to their individual online portfolios. Adrian would like more student interactions in the class online discussion areas rather than in individual portfolios. This would hopefully result in a greater consideration of others' ideas and an exploration of a wider range of ideas resulting in increased understanding.

Successive cycles of negotiation and development

The initial exploration of Adrian's context revealed that several areas would need to be re-examined.

The starting point for the intervention examined each of these areas progressively through negotiation and renegotiation as each intervention cycle occurred. For each cycle, different kinds of intervention were required. For example, when examining the course curriculum, it was sufficient for the researcher to share insights from the literature on research methods course curricula and best practices. This led to developing a more concise and realistic set of curriculum goals for the course. Upon reflection on the new course goals, Adrian was happy to re-negotiate further starting points for further interventions. A new intervention cycle focused on translating the course goals into course modules that progressively build on each other. A series of four modules was negotiated and developed. Another intervention cycle focusing on pedagogical refinement included the refining of a teaching activity to encourage students' online participation and engagement with one another's ideas. Each cycle of negotiation and development continued until Adrian was satisfied with the re-development course.

In developing successive cycles of intervention, Adrian agreed to use a team-based approach. A team (web-based team) consisting of himself, the researcher, and two senior lecturers at the graduate centre; one who is an experienced online teacher (identified as D), while another is also an experienced research methods lecturer (identified as E), regularly met prior to the course commencement and during the semester as the course progressed to provide input and further suggestions for each intervention development. In total, the team met for a series of 16 meetings.

Additionally, Adrian also agreed for this researcher to observe (as a participant observer with further consent from the students) his daily online teaching. This was followed by regular reflection and evaluation (informal reflective conversations) as each week progressed and at the completion of each course module depending on his time availability. Altogether six conversations were held.

By participating in successive cycles of team-based and teacher-researcher negotiations aimed at refining each aspect of course and addressing issues as they arose, Adrian was able to progressively improve the overall development of his online course and develop his online pedagogical repertoire.

Findings

This section describes some excerpts from the ongoing reflective conversations with Adrian to illustrate the impact of the strategy on his online pedagogical development.

An example of an online pedagogy change

With the exception of Weeks 1, 3 and the last week of the course, all weeks required students to work online in group projects and arrive at a group consensus. In Week 3, the topic ‘Literature Review in Research’ was discussed. Students’ were to conduct an individual library search, access the library’s e-journals on a topic of their interest. They were to include 2-3 articles published within the past 5 years. They had to post the list of keywords they had used, the titles of the articles obtained, and a summary-cum-synthesis of their articles (in 100 words). Each had to post and share his or her summary in the group. They were to provide constructive comments on their group member’s search and review. However, by the end of the week, all the students had posed their summary (at the last minute) but none had commented on other’s work. Adrian was pleased that most students had posted a summary, and, when prompted, indicated he thought that the task requirements had been sufficiently specific. He speculated that students might have lacked the confidence to critique each other’s work so early in the course.

Adrian: ...the instructions were there, I think what’s happening is that it’s taking them quite a while just to get the work up. And then of course the week’s finished and so they haven’t commented on them. The notion of commenting on someone else’s posting is, it’s quite difficult when it’s a finished artefact. When they are not feeling very confident themselves. It would be interesting to see how it goes this week. We want them to critique and look at others but I think it may have been too early in the course to do that. The answer is yes we want them to do it but I think that, by the time they put their posting up, people were moving away from contributing.

This particular week was also a very busy one for Adrian. He had been occupied with other work deadlines and had not gone online to teach as regularly as he would have liked. When queried whether students might like some feedback, he conceded this might have fostered further contributions.

Researcher: I was just thinking if I was a student in the class, and spend all my time getting this synthesis together and then posting and then no one comments on it. I’d feel as if my effort is wasted?

Adrian: Sure. And maybe I should have commented more on them, that’s the other thing I could have gone through and given each person a commentary on what they’ve done. And I have done that in the past, this week, well okay this week got a little bit fraught with [a deadline] and I probably wasn’t online as much as I should be. But then I was online more than what I would have taught in a class anyway. So it was interesting. Yeah it is a valid point. And I don’t have an answer. It was an unfortunate, it was unfortunate that there weren’t comments on there about how they’d done. ...

On reflection, Adrian concluded he had lost an opportunity to give feedback.

Adrian: Yeah and we should have given them some advice. End of story and we were remiss in doing that. Okay? I’m just saying that we missed the opportunity here, sometimes when things are online and you’ve got 3 groups, you tend to miss things and we missed or I missed that opportunity. Yeah I’ve got to take it as a learning experience too.

The suggestion was posed and negotiated with Adrian that the asynchronous nature of online communication can support discussion on the past week’s learning activity even though the real time deadline was over. Since students’ online postings were recorded, Adrian could go into individual online portfolios to provide feedback. Adrian agreed and obtained favourable feedback from students. The following is Adrian’s observations at the end of Week 4:

Researcher: With regards with Week 3’s discussion where we had students posting their literature review and then getting students to comment on it. Your last response to that discussion was that “They didn’t actually critique each other’s review and you mentioned that its now too late for us to go back”. But a week later you’d went back in and commented on each of their individual portfolios.

Adrian: Yeah and that worked pretty well. I think it was too late to do it in the discussion really because it would have disrupted the flow. ... but by going back into their portfolios, then that was a good way to do it. So you are talking to an individual rather than as a whole group. And so you weren’t disrupting the flow of Week 4...

Researcher: What sort of comments did you get back from students?

Adrian: They were actually quite good, they were pleased that I had commented on what they had done. The students appreciated [me] getting back to them individually.

Three quarters of the online class voiced their appreciation to Adrian for his constructive feedback. This episode illustrates how negotiations were successful in addressing Adrian’s initial concern to not disrupt the flow of the course by providing feedback on a previous activity.

Another incident to describe a change in Adrian’s pedagogical practice occurred in Week 6. Adrian became aware that giving general feedback to all groups was more effective than feedback to specific student groups.

Researcher: In week 4, you posted replies to them individually...whereas for weeks 5 and 6, you just gave general feedback.

Adrian: I think doing the group responses though, doing one response for all of the groups' postings has actually worked well because I think you're not doubling up ... But by looking at them and talking about them, then it's a way of adding more knowledge in and then for them to look at the strengths and weaknesses of what you're saying, what they've done... Rather than doing it individually [replying to each of the 3 groups] I think we've got to get a right balance between individual versus group versus whole class. And that's an interesting dynamic in terms of how you structure your course...

I think that the notion of responding to the groups responses, gives you more flexibility in what you can add, because it may be that they might think that you're criticising the other group and they don't take it as personal because you're talking to 15 not 5.

For Adrian, giving general feedback was more flexible, helped to add richness to the class discussions, and decreased the chances of students' feeling they were being personally criticised. These episodes added to Adrian's confidence in teaching online and raised his awareness of the possibilities within online teaching and learning, particularly the importance of responding to students.

When negotiations are risky

In Week 3 (during the literature review topic) students posted their literature reviews online and Adrian went online to provide brief suggestions for improvement. A particular student he had given comments to was 'V'. V defended his ideas in a relatively assertive manner, which adversely affected the group dynamics. Their online conversation is as follows:

Adrian: V, You have covered all the right issues but at the moment it reads more as a class discussion rather than a literature review... The ideas are great but need to be constructed in the form of a literature review for a research paper or thesis etc...

V: With all due respect to you I do know about the 'accepted' qua Western/ European/University notions of what constitutes a 'good' literary review...but I was making a deliberate attempt to break down the 'accepted' norm as part of my trying to concretize what my review was about i.e that there is a different way of doing things that needs to be recognised by the prevalent/dominant discourse...

I trust this clarifies the issue. To you no doubt radical, yes, but I cannot see - as another example - the relevance of the APA (American Psychological Association!) referencing system to my own world view. I also note your own terminology "you normally don't" and "you need to", both of which stem from your own such vista...

The following reflective conversation revealed Adrian's opinion on the incident:

Researcher: To pick up that point with V [a student], if you can just describe the situation briefly.

Adrian: My thought was that he hadn't put a lit review together, it was just pontificating, and we really should have just let it go and then come back with an overall comment about things. ... I think he deliberately set it up ... We should have seen it ... what happened was that we became very worried about how it would affect other people in the group.

Adrian implied that he had in part made the contribution because of prompting from the researcher due to concerns to develop a sense of community amongst students, something that had been identified as critical to successful online classes. Developing a sense of community usually requires regular teacher facilitation of the class but upon reflection in this case, Adrian felt the prompting for teacher facilitation was done too prematurely. Adrian explained that his normal response would be to "have left it and let others come back to him". Typically, he would have waited for further contributions and given a group response

Adrian: I would have waited another day, see it was only Wednesday [weekly online discussion topics start from Sunday to the next Sunday]. What I tend to do is make overall comments based on 2 or 3 [feedback] so that no one feels they are being attacked or commented upon individually. I've found that to be quite important teaching online that you don't give a response back to somebody which can be in any way misconstrued as negative. You make comments on what they have posted in the context of commenting on a number of things, if you've got a situation like that, so that's what I would have probably have done. But that's okay, we tried something, it didn't work, you know.

In the end, Adrian decided not to respond to V in the general discussion but did so in his personal portfolio instead. In there, Adrian explained to V he had the right to pursue alternative ideas, but also to consider the other novice students in the group who were budding researchers in the field. Adrian encouraged him to help others in his group to synthesise their thoughts. V did not respond to Adrian's reply but the terse situation improved towards the end of the course when V voiced his appreciation of Adrian's regular online teaching presence and feedback.

This series of reflections indicates how a negotiated activity failed to account for the teacher's beliefs, and understanding of the characteristics of students who typically enrol in his course. In responding to V's online postings early in the week Adrian received an adverse reply which appeared to affect other students' confidence in interacting with V. Subsequent interviews with two students in V's discussion group reported they felt intimidated by V's rudeness in Week 3, resulting in their withdrawing from further discussions with him.

Researcher-collaborator influence

After reflection on the above incident, the researcher wanted to understand how the negotiated intervention cycle had come to influence the teacher's practice. The following revealed the challenges involved in maintaining a balance between the researcher's and teacher's views and beliefs about how to interact with and respond to students. Adrian explained that he had been influenced by the researcher and another research team member to go against his "gut feeling".

Adrian: I want to use V as an example on how not to do it ... I should have actually carried on with my original strategy and not being distracted by him. I think one of the issues is that we try to be nice to him, I think there was an issue with you suggesting and D [a web-based team member] suggesting and I should have just gone with my own gut feelings. I've been teaching this course now for 10 years, there's definitely all sorts of different students. D became involved, D was at my door telling me how good he [V] was, its great to have people like that in the course. But you know he was just distracting people. So I think it caused more problems then, we shouldn't have let it get to us basically.

In response to a researcher suggestion that she had influenced his action he commented.

Adrian: Well you could be influencing me too much, in that I move away from teaching. You worry about housekeeping, that could be a problem. That I don't follow my own gut feelings from a pedagogical point of view or interacting with people. That could be. I've thought of that whether you are distracting me.

He noted that a researcher always changes what is happening. In the context of the negotiated intervention he raised the issue of balance in influence. He made clear that as the lecturer he had the ultimate responsibility for the class whilst pointing out he was keen to learn from the researcher given she had researched then co-designed the intervention.

Adrian: I think the researcher always influences what is going on and you have changed the dynamics. But having said that and maybe a way around that is for me to do what I initially want, do what I think, you know. You're coming in saying do this and this and this. Maybe I say what we do. And I don't think it'll change your role, I enjoy working with you so that's not an issue. The issue is that we'll just make sure that the balance is maintained. You know because I have got gut feelings, I have a sense of what needs to be done. But I'm also aware that I want to do a good job, so I'm listening to you and I mean, you're not just a researcher, this is your intervention as well, and you've got a lot to offer, and I always say right from the beginning that I will make a judgment call and I made a judgement call. And we may make another one next week, so we've just got to be relaxed about it actually.

It was clear that the researcher's influence in this negotiated approach could be risky to the teacher's practice. But by assessing the researcher-teacher working relations early in the semester, both became more aware of the potential opportunities and pitfalls when negotiating the online intervention activities.

Overall evaluation of the course

When asked to evaluate the outcomes from the course intervention, Adrian was generally positive. He felt that the research had helped him develop his online teaching by giving him opportunities to try out new pedagogical approaches and a new course structure to promote student participation in discussions. He affirmed he would retain the course structure (the negotiated version) but would continue refining it.

Adrian: I think it's gone really well. I mean there have been hiccups where we thought it hasn't gone as well as we thought but we had pretty high expectations. So I think as a course and just from people's comments and so forth, I think it has gone really well...But I think that's dealing with people, you know the different people and the interactions within the groups and the lecturers. By the time we take all those variables into consideration, I think that the course has actually gone quite well.

Researcher: What would you have retained from what we've done so far in the course?

Adrian: I would retain everything but I'd just maybe look at my interactions being a bit different depending on the people. So I'm not chucking everything out but I'd look at refinement, so that refinement is going to take place in the first half of next year as we look at setting the course up...

The students' feedback regarding the course was equally positive. For example:

- Eighty per cent of the students indicated the course had met their learning expectations, while all students reported they would recommend the course to their friends.
- Further student interviews revealed two major themes; how valuable the course had been to them (this was from one third of the class with comments such as: "I got a lot out of this course and feel that a course that does that certainly has a lot to offer").
- How well organised the course had been for them to follow (this was from a quarter of the class with comments such as: "The structure of the course was great and Adrian is a true professional"; "Because again it was organised well for an online course, straightforward most of the time, good and quick feedback most of the time").

However, an area for future improvement recommended by students included the clear establishment of a social and supportive culture of learning online at the start of the course:

- One third of the students identified the usage of an appropriate language platform to prevent anyone from feeling left out as important to this idea (eg. "I think from the beginning, as you make very clear that the language of formal discussion should be done in one language ... then another folder set up saying "if you wish to use Maori, French, German, Martian whatsoever, go to this folder, and chat away". That way, no one gets upset, no one gets ... shut out").
- Adrian's handling of disruptive students in the course needed to be made more explicit to avoid a feeling of disempowerment and fear of sharing ideas online (eg. "... given that it's a learning environment — the discussion online ... Adrian should have contacted him [student V] ...and said you know, the way you talk to people online is disempowering or inappropriate; you need to look at how you converse ... He needed to be pulled back into line").
- An expectation for communicating online (eg. "Maybe in the future it could be a requirement to enter these classes that people would do a netiquette course ... so that when they are actually participating, you don't have these problems with language or communication or long-windedness or whatever").

Constraints

A constraint in using this approach was time. Teaching online itself was time consuming not withstanding the time involved in participating in the cycles of negotiations.

Adrian: If I had a 3 hr class, I will talk for 3 hours and I'll just say I can't come to the meeting, I need to do my class. And then that's not a worry. But the trouble is, it's quite insidious. You want to respond to the students, you don't want to let things go. And so although you set boundaries, then you want to make the class work as well...You know so you are spending 10 hours of contact time at least rather than 3.

Discussion and conclusion

This paper reports on the process of planning and designing a pedagogical intervention for an online graduate course in educational research methods. The negotiated intervention is a series of formative collaborative interactions between the teacher and researcher to negotiate and develop suitable interventions as needs arise prior to and as the course progresses. Excerpts from a series of reflective conversations with the teacher illustrate the complexities of working with a teacher to develop his pedagogical practice as well as highlight the potential of the negotiated intervention strategy as a promising tool for online teacher development. The teacher collaborator in this research was quite positive of the approach's impact in developing his practise and generally pleased with the experience of refining his teaching and the quality of the online course. A major constraint observed was the time commitment on the part of the researcher and the teacher collaborator. The researcher also needs to consider and respect the teacher's views on learning. More importantly is the researcher's awareness of his or her influence on the teaching-learning context in order to avoid rushing in to "rescue" a situation according to how things ought to be done when teaching online.

The key advantage of this strategy in promoting gradual, relevant and constructive changes in teaching-learning is its consideration for the teacher's context in the class and within the university. The teacher is able to adopt classroom intervention strategies that are less intrusive and less threatening while building on his or her existing strengths. His or her online pedagogical development is scaffolded as far as he or she is able, ready, or willing to pursue at any one time to bring about continual improvement in the teaching and earning of the online class. Such an approach corresponds with current sociocultural views

of teaching–learning, where participants share knowledge and progressively become active members of a *community of practice* (Lave & Wenger, 1991). By working together to develop such a community, both the researcher and teacher-collaborator are each intentional and self-motivated acquirers, users and extenders of knowledge, individually and collaboratively (Brown, Ash, Rutherford, Nakagawa, Gordon, & Campione, 1993). The cycles of formative negotiations in the Negotiated Intervention strategy serves to ultimately enrich the teacher’s online teaching professional development, knowledge, experience and confidence.

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