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Provocative Pedagogies in e-Learning: Making the Invisible Visible

Anne Sinclair
University of Auckland

The purpose of this case study was to explore the experiences of participants (practicing teachers) involved in an online course entitled: "Reflective Practice for Teachers." Using a provocative pedagogy in the course, the teachers were challenged to confront beliefs and assumptions about teaching and learning and become active participants in the process rather than passive observers. The study aimed to generate a greater understanding of the perceived links between the pedagogy of the class and the learning of the teachers. A questionnaire and an online focus group were used to explore and report on teachers' experience of learning about reflection in an online environment. The results indicated that specific pedagogies and being part of a community of learners were most significant in their understanding of self as a reflective practitioner. Some of the guiding research questions were: What learning and thinking processes were associated or attributed to the learning process? What learning and thinking processes were enabled by these experiences of pedagogies?

It is apparent that with changing educational environments, challenges to customary cultural practices in teaching, and diverse student populations in Universities, online learning will be part of an expanding view of the classroom. As part of what McWilliams (2005) refers to as un-learning pedagogy, the process of learning and teaching online in a university course creates challenges for both lecturer and learner and requires an understanding of how those roles may function in a different type of teaching/learning context. Teaching online involves an alternative approach, with the emphasis being on distributed learning whereby control of the learning is distributed among the community (Dabbagh, 2004) and is not in the hands of a single expert (lecturer). Giving up power can be problematic, and lecturers may encounter difficulty in understanding this approach to learning and be unwilling to let go of traditional perspectives of learning and teaching (Rogoff, Matusov, & White, 1996). Correspondingly, students also encounter a difference in learning online, where the 'classroom' is less hierarchical and the approach has more emphasis on self-regulation and participation.

This paper examines one such approach in online learning, where an alternative pedagogy was utilized to offer opportunities for rich and sustained dialogue amongst the teachers (participants in the study) involved in a course, Reflective Practice for Teachers. The pedagogy referred to in this study is predicated on Fenwick's (2005) notion that pedagogy is inherently audacious and is about struggle and invention, not about certainty and control. It is through encounters with what Biesta (2001) refers to as different and unfamiliar ways of thinking and doing that allows learning and knowing to occur. The author contends that in experiencing a pedagogy of difficulty (Nelson and Harper, 2006), an environment is created that fosters the skills of critical thinking, deeper learning, and reflective thought. In this environment the lecturer then becomes that of a provocateur, or "meddler in the middle" (McWilliam, 2005), rather than transmitter of content.

It is in acknowledging uncertainty and possible conflict within one's existing beliefs and values (Larrivee, 2000) that critical reflection can occur. The dissonance created by uncertainty allows the reflective thinker to reposition herself and consider other perspectives, rather than relying only on her own experiences and judgments. Some studies (Barron, 2003; De Lisi & Goldbeck, 1999) have found that learners benefit from this more transactive form of knowledge sharing, where they are confronted with ideas that are different from their own. It is through such cognitive dissonance that they begin to think in a more critical way and perhaps reconsider previously held views (Barron, 2003). Through negotiation and re-negotiation, co-construction and re-stating of ideas, there is opportunity to consider a range of perspectives and create a new shared knowledge (Anderson & Haddad, 2005).

Considerable doubts continue to be raised by some authors about the validity and worth of reflective practice in teacher education programs (Fendler, 2003; Zeichner, 1992). These doubts include lack of evidence that in education, a reflective teacher is able to "produce more effective learning outcomes in

participants" (Smith, 1997, p. 5). More recent studies (Alger, 2006; Cox, 2005; Larrivee, 2000) have suggested that participants in the future are going to require different skills in order to succeed in a changing educational environment, and they will need "intellectual, moral and critical thinking abilities to meet the challenges of the 21st century schools" (Forlenza-Bailey, Sentnor, & Yost, 2000, p. 39). Moreover, with the implementation of a new Curriculum in New Zealand schools in 2010, there is an increased emphasis on the importance of reflection for student learning:

> Reflective learners assimilate new learning, relate it to what they already know, adapt it for their own purposes, and translate thought into action. Over time, they develop their creativity, their ability to think critically about information and ideas, and their metacognitive ability (that is, their ability to think about their own thinking). Teachers encourage such thinking when they design tasks and opportunities that require students to critically evaluate the material they use and consider the purposes for which it was originally created. (Ministry of Education, 2007, p. 34)

Much of the literature has established that reflective teaching is a desirable pedagogical approach, as indicated in the corpus of work undertaken over the years (Cox, 2005; Larrivee, 2000; Picciano, 2006; Pollard, 1997; Smyth, 1989; Zeichner & Liston, 1996). The methods to encourage participants to become more reflective in face to face courses include journal writing, autobiographies (Brookfield, 1995; Brown, 1997; Johnson, 2002), reflective learning logs, critical incident diaries, fieldwork diaries, and action research (Henderson, Nappan, & Monteiro, 2004). It is the objective of this paper to explore alternative pedagogic approaches in an online course and provide examples of interactive learning tasks designed to promote critical reflection. The course utilized Moodle open source software as the online teaching platform. It is argued (Picciano, 2006) that online classes value the reflective thinker because the medium provides more time to contemplate ideas and opportunities for more considered responses.

Conceptual Framework

The learning perspectives underpinning this descriptive study were situated in the social theory of learning (Wenger, 1998) and the principles of collaboration in online communities of practice, where teachers work in a socially interactive and reflective learning environment (Sorenson, Takle, & Moser, 2001). In order for the teachers to share learning, it was vital that a community of learners within a community of practice was established, which was participatory, proactive, collaborative and given over to constructing meanings rather than simply receiving them (Bruner, 1996; Lave, 1988). The claim is that the teachers would develop deeper conceptual understandings in a community of learners, compared with those who attended the more traditional classroom (Rogoff et al., 1996; Sorenson et al., 2001).

These theories recognise active participation in the community of learners as key to the development of individual cognition. According to Vygotsky (1987), this adaptive function of socially shared cognition is more likely to generate exchanges of differing views, which, in turn, are reorganised to a "higher plane of thinking" (Berk & Winsler, 1995). It is suggested (Engle & Conant, 2002) that when students are guided to engage in knowledge-building discussions, they learn to develop and to justify an argument, eventually learning to disagree with others in increasingly sophisticated ways. As a result of the exchange of ideas within the group, new ideas may emerge which were not considered before the discussion (Wortham, 1995). In the same way, Popper (1972) asserts that this socially and collectively constructed learning acknowledges disagreement and dissonance as motivators in knowledge construction, and through involvement in this collaborative discourse, meaning making occurs (Wenger, 1998).

Methodology

This descriptive case study was undertaken within the broad paradigm of qualitative research further defined by Merriam (1998) as being particularistic, descriptive, and heuristic. The case sought to understand and reveal what had happened in a particular course, 'Reflective Practice for Teachers,' describing and explaining the process through the perceptions of the teachers, namely: What learning and thinking processes in the course were associated or attributed to the gaining of

learning? What learning and thinking processes in the course were enabled by experiences of particular pedagogies?

In this compulsory one semester course, teachers examined the moral, political and ethical factors that influenced and affected their work in general and how this related to their personal and professional practice in particular. They were challenged to confront their own practices through a critically reflective lens working in a community of practice, using open source software Moodle as the teaching/learning platform. A feature of the online class was having a written transcript of the teaching and learning that took place, illuminating understanding of the course through what Merriam (1998) describes as "insights into how things get to be this way" (p. 30). The case study utilized a qualitative approach, and data was collected by questionnaire and a semi-structured online focus group. The participants were familiar with the process of online discourse and so were able to contribute to the online focus group in a method they were familiar with.

Participants

Ethics approval was gained through the University of Auckland and informed consent was obtained from the adult participants (teachers). The participants in the study included primary, secondary and early childhood teachers upgrading their qualification from a Diploma of Education (a former two-year qualification at the Auckland College of Education) to a Bachelor of Education (Teaching) degree in the Faculty of Education at the University of Auckland in New Zealand. The selection process utilized the purposive sampling method on the basis of participant involvement in the course to be studied. Three classes of teachers, who had completed an online course (Edprofst 357, Reflective Practice for Teachers) over one semester and had become experienced in the use of the technology, were selected to participate in the study. Because the teachers were proficient in the technology, competency in the technology was not an issue or major focus of the study. After the course was completed and grades recorded, a letter and participant information sheet outlining the study was sent to all 80 participants in the three classes, inviting them to participate. A questionnaire was included, with the option to complete or take part in an online focus group. Twenty participants agreed to take part in the focus group, and a further twenty participants completed the questionnaire, giving a 50% response rate to one of the two options. Forty participants overall took part in the study.

Data Gathering

Case studies, distinct from experiments or surveys, do not claim any particular method for data collection or analysis but seek to reveal a "comprehensive understanding of the groups under study" (Becker, 1968, p. 29; Merriam, 1998) through a variety of techniques. The aim of the case was to identify and classify the teacher's comments into themes relating to the learning and pedagogy experienced in the course. The instruments for data collection employed in this case study were determined by the geographic distance of the participants from the university and the online nature of the program. Because the participants had worked in a Community of Practice (COP), it seemed logical that an online focus group (e.g., Burton & Goldsmith, 2006; Litoselliti, 2003; Rezabek, 2000) would be utilized as the main method of data gathering. Data was collected at the end of a one semester compulsory course entitled "Reflective Practice for Teachers" in the Faculty of Education at The University of Auckland, New Zealand.

Through the online focus group, the participants constructed shared meaning of the questions and provided a critical commentary on the experiences they had engaged in. Members of the focus group were asked to respond to the open-ended questions individually and then react to the responses presented by the other members of the group. With the asynchronous nature of the discussion, the participants could add reactions, contrary views, and affirmative statements at any time during the two-week period the focus group operated. Both the researcher and participants then had the chance to review the content of the discussion and amend or add to their comments.

An advantage of using an online focus group was being able to generate an immediate transcript and eliminate transcribing tapes, thus guaranteeing more accuracy of recording. This method gave the researcher a chance to gather any other information not captured in the initial paper questionnaires and enabled the participants to make final comments and pose subsequent questions.

The paper questionnaire was designed with open-ended questions to capture the individual's view of the programme after a period of time had elapsed, which

enabled the participants to step back and reflect. Because the paper questionnaire was sent out first, the returned responses built up a picture of the course and enabled the researcher to adjust and refine the questions for the online focus group. Some examples of the initial questions included: Is this your first online experience? Describe experiences in the course that contributed to your learning?

As a result of reviewing the paper questionnaires, the questions posed for the online focus group were re-worded to encourage more interaction and group participation, for example: What learning and thinking processes in the course were associated or attributed to the gaining of learning? What learning and thinking processes in the course were enabled by experiences of pedagogies? How would you describe the learning experiences? Discuss the processes you engaged with that were significant in your learning. Can you give specific examples of whether your learning has changed? Why? How?

Analysis

The applied qualitative analysis method was underpinned by the ideas of Miles and Huberman (1984) and Strauss & Corbin (2008) using an exploratory thematic analysis and interpretive approach to search for themes related to the questions in both the questionnaires and focus group. Adapting Strauss & Corbin's (2008) open-coding system, three categories were developed, and tentative hypotheses were proposed and tested against the data until a theoretical framework was developed to illuminate initial ideas and events. These categories were taken from the central research questions and refined, namely: What learning and thinking processes contributed to your learning? What experiences of pedagogies contributed to your learning? What were the hinderers to your learning? (see Appendix A)

In order to identify the pedagogies that contributed to the learning, it was decided to utilize Goodyear's (2005) Pedagogic Framework (Appendix B), adapted from (Goodyear, 1999), for distinguishing the different types of pedagogies. This framework provided an instrument for identifying the type of pedagogies found in the course and linked these to the learning experiences.

As many of the teachers did not specifically name particular pedagogies but rather talked about approaches and activities, it was deemed necessary to place their responses into a pedagogic framework (Goodyear, 2005), adapted from (Goodyear, 1999), in order to make the links between learning and pedagogy clearer. The responses could be collated and categorised under the four pedagogical headings below to make these links.

The most significant learning tasks identified in the course were described, illustrated with quotes from both the questionnaires and the focus group, extrapolated upon, and linked to pedagogy from the pedagogic framework. The teachers, whose examples were quoted, were given a numeric code as a pseudonym to ensure their anonymity. In reporting these examples below, teacher numbers are prefixed with a letter, which represents the theme to which a statement was coded. For example RP3 means the quotation is from Teacher 3 and relates to Role Play.

Results

The key themes to emerge in the data as significant in the participants' learning related to particular pedagogies, reflection, and being a member of a community of learners (see Appendix C). There was consensus from the participants on the aspects of the course that were central to their learning, as outlined in Appendix B above. However, there were some aspects of working online that presented barriers to the learning of two teachers.

Two teachers commented on specific barriers to their learning, including initially feeling outside their comfort zone and having difficulty adjusting to working online. A further disadvantage for these teachers was living in remote locations and not having access to a Broadband connection, or existing connections being too slow. They both regarded this inability to be able to respond immediately as affecting their ability to participate fully in the discussions, as their contributions lagged behind the current discourse online. As a result, one of the teachers preferred self-direction rather than interaction, finding constructing ideas with others too time consuming. Three other participants identified these delayed responses by some class members as also being an inhibiter to the flow of the discussions. However, all the respondents made particular mention of the flexibility that working in the online environment afforded them.

The findings of this study are presented under four headings related to learning in the pedagogic framework. Examples of the learning tasks are

included and extrapolated upon to provide an explanation and context for the responses. The quotes are taken directly from the focus group discussion and questionnaires and are used because of the frequency with which they occurred.

Pedagogical Philosophy

The pedagogical philosophy in this course was designed around the idea that teaching and learning are complex, tentative, and difficult, promoting what Salvatori (2000) refers to as the pedagogy of difficulty. The opportunity for deeper learning was provided by active engagement with complex issues, rather than suppression of the problematic. The teachers wrestled with ideas and unexamined assumptions about their teaching, which in many cases had no 'right' answers. One teacher commented on the challenge to her beliefs about teaching boys: "The examination of how I teach boys, not assuming there is one best way, with me being a learner, sharing the learning struggle to gain understanding, caused me to review what I formerly believed." There is a belief (Hess & Anzuma, 1991) that the need for right answers often inhibits this struggle and does not allow for suspension of belief or critical analysis, whereas the idea of "sticky probing," where ideas are examined from multiple perspectives whilst interacting with others, may enable this to occur.

Being able to view events and situations from another's viewpoint in the role-plays featured strongly in the responses, as noted in this example: "The role play situations were challenging, particularly if we had to argue a viewpoint we did not necessarily share" (RP 4). A number of the teachers noted how uncomfortable they felt in one role-play that challenged accepted grouping practices in schools and the moral decisions teachers made when grouping students. The teachers assumed the role of different characters, i.e., a student who was always in the lower group, a parent who wanted their child in the top group, teachers who had always grouped according to ability and had not considered other ways to group. By taking on these different roles, a number of teachers commented on how they had a deeper understanding of the effect their decisions as teachers had on others and what this may mean to the confidence, life chances or self esteem of a student.

Another role-play involved a simulated staff meeting online, where staff took on a particular role (e.g. Assistant Principal, Education representative from the Ministry of Education, Curriculum adviser, experienced teacher and beginning teacher) and argued their position on how they would like to see the key competencies in the New Zealand Curriculum implemented in their institution in 2010. In each of these role-plays, the teachers were required to come into their role from an informed position, using research to support their points of view. Many of the teachers stated that the role-play provided them with an opportunity to think of alternative ideas regarding the new curriculum, rather than always thinking that change is negative. By switching roles and reviewing previous contributions from others, they were able to deepen their understanding of the possibilities a new curriculum afforded them in their practice.

Slater (2000) argues that role-plays are well suited to online learning and have the ability to engage participants in substantive conversations. By taking on the role of 'other,' who may have a conflict of interest within a situation, learners engage in more deliberate thought and negotiation than they would in a group without conflict (Berk & Winsler, 1995). One teacher commented:

> The learning experiences were clever as they made us interact in ways we would not have in a face-to-face class. Making the learning experiences compulsory forced me to confront many situations in order to contribute, otherwise I would have probably been an online spectator. I think the learning experiences added so much more to this course – we learnt from one another as well as from the course material. (RP11)

In order to stimulate reflective action, drama conventions, which encourage reflection, were purposefully designed in the course. In this way the 'actors' were required to consider the feelings and actions of others in a role-play, and in doing so they learned something about themselves as a result of the experience. The teachers were asked to consider the problems associated with the underachievement of boys and discuss this while assuming different roles. What do boys, parents, teachers, researchers, sociologists or feminists think about this problem? An account by one of the teachers demonstrated areas she had confronted:

> The role-plays made me really think about pedagogy, not just mine but that of others. Having to put yourself in a role or wearing a certain hat made me think about how I could support a particular position. It was a

> revelation to see the valid reasons people could come up with for supporting quite opposing positions. (RT13)

This convention has the capacity to challenge and change attitudes towards particular views of the world and society by offering the concept of debate in a non-threatening way. Realistic experiences were created that promoted socially shared ideas within a specific context. The majority of teachers reported that having time to reflect upon their responses and consider the views of others enabled them to make more deliberate contributions:

> The interactive role-plays made me think about why I was responding the way I was. I found that by putting myself in someone else's shoes made me really think and look at things from another perspective. It made me feel uncomfortable. (RP8)

Many of the teachers suggested that when they assumed the role of 'other' and they consciously maintained the attributes and characteristics of how that person would react in certain situations, they could really consider the issue from another perspective. It is Fogarty's (1994) contention that taking on another role contributes to the reduction of ego-centered perceptions and leads to a deeper understanding and interpretation of human behavior and meanings. Often the experience of re-conceptualizing ideas and concepts results in a transformation of existing preconceived ideas about situations and people (Neelands & Goode, 2000).

Through this form of active inquiry, teachers engaged with complex human experiences in order to explore the questions inherent in the role-plays. Furthermore, the task provided a context where they were able to examine any biases, assumptions or beliefs they may have held in relation to the issue being played out. A number of participants commented on the effect that participating in the role-play had on their thinking, as they had formerly based a lot of their teaching practice on experience alone and had not considered the ideas of others.

High-level Pedagogy

Although the Socratic seminar is traditionally used in face-to-face classrooms, it offered opportunities online for the teachers to engage in cognitive dissonance and provided a stimulus for learning. The posing of a generative question or statement acted as a springboard for discussion, where discussants were encouraged to pose probing questions and offer discrepant viewpoints in order to encourage interaction. One such example read, "Current policies and practices focus on the 'skilled teacher'. In contrast, Snook (2003), proposes the notion of the ethical teacher. How would you respond to these statements?" Another debate centered on the effects of proposed National Standards, in which there were very polarized views within the class. The majority of the teachers agreed that being forced to examine their ideas and look for alternative perspectives challenged their long held assumptions and created a sense of uncertainty. As one teacher expressed:

> Having to bare one's soul to the group was a challenge. To find that other people responded positively and were willing to help with or questioned your thinking and shared their understandings and knowledge were both provoking as it made you want to find out more and challenging as you knew people were carefully considering what you said. (S7)

In a face-to-face class all discussion is oral, whereas in an asynchronous online medium all questions and responses are written. Many of the teachers commented on the importance of having time to review their writing and that of their colleagues. They argued that this facility enabled them to give deeper consideration and responses in their writing, together with providing evidence for their arguments. Pelz (2004) contends that for learning to occur, reading and writing are superior methods to listening and talking. One teacher describes the advantage of this approach:

> The course used appropriate questioning, provoking me to open up my thinking or re-orientate my thoughts. The physical nature of the discussions being available allowed me to go back and re-read and respond at my leisure. Having a lecturer who held back in discussions and gave others an opportunity to respond meant our views were valued. The lecturer also stepped in and asked teasing questions in order to encourage more discussion. (S9).

Typically, one of the difficulties in facilitating group discussions in class situations is discovering

methods to deepen engagement, as participants often come into a discussion with limited evidence to support their argument or stance. One study (Card & Horton, 2000) found that in face-to-face classes, participants tended to rely on their own opinions and experiences to support an argument, whereas in the Socratic seminar online, the teachers were required to provide research to substantiate their viewpoints. Furthermore, the documentation of the discussion allowed the teachers to reflect on their positions and re-evaluate their stances, adding to the 'forum' body of knowledge. The most significant part of the process is that the participants could 'see' their learning on the screen, as noted below:

> Being a learner online gave me opportunity to communicate what I needed to say without losing my train of thought. I could express my views, but edit them in order to clarify to others and myself my point of view. In a face-to-face class I do lose multiple thoughts in classroom discussion as a result of listening and waiting for an appropriate time to respond. Online I do not feel limited in the number of responses in the discussions I could make. I was more involved in the learning. (S10)

Some researchers, for example, Salmon (2000), argue that participants are sometimes deterred from contributing because their entry is open to scrutiny, but other researchers (Sinclair & Davies, 2005) suggest that more of the participants contribute in an online learning environment than in a face-to-face class because they cannot be seen.

Pedagogical Strategy

Overwhelmingly, the majority of teachers identified Smyth's framework of reflection as a significant strategy in their understanding of 'self' as learner. This 'model' provides a common language with which to describe thinking. It utilizes four forms of action based on critical theory and follows specific questions to allow exploration. Describe (what did I do?), Inform (what does this mean?), Confront (how did I come to be this way?), and Reconstruct (how might I view/do things differently?).

There are many models of reflection documented in the literature, including Schon's (1983) reflection-in-action and Pollard's (1997) reflective cycle, but Smyth's (1989) framework was selected because it required teachers to participate in a dialogic and discursive approach to learning, "which can only emerge from processes of confrontation and reconstruction" (Day, 1993, cited in Cox, 2005, p. 469). The teachers were required to examine moral, social, political, and ethical dilemmas associated with their professional practice and reflect upon their position within a dilemma.

In order to move beyond 'what did not go well and what will I do next time,' Smyth (1989) suggests that a reflective stance that recognizes the ethical and moral nature of teaching cannot be divorced from these contextual factors. By acknowledging the broader contextual framework within which their practice is situated, teachers are able to examine the effect of these influences on the decisions they make for children's learning. Two teachers put it in these terms:

> The new experience made me think about different ways children learn and my own deep-seated assumptions regarding children's learning. I believe teachers often impose their own personal expectations that are not always appropriate or fair. Teachers often judge children too quickly by how they interact in one context. Societal expectation, government guidelines and our upbringing can influence how we expect children to learn. (R17)

> By using Smyth I have learnt why I have the attitudes I do and how I can change them. I never realized why I held onto these opinions until I worked through Smyth and really began to question these attitudes. (R3)

Through dialogic and dialectic reflection, the teachers explored problems, placing themselves within the 'frame' of the issue by using the 'I' voice and being guided by these questions:

Describe:	I am concerned/puzzled/worried about the…
Inform:	I am feeling…frustrated…perhaps it is because…maybe…
Confront:	In my own educational experiences…my cultural beliefs…history…wider socio/political context…I realize…according to research…
Reconstruct:	In the future I will…

The following responses are indicative of the impact that using Smyth's framework has had on two of the teachers understanding of self as a learner:

> The area of reflection that has changed for me is looking beyond the surface. What are the reasons behind what we are being asked to do? How do these fit in with my values and principles? Should I agree or should I question what I am being asked to do? (R8).

> I am more willing and able to reflect on what I do and why – I am not afraid to examine my teaching and explore new directions, ideas and approaches. By ensuring that I consider and seek out the perspectives of others has moved me away from being the 'know it all' practitioner to the perception that there is more than one-way to do things. (R11)

All aspects of the reflection are written. One of the most difficult stages of this model is the confront stage. For many teachers, this was the first time they had consciously examined their beliefs and understood the influence their beliefs had on the decisions they made for children's learning.

Pedagogical Tactics

Consideration was given to the wide range of experiences and abilities brought to the course by the teachers enrolled in the online programme, and assumptions could not be made that everyone was at the same level of confidence or understanding. An important feature of the course noted by many of the teachers was the recognition of their prior learning and the fact that they were acknowledged as adult learners. Consequently the teachers were introduced to the idea of an adult learning community, where they were key players, not passive observers. This tactic was employed to ensure that the teachers and lecturers were cognisant of their responsibilities and roles in the group. Being part of a community of learners and the access this gave to each member featured strongly in the responses. A majority of the responses made specific reference to the understanding of the different roles in a community, as illustrated by the following comment:

> The whole process reminded me of what it was like to be a learner – wondering what does the lecturer want? Have I got it right? What does that really mean? It is valuable for us as teachers to be participants again and to remember how participants may feel. The most important learning for me was what democratic learning and teaching was about. By being part of a community, learning from peers, as a learner I felt valued. (CL13).

With the interactivity of the learning tasks on Moodle, the teachers increasingly engaged with each other rather than always referring back to the lecturers. Reliance on the lecturer has often been a feature of earlier distance learning models, but by utilizing the ideas of Rinaldi (1998) and 'Io Chi Siamo' (I am, who we are) as underpinning principles, the role of the lecturer changes. In this process, the lecturer starts in the centre of the learning community as the expert, but as the expertise and confidence in the group increases, he/she gradually moves to the outside as the learners become the teachers. Because of the blurred roles of students and lecturers, greater emphasis is placed on the learning process and learning experiences. There is a shared responsibility for the learning between the participant and the lecturer.

In order to continually challenge the teachers, the lecturers came online regularly and gave personal, positive, but challenging feedback. This feedback then enabled the lecturer to further complicate (provoke) the thinking processes because the lecturer had a better understanding of the teacher's cognitive level of development. It has been established (Smith, Ferguson, & Caris, 2000) that online teaching promotes higher order thinking, reflection, and rigorous intellectual challenges leading to more equality between learners and teachers. An overwhelming response by the teachers noted the quality and immediacy of the feedback by the lecturer, which assisted their learning. It was this interchange between teacher and learner that promoted the development of these skills, as noted by one participant:

> I think the experience made me more aware of the quality and timeliness of the feedback in supporting learning. I became aware of a need for immediate feedback. Over time I would seek feedback from others in the group and become annoyed if they did not respond. I equated this with how my participants might feel when they have

> invested energy in a project and don't receive a response from me. It gave me a valuable look at how learners feel in my class. (CL15)

The process became collaborative when the teachers discussed their reflections with a critical friend before seeking feedback from the lecturer. For the teachers to have the confidence to critique and give feedback to peers, opportunities must be provided for them to practice these skills. One study (Cartwright, 2000) found participants were hesitant about giving feedback because they did not feel they could contribute anything of value to the more able participants. However, Nichol, Minty and Sinclair (2003) report that the permanent and visible contributions of participants in an online class have an impact on their learning because they have time to re-assess ideas, review submissions in light of reading contributions from others, and contemplate further responses. The collaborative element of reflection allows a sharing of problems and a chance to view varying ideas of very real and often complex issues. This in turn leads to a deepening of insights relating to the issue for each individual. Feedback should include both explanation and provocation to ensure conversations are intellectually substantive and demanding.

Discussion

The challenge of this study was to investigate whether a 'provocative' pedagogy approach designed for teachers in an online course led to an enhanced understanding of themselves as learners and if they able to attribute this understanding to specific online learning experiences. In addition, the challenge for the lecturers teaching in a web-based medium was designing experiences for participants that moved beyond the transmission model often associated with online teaching to one that increased dialogue and encouraged critical thinking and reflection (Bullen, 1998).

As outlined in the results, the most common theme to emerge from this study was the identification of particular pedagogies designed by the lecturers that assisted in that learning. The use of a reflective framework (Smyth, 1989) was identified by the majority of teachers as being most significant in their understanding of self as learner. The results indicated that the level of critical analysis and self-awareness being documented reached levels not formerly associated with many of the teachers' practice. The teachers indicated that they had previously not consciously examined the effects of the ethical and moral decisions they made for children's learning and tended to rely on their experience alone. By providing reflective practice strategies, the teachers became conscious of the potential for learning through their practice. Instead of viewing tension and dilemmas as troubling, these uncertainties provided fertile learning opportunities.

Therefore, as teacher educators, discovering ways for teachers to recognize the complex and multi-faceted consequences of their actions and decisions could be assisted by the utilization of explicit strategies. The findings of this study suggest that some interventions or authentic learning experiences could be employed to explore and examine the underlying assumptions and beliefs about a teacher's practice. Larrivee (2000) argues that the path to developing as a reflective teacher cannot be prescribed by formulas—it must be lived—whereas Alger (2006) contends that without structure and collaboration provided by teacher educators, reflection becomes primarily an individualist endeavour.

Unlike pre-service teacher education students, practicing teachers are able to draw on many experiences to reflect upon, but they often find it difficult to suspend belief and judgment and take action for change. The act of stepping into someone else's shoes in the role-plays created a context for self-reflective dialogue. This process was recognised by the teachers as a way of understanding and exploring multiple perspectives and consideration of the views of others. They suggested that as there is an absence of any 'stage', script or visible audience in an online medium, the players have to consider the effect of their written dialogue and responses on others. The teachers further commented that the masking of age, gender, race, class and ethnicity enabled them to be less restrained in contributing in the role-play, which may lead to more equitable opportunities and outcomes for many. The conclusion reached is that opportunities for exploring difficult ideas and concepts could be explored through role-plays, which would enhance instruction and encourage students to be players rather than bystanders.

Participating in a Socratic seminar online as a high level pedagogical approach was a new

experience for the teachers. Because the activity was in written form, they were able to re-visit ideas and learn from others' viewpoints. The majority of the teachers agreed that this activity assisted them in understanding the importance of offering opinions of events or situations from an informed position, grounded in research, rather than experience alone. The process helped legitimise their questions and uncertainty as they encountered difficult readings, many of which challenged their ideas. Because Socratic seminars rely on mustering evidence to discuss a position in an argumentative format, knowledge construction occurs. Through this process, the habits of conversation and the behaviours of listening, thinking and interaction are encouraged. When learners are actively engaged with the materials and the tasks, they learn. Frielick (2004) refers to this teaching and learning as "…an ecosystemic process of transforming knowledge in which teacher, subjects and participants relationships are embedded or situated in a context where complex interacting influences shape the quality of learning outcomes" (p. 3).

All the participants distinguished the documentation of lecturer/learner feedback and exchanges as a most significant factor in their learning. The learning process was visible for teachers and lecturers and thus enabled them to carry the learning forward in a more engaged and intellectually demanding manner. Significantly, not one of the teachers mentioned having to write all their thinking as a barrier to their learning, but most felt their writing had improved. These observations by the teachers supports the view of Smith, Ferguson and Caris (2002), who contend "the emphasis on the written word encourages a deeper level of thinking in online classes, resulting in more profound learning" (p.5).

The final finding was the effect that participating in a community of learning had on the teachers' learning as a result of a step-by-step, collective contribution from each other. They claimed that because knowledge was constructed as a collective and not from the sole voice of the lecturer, the process assumed considerable significance in their understanding of being a member of a democratic classroom. There are implications of this finding for lecturers when designing courses in the future. Lecturers are often reluctant to confront aspects of well-established practice and consider whether these are relevant or appropriate in a changing digital environment.

Conclusion

Until recently, universities have relied on a pedagogical model typified by activities such as lectures, tutorials and laboratories. For students to progress beyond being passive recipients of knowledge to constructing and making meaning for themselves requires a paradigm shift in course design and lecturer disposition and belief (Lauzon, 1992). Perhaps one of the outcomes of this study for lecturers is having more understanding of pedagogic approaches being used and seeing pedagogy as a rich concept that has the power to create and transform learning through different ways of teaching.

Although in recent times a transformation of culture (Jamieson, 2004) has occurred in many universities as a result of the introduction of online learning, there still exists an attitude of **"**I do not want to go outside my comfort zone; I like things the way they are*"* by many students and lecturers when introduced to online learning. Not surprisingly, this transformation of learning has had an effect on the pedagogical practice of some university lecturers (Jamieson, 2004). Because of the different form of interaction, online teaching is sometimes seen as a threat to professional identity and what it means to be an academic (Brooks, Nolan, & Gallagher, 2001). Consequently, beliefs about pedagogy will be constantly confronted and challenged by the growth of new technologies and thus require an appraisal of and reflection on existing practices. Additionally, it has been argued (Le Metais, 2002) that the disposition towards learning depends largely on teaching methods and the satisfaction and enjoyment that participants experience because of the nature and content of that learning. The following statement by one of the teachers posits the effect of the lecturers in the learning process in this course: "Online is a medium that enables communication with other educators in a way that I have not been able to get in any other institution. Maybe it all comes down to the lecturers and the way it was presented" (Student 19).

As online learning becomes increasingly more common in universities, lecturers will be challenged to teach the upcoming generation of 'digital natives' who have grown up with digital technologies and may decide to learn in a web-based environment rather than in face-to-face lectures. Furthermore, the development

of mobile learning (hand held devices) has created possibilities hitherto un-thought of and increasingly being used in universities and institutions round the world. The changing face of how students can learn signals a new era in global learning, as well as collaborative global knowledge building suited to the 21st Century (Sorenson et al., 2001). The Net provides a rich environment for students to mine deeply into knowledge resources and to negotiate their way around and share knowledge (Anderson, 2003).

The 2008 Horizons report (Johnson, Levine, & Smith, 2008) drew attention to the lack of technological skills of many teachers and their difficulty in keeping up with their students, which in turn affected their teaching. Questions will continue to be raised as to how current teaching practices of lecturers will transfer to the online environment and what this will mean for academics. Because many academics have not experienced being participants in online learning courses, learner-instruction interaction (Hurumi, 2002) and pedagogical practices may be challenged. However, this kind of teaching also has the potential to set up online collaborative practice between faculties and institutions, both nationally and internationally. The global classroom becomes a reality, not just rhetoric.

Finally, if we are to have courses that foster inquiry and independent thought, it is desirable to have teacher educators who model inquiry in their classes and are reflective in their own practice (Beattie, 1987). It may be difficult to change our practice and give up our traditional role, but as Dewey (1933) argued, teachers who are unreflective about their teaching and accept uncritically everyday practices in institutions "lose sight of the purpose to which they are working and merely become agents of others" (Dewey, 1933, cited in Zeichner & Liston, 1996, p.9).

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ANNE SINCLAIR is a Senior Lecturer in the Faculty of Education, School of Teaching, Learning and Development at the University of Auckland, New Zealand. Anne has a Masters of Educational Administration degree from Massey University. Her Master's research focused on the part reflection played in examining beliefs about teaching and learning and how this translated into practice. Her interest in online teaching and learning came about because of the difficulty in designing pedagogy for courses online, which fostered reflective action, active engagement and participation by both students and lecturers. Anne has presented her work at numerous national and international conferences including The Tenth International Conference on Thinking in Phoenix, Arizona in 2002; First International Conference on Pedagogies and Learning at USQ University in Australia, 2003; What a difference a Pedagogy makes at Stirling University in 2005; the International Conference on Education in Hawaii, 2007 and British Educational Research Association conference in Manchester, 2009.

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Appendix A.
Recurring Responses from both the Questionnaires and Focus Group Transcripts

What were the learning and thinking processes, which contributed to learning?	Experiences of pedagogy, which contributed to learning?	Hinderers to learning?
Considering other viewpoints	Smyth's model of reflection	Open to other's critique
Thinking from other viewpoints	Role plays	Time consuming constructing ideas
Confronting values and beliefs	Deep and provoking experiences	No broadband connection making responses slow
Considering wider range of views	Step by step collective contribution of many participants	Frightening
Being more open-minded	Scaffolding	Putting comments into written discussion required reciprocal trust
Being provoked to think more deeply	Interacting	Guilt for not always responding
Reflection	Active participation through design tasks	Preferred self directed work not interaction
Challenge	Socratic debate	Lonely requires discipline
Being critical not criticising	Variety of experiences	Going outside comfort zone
Researching to inform discussion	Community of learners	
Examining beliefs and values and assumptions about learning	Supportive environment	
Deeper consideration and responses	Valuing students ideas	
Deeper level of thinking	Hands off – led, not lectured to	
Learning	Respectful of learner	
Questioning	Feedback	
	Collaboration	
	Democratic	
	Time to process	
	Revisiting discussions	
	Inclusive	

Appendix B.
Pedagogical Framework Describing the Four Pedagogies Utilized in the Analysis (adapted from Goodyear, 2005)

Pedagogical philosophy is the understanding of the role beliefs, assumptions and values play in how learning occurs. The construct of pedagogies as collaborative, where participants construct knowledge through socially situated learning within the intellectual collective of the community such as the role plays, as distinct from instructivsm, where the lecturer provides the knowledge in a transmission form.

High-level pedagogy is the connectivity between a philosophical belief and the implementation of an actual approach, eg. cognitive dissonance, challenge, pedagogy of difficulty, such as the encounters in the Socratic seminars.

Pedagogical strategy is the broad approach, action, or intention of the course, i.e. learning is embedded within rich situations and socially mediated acts and learners are able to reflect on their actions through discussion of issues and problems with fellow community members eg. Smyth's framework for reflection

Pedagogical tactics are the actual 'how to' activities or methods related to achieving the strategies, such as detailed feedback, posing stimulating questions, high level debate, writing critical responses

Appendix C
Themes Categorised Within the Pedagogic Framework

Pedagogical Philosophy	High Level pedagogy	Pedagogical Strategy	Pedagogical Tactics
What were the beliefs underpinning the course?	How were the beliefs translated into practice?	What were the broad approaches used?	How did the methods achieve the strategies?
Being provoked to think more deeply	Provocation	Interacting	Deep and provoking experiences
Confronting values and beliefs	Challenge	Active participation	Step by step collective and contribution of many teachers
Considering wider range of viewpoints	Difficulty	Collaboration	Feedback
Being more open-minded	Cognitive conflict	Smyth's model of reflection	
	Community of learners		
	Socratic seminar		

Reflective paradigm Being in someone else's shoes in role plays