# Cognitive, Social, and Teacher Presence and Educational Contexts and Environments: Three Elements of Creating a Distance and Online Community of Learners in a Graduate Pre-service Teacher Education Course at the University of Southern Queensland, Australia

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#### Abstract

Three crucial elements of creating and sustaining distance and online communities of learners are cognitive, social, and teacher presence. These elements are fundamental to ensuring that the educational contexts and environments framing a course of study are understood and engaged.

This chapter interrogates a graduate pre-service teacher education course at an Australian university in terms of its efficacy in facilitating and enacting these elements. The chapter identifies the centrality of presence, multiple and mutual responsibilities, the requirement for technologies to serve human needs, and the importance of explicating and interrogating contexts and environments as vital to sustainable communities of learners.

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#### Introduction

The notion of community underpins much of the recent and contemporary discourse framing social theory (AUTHORS, 2005). It seems that, as the certitudes of modernity have given way to the uncertainties of postmodernity, a focus on community holds some promise of establishing shared meaning-making and commonality of purpose, *albeit* within a carefully circumscribed context. This focus has certainly framed such concepts as imagined communities (Anderson, 1983), phantom communities (Durham, 1998), relational communities (Smith, 2005), and symbolic communities (Cohen, 1985).

Within education, community has been deployed as both a theory and a set of strategies to strengthen the bonds between learners and educators and among learners. This has been the case, for example, with the notions of communities of practice (Wenger, McDermott, & Snyder, 2002) and of cooperative communities (Johnson & Johnson, 1998). This approach is generally aligned with a socially constructivist conception of learning (Vygotsky, 1978), highlighting communication, dialogue, and interaction (Anderson, 2003) as crucial vehicles for the development of understanding.

This assumed and desired interplay between community and learning has particular resonance in the fields of distance and online education. Those commentators who privilege face-to-face contact as the educational 'norm' insist that there is greater pressure on distance and online education to establish communities of learners to compensate for the inherent disadvantage arising from the absence of such contact (Kruger, 2000). By contrast, champions of distance and online education argue that asynchronous communication and multiple educational sites help to disrupt the educator–learner binary and create new opportunities for revisioning relationships, responsibilities, and roles across and within those sites (Edwards, 1995).

This chapter engages with this interplay between community and learning by exploring the dynamics and the tensions within one specific case of distance and online education: a graduate pre-service teacher education course at the University of Southern Queensland in Australia. The course, entitled GDE3002 Contexts and Environments, was developed by a team of four, three of whom and a new academic staff member taught the course for the first time in Semester 1 (February to June) 2006 (and wrote this chapter). The authors deploy Anderson's (2004) useful distinction among cognitive, social, and teacher presence as a conceptual lens for reflecting on the processes and strategies underpinning the course's development and teaching and for interrogating the course's efficacy in generating and facilitating a community of learners. On the basis of that reflection and interrogation, four requirements for successful and sustainable communities of learners are distilled.

The chapter is divided into four sections:

- A brief review of the current literature related to cognitive, social, and teacher presence
- An account of the design and implementation of GDE3002 Contexts and Environments

- An examination of the course's capacity for enacting cognitive, social, and teacher presence
- An elaboration of four implications for the success and sustainability of communities of learners as a contemporary trend in distance and online education.

#### **Literature Review**

It is easy to understand why cognitive, social, and teacher presence constitute an accessible and attractive conceptual framework for distance and online education researchers, particularly those concerned about establishing communities of learners. On the one hand, presence evokes the engagement and interaction assumed to lie at the centre of the learner–educator relationship, whether face-to-face or mediated by space and/or time. Presence also betokens the empathy, encouragement, interest, and support and the emotional dimension of being human on which that relationship is presumed to be based. On the other hand, the cognitive, social, and teacher elements of such presence elicit the three commonly accepted modes of interaction in education: respectively student–content; student–student; and student–teacher (Anderson & Garrison, 1998). If distance and online programs and courses can facilitate genuine cognitive, social, and teacher presence and harness these modes of interaction, their pedagogical effectiveness would seem to be heightened, if not assured.

One caveat is appropriate here: the title of the chapter (Anderson, 2004) from which the framework deployed in this chapter is taken is "Teaching in an Online Learning Context". While the authors assert the utility of that framework in reflecting on and interrogating the course discussed here for its capacity to facilitate a community of learners, they acknowledge that that framework derives from the specific concerns and interests of the teaching staff in the course. It is hoped in subsequent research to glean and analyze the multiple perspectives of the students and other stakeholders in the course and the program to which it contributes.

#### [Insert Figure 1 about here]

That proviso having been noted, the authors turn to the model elaborated by Anderson (2004), based on earlier work by Garrison, Anderson, and Archer (2000), and represented in Figure 1. That representation places central emphasis on the nature and quality of the educational experience, to which each of cognitive, social, and teaching presence makes a vital contribution, specifically by means of the simultaneous processes of selecting content, supporting discourse, and setting climate. Anderson (2004) contends that "deep and meaningful learning results when there are sufficient levels" (p. 274) of all three types of presence; they are therefore interdependent and iterative.

Firstly, according to Anderson (2004), cognitive presence is crucial to ensuring "that serious learning can take place in an environment that supports the development and growth of critical thinking skills" (p. 274). Furthermore, cognitive presence "is grounded in and defined by study of a particular content; thus, it works within the epistemological, cultural, and social expression of the content in an approach that supports the development of critical thinking skills…" (p. 274). This form of presence accords directly with the student–content interaction mode noted by Anderson and Garrison (1998).

Secondly, Anderson (2004) states that social presence "relates to the establishment of a supportive environment such that students feel the necessary degree of comfort and safety to express their ideas in a collaborative context" (p. 274). It follows that the absence of social presence "leads to an inability to express disagreements, share viewpoints, explore differences, and accept support and confirmation from peers and teacher" (p. 274). This form of presence articulates particularly with the student–student interaction mode identified by Anderson and Garrison (1998).

Thirdly, Anderson (2004) postulates that teaching presence "is critical" to "formal education" (p. 274). Drawing on the work of Anderson, Rourke, Archer, and Garrison (2001), he identifies "three critical roles that a teacher performs in the process of creating an effective teaching presence" (p. 274):

The first of these roles is the design and organization of the learning experience that takes place both before the establishment of the learning community and during its operation. Second, teaching involves devising and implementing activities to encourage discourse between and among students, between the teacher and the student, and between individual students and groups of students and content resources....Third, the teaching role goes beyond that of moderating the learning experiences when the teacher adds subject matter expertise through a variety of forms of direct instruction. (p. 274)

This form of presence links clearly with the student–teacher interaction mode posited by Anderson and Garrison (1998).

While the authors consider that the conceptual framework represented by Figure 1 is relevant and robust in relation to the course under review in this chapter, it is appropriate to acknowledge that other contemporary literature questions the centrality of the three types of presence. Some concern (Kehrwald, 2006) derives from the fact that the most commonly cited explanation of social presence occurred in the mid 1970s (Short, Williams, & Christie, 1976), and that it is likely to require some updating, particularly in view of the unprecedented technological developments since that time. Another source of critique has been the assertion that, rather than social presence helping to explain why particular media communicate the impression of the presences of others, "...all media have an inherent degree of richness..." (Hiltz, Coppola, Rotter, & Turoff, 2000, n.p.) but also that "No medium is richest on all media characteristics, and the relationships between communication processes and media capabilities will vary between established and newly formed groups, and will change over time" (n.p.).

Although these concerns have some merit, the authors find more persuasive Luppicini's (2002) identification of what can be seen as an elaboration of social presence: the notions of sociopolitical and sociocultural presence. According to Luppicini, sociopolitical presence "concerns normative and pragmatic rules in sociopolitical structures" (p. 97). Distinguishing between, and studying, these rule types are important, because "...there are political structures, contests, conflicts, environmental factors, and change at the base of any society" (p. 97). Similarly, sociocultural analysis "describes an inquiry into values, beliefs, and communication styles developed by a group of people in a particular human environment" (p. 97). In Luppicini's view, "Sociopolitical and sociocultural presence is gradually growing in recognition as an important aspect of computer-mediated learner communities" (pp. 97-98). For the authors, this recognition attests to the understanding of the politicized contexts and environments in which

distance and online education are enacted – an understanding that resonates with the concerns of the course as elaborated below.

Thus Anderson's (2004) focus on cognitive, social, and teacher presence, leavened by current critiques of social presence, constitutes a timely and useful framework for the authors' interrogation of the capacity of GDE3002 Contexts and Environments to facilitate the development of a distance and online community of learners. That interrogation is preceded by an account of the design and implementation of the course in the first half of 2006.

#### **Designing and Implementing GDE3002 Contexts and Environments**

The Graduate Diploma in Learning and Teaching was developed and accredited in 2005 by the Faculty of Education at the University of Southern Queensland in response to government changes to teacher education programs in Queensland. Until the mid 1990s, prospective teachers chose between a four year full-time undergraduate pathway and a one year full-time graduate entry pathway to qualify for registration, then from the mid 1990s to the mid 2000s the graduate entry pathway was doubled to two years full-time. A review of graduate entry programs recommended the reversion to one year full-time, partly to bring them into line with equivalent programs offered by universities in other Australian states.

In developing a new graduate entry program in response to this change, the Faculty of Education at the University of Southern Queensland decided to offer the program in two modes: on-campus (face-to-face); and online (using the WebCT course management system). Despite this distinction, all students in the program have a broad commonality of learning experiences; face-to-face students have access to intensive workshops throughout each course but the central pedagogy is focused on online facilitation of engagement with written study materials to which all students have access (a point that highlights the cultural expectation at the university that all students, regardless of delivery mode, need to engage with contemporary technologies in their learning). This approach was intended to maximize development and teaching efficiencies in a situation where the program had to be designed and implemented in a concentrated time period, and also to articulate with the demographics of the university's student population, nearly 80% of whom are external or distance students and 30% of whom are international students. The university has a well-established reputation for providing distance and online education, and the program developers sought to capitalize on that reputation in structuring and teaching the program.

The eight courses in the program are intentionally diverse, as befits a program seeking to certify contemporary registered teachers, yet they have some features in common:

- The courses support specialization in early years, primary, secondary, or further education and training
- The courses are structured around a 'problem-based' pedagogy
- The courses are intended to prepare students for, and to be enriched by students' experiences during, periods of professional attachment in educational settings
- The courses contribute to a compulsory initial residential workshop and/or optional supplementary workshops

- Each course has its own website using WebCT, consisting of downloadable course materials (typically a course specification, a study guide, and additional readings), announcements, and asynchronous discussion lists, with the capacity for recorded lectures and/or Macromedia Breeze presentations to be added
- Each course has a series of face-to-face workshops for students able to visit Toowoomba, the university's principal campus.

Within that broader context, GDE3002 Contexts and Environments is one of four courses studied by full-time students in the first of the two semesters of the program (see also AUTHOR, accepted for publication). The course has the following rationale:

Socio-cultural and socio-political factors are powerful influences on the environments in which teachers conduct their work in schools and, in turn, on the environments that they establish for their work with students. In the broader context of globalisation, with its attendant homogenising forces, inclusive practice needs to recognise the differences that students and communities bring to the learning context. In order to design teaching and learning environments that are socially just and inclusive, teachers require an understanding of the socio-cultural realities of learners and the positioning of schools within particular cultural contexts and locations. (University of Southern Queensland, 2006, p. i)

Likewise the course synopsis is as follows:

This course is designed to assist students to understand the range of social and political forces that interact to shape the nature of educational contexts and environments within schools, as well as the cultural identities of the individuals within schools. Understandings of these forces and trends are connected to exploration of whole-school and individual-teacher approaches to the establishment of inclusive learning environments. Awareness of how particular schools respond to particular features of their socio-cultural communities is explored through the lens of a social justice approach to meeting the needs of 'at risk' groups. The course provides for a nominal 7.5 days of professional attachment to an identified school. During this period of attachment students will be immersed in the day-to-day operations of the school and in the work of a teacher, with a particular focus on the connections between that work and the issues covered in this course... (University of Southern Queensland, 2006, p. i)

The course has nine objectives, some specific to the course and others generic, whereby:

On completion of this course students will be able to:

- 1. identify the key elements of inclusive learning environments
- 2. demonstrate knowledge of the socio-cultural, legislative, systemic and educational contexts that inform quality teaching for diversity
- 3. understand the application of ecological theory in a particular context
- 4. identify the implications and ramifications of actions taken at different levels of an education system
- 5. apply whole of school and community approaches to social justice in education
- 6. demonstrate knowledge, understanding and skill in the use of appropriate personal, professional and academic literacies
- 7. demonstrate knowledge, understanding and application of appropriate ICT uses for teaching and learning in a particular context

- 8. apply an understanding of contexts and environments in the professional attachment
- 9. articulate an example of how the key concepts encountered in this course can be applied in an educational setting. (University of Southern Queensland, 2006, p. ii)

The course content has been divided into four modules, each constituting one quarter of the study guide (AUTHORS, 2006), one quarter of the facilitated online discussion and one workshop for face-to-face students:

- 1. Socio-cultural influences on individuals, schools and education
- 2. Whole-school and community approaches to inclusivity and social justice
- 3. Features of inclusive learning environments
- 4. Educational reform and the role of the teacher. (University of Southern Queensland, 2006, p. ii)

The course's summative assessment consists of three items:

- 1. Proposal for problem-based presentation (10%)
- 2. Problem-based presentation (40%)
- 3. Professional attachment (50%) (University of Southern Queensland, 2006, p. iv).

Teaching team members assess students for the first two items; the remaining 50% is assessed by each student's professional attachment supervisor.

The course specification – and hence the rationale, synopsis, objectives, four content areas, and summative assessment items – had been written by the program coordinator as part of the program accreditation process; while he sought input and feedback from academic staff members, many of them had minimal involvement because they were not aware at that stage whether they would be developing and teaching specific courses. Three of the authors and another academic staff member wrote the four modules in the study guide over a period of three to four weeks at the beginning of 2006. The study guide and selected readings were loaded onto the course website prior to the commencement of the semester of the first teaching of the course, which at the time of writing this chapter is drawing to a close. Each of the four authors of the chapter facilitated the course's discussion list for the three weeks allocated to that person's module and presented one two hour workshop at the Toowoomba campus for students who were able to attend; two of those workshops were recorded 'live' and then uploaded onto the course site, while the facilitators of the other two workshops subsequently recorded Macromedia Breeze presentations with PowerPoint slides and an audio commentary that were loaded onto the site.

#### Cognitive, Social, and Teacher Presence in the Course

The literature having been reviewed and the course having been outlined, the authors turn now to apply the three types of presence (Anderson, 2004) as a conceptual framework for evaluating the course's effectiveness in promoting a distance and online community of learners. This evaluation deploys a single case exploratory design within the case study method (Stake, 1995; Stark & Torrance, 2005; Yin, 1994), with the goal being an intensive examination of a contextualized phenomenon and the identification of possible implications beyond that phenomenon, rather than generalizability across contexts and phenomena.

Cognitive presence

As was noted above, cognitive presence is designed to foster effective student—content interaction and to work "within the epistemological, cultural, and social expression of the content in an approach that supports the development of critical thinking skills…" (Anderson, 2004, p. 274). This implies a capacity to help to bring the course content 'to life' for students and to facilitate their making direct and substantial links between that content and their respective and shared lifeworlds and worldviews. In this respect, the focus was on using cognitive presence to developed shared pedagogical understanding in ways that were as dialogical as possible.

Each member of the course development team approached the task of writing her or his module for the study guide from the perspective of this goal – of making the text of the module as engaging and dialogical as possible. A number of textual strategies was used to further this goal, ranging from posing in-text questions to reflecting on multiple possible interpretations of particular readings to making explicit the author's specific standpoint with regard to the intentions of the module. This was particularly important with the first module, which provided the conceptual tools and vocabulary for students to develop their own positions in relation to complex contemporary educational issues.

Similarly, each member of the course teaching team used the three week online facilitation of her or his module, and the two hour workshop for face-to-face students, to draw students' attention to aspects of the course content felt to be crucial to helping the students to meet the course objectives (and in the process to develop critical thinking skills) and to completing the summative assessment items. The emphasis was consistently on maximizing cognitive presence by explaining difficult or unfamiliar concepts of vocabulary, highlighting links and resonances across modules, identifying areas of debate and dissension within the content, and suggesting strategies for time efficient approaches to engaging with complex and lengthy material.

Despite the development and teaching team members' best efforts, many students in the course's first cohort found the course content difficult and even inaccessible. Their initial degrees, on which their status as graduate entry teacher education students depended, varied widely, from arts and cultural studies to engineering and fine arts to law and media studies to nursing and science. Some students with backgrounds in arts, cultural studies, and sociology had an existing familiarity with many of the course concepts; others had no such familiarity and felt at a distinct disadvantage. Moreover, some students had completed those initial degrees one or two years before enrolling in this program, whereas others had last studied formally several years previously and some of them found the return to university study difficult. Furthermore, some students were resistant to the idea of developing their own philosophy and pedagogical approach, seeming to expect that teaching team members would tell them what that approach should be.

This situation of variability in students' capacity – and/or willingness – to engage with admittedly cognitively complex course content exercised the minds and challenged the respective pedagogical approaches of the teaching team members during and between team meetings (with varied views, for example, about the levels and types of cognitive scaffolding appropriate and possible to provide to students). Informal observation suggested that it was also a concern of teams teaching the three other courses in the first semester of the program. The team members will need to engage in careful and reflexive dialogue, informed by the students' final grades for the course and their completed course

evaluation surveys, in order to see whether the presentation of the course content can be adapted in order to enhance the course's cognitive presence. At the same time, it is important for students and team members alike to recollect the course's intended contribution to certifying program graduates who are 'industry ready' and capable of making the transition to effective classroom practitioners, so it is vital not to 'water down' content in ways that render that contribution null and void.

#### Social presence

Anderson's (2004) conception of social presence, which is focused particularly on student–student interaction, is that it "relates to the establishment of a supportive environment such that students feel the necessary degree of comfort and safety to express their ideas in a collaborative context" (p. 274), and that the absence of social presence "leads to an inability to express disagreements, share viewpoints, explore differences, and accept support and confirmation from peers and teacher" (p. 274).

The course online discussion list was the most prominent intended vehicle for the promotion of students' social presence. While it is not easy to identify the percentage of students who sent posts regularly compared with those who sent only one or two messages or who sent no posts at all, it is clear that several students were 'lurkers' who read other students' posts and learned from them but for a variety of reasons declined to send messages themselves. Through email messages and/or telephone calls to individual teaching team members, some students said that they felt overwhelmed by the course content and had a view that some other students had a far more decisive grasp on understanding that content than they had, rendering them disinclined to demonstrate what they perceived as their relative ignorance of the material.

At the same time, several students took advantage of the medium to send and respond to others' posts, and thereby to develop and display their social presence. These messages were of various types, including:

- Introducing themselves to other students and teaching team members
- Asking questions of teaching team members, generally about content and/or summative assessment requirements
- Responding to comments and/or questions posted by teaching team members
- Responding to comments and/or questions posted by other students (for example, sending copies of readings that the posting students had been unable to download)
- Presenting alternative views to those posted by other students (for example, dissenting from a proposal for changing the dates of the optional mid-year residential school, on the grounds that they had already made arrangements for attending on the previously advertised dates, and presenting an alternative experience of teaching in schools organized by specific Christian denominations)
- Striving to establish face-to-face study groups (for example, among students living in the same geographical area)
- Striving to establish face-to-face social groups (for example, inviting students living in Toowoomba to meet for drinks at the university student club on Friday afternoons during the period of professional attachment).

A few observations are worthwhile making about the character and significance of these multiple enactments of students' social presence. The first and most striking for the teaching team members was the wide array of responsibilities that students continued to discharge at the same time as participating in full-time university study. These responsibilities ranged from paid employment (in some cases more than 30 hours per week), caring for family members, becoming married and giving birth during or at the end of the semester. While this trend conforms with McInnis's (2001) analysis that university study is not at the center of contemporary students' lives and has to compete with manifold other interests and pressures, teaching team members were concerned that some students had an unrealistic idea of the level of engagement needed to complete the course satisfactorily, and that this did not augur well for their understanding of what would be required of them as practicing educators.

The second and related observation is the apparently wide diversity of student attitudes and approaches to studying in the course (and presumably in the program as a whole). Some students had clearly read and reflected on the study guide and selected readings at considerable depth, and addressed numerous questions to teaching team members, both on the discussion list and via individual email messages (in a few cases, seeming to fixate on relatively minor details of presentation). Others displayed a minimalist approach to study, sometimes allied with a high level of dependency on academic staff members that seemed to assume that it was the staff members' responsibility to provide the answers for the students to reproduce in their summative assessment items. One example of this was a few posts to the discussion list, along the lines that other universities that had student teachers at the same professional attachment site as these students expected far less of their students in terms of levels of commitment and engagement.

The third and perhaps corollary observation is the tension evident between students being willing to assist one another to find information and to suggest possible alternative ways of approaching their summative assessment items on the one hand and being covertly and overtly competitive with one another on the other. It was certainly the case that the summative assessment items were individualized and that no attempt was made to initiate online teamwork. At the same time, there was relatively little effort invested by students in building on other students' responses to questions in the online discussions.

Finally in relation to social presence, as noted above Luppicini (2002) provided a useful elaboration of this concept with his reference to sociopolitical presence, which focuses on the "political structures, contests, conflicts, environmental factors, and change at the base of any society" (p. 97), and to sociocultural presence, which "describes an inquiry into values, beliefs, and communication styles developed by a group of people in a particular human environment" (p. 97). Certainly GDE3002 Contexts and Environments is centrally concerned with these deeply embedded forces and structures that construct historical and contemporary meaning for multiple individuals and communities, particularly in relation to their impact on the possibilities and constraints of formal educational provision; this is exemplified in the first module in the course, "Sociocultural influences on individuals, schools and education". Given that orientation, it was pleasing that students selected as their concept from that module such notions as agency, critical pedagogy, identity, and public pedagogies. Yet it is also fair to remark that students varied widely in the level of engagement with the sociopolitical and sociocultural dimensions of presence and in their demonstration of the degree of reflexivity required to assign to those dimensions the prominence that they warranted.

#### Teacher presence

Anderson's (2004) major focus was on teaching presence and on the student-teacher interaction mode, which the authors have interpreted in terms of their capacity as teaching team members to facilitate the course's status as a community of learners. The authors follow Anderson's distinction among design and organization, facilitating discourse, and direct instruction as "three critical roles that a teacher performs in the process of creating an effective teaching presence" (p. 274).

#### Design and organization

Anderson noted that "The first of these roles is the design and organization of the learning experience that takes place both before the establishment of the learning community and during its operation" (p. 274). As was outlined above, the development and teaching team members drew on their respective and shared experiential and theoretical knowledge in writing and/or facilitating their designated modules in the course. For example, the author and facilitator of the first module deployed his expertise in cultural studies and social theory to devise a conceptually rigorous yet empirically grounded account of the interface between sociocultural ideas and education. The author of the second module, about whole-school and community approaches to inclusivity and social justice, interpreted that topic through the lens of her own Indigeneity and her interest in Indigenous ways of knowing and understanding the world and education, while the facilitator of that module brought to the task her experience and research in school leadership and revitalization. The author and facilitator of the third module, which dealt with the features of inclusive learning environments, extrapolated from her working knowledge of, and teaching about, such environments in early childhood education and from the perspective of ecological theory. The author and facilitator of the fourth and final module, concerned with educational reform and the role of educators, framed the module in terms of his interest in the links between educators' work and identities and illustrated this framing by reference to teachers of occupational Travellers such as circus and show communities, the subject matter of his research with other colleagues.

From this it was made clear to students that, rather than being neutral vehicles or passive ciphers for the delivery of content, the development and teaching team members were an integral part of the course's design and implementation. Moreover, individually and in combination they had significant and widely ranging experience as learners, educators, and researchers across a diversity of educational sectors and systems and across a number of different countries. In this way, the team members were modeling to students the kinds and levels of engagement and reflexivity that they expected the students to demonstrate throughout the course. Thus the course design and organization both highlighted and depended on a strong level of teacher presence to set the parameters and lay the foundations of establishing a community of learners.

#### Facilitating discourse

As the second element of teacher presence, Anderson (2004) noted that "teaching involves devising and implementing activities to encourage discourse between and among students, between the teacher and the student, and between individual students and groups of students and content resources" (p. 274). As with other types of presence, the online discussion list was the most appropriate medium for the facilitation of this

discourse, enhanced by such strategies as a rapid rate in teaching team members responding to students' posts and individual email messages and ensuring that such responses were phrased in ways that fostered ongoing dialogue rather than closed down conversation. Moreover, team members emphasised that they were also learners and asserted frequently the importance of listening to and understanding other people's opinions. Again as with other types of presence, the authors' analysis suggests a 'mixed picture' about teacher presence being used to facilitate widely ranging and deeply reflexive discourse in the course.

On the one hand, it was clear that as the semester progressed the level of student commentary became more highly developed, with some students engaging with such issues as multiple and potentially conflicting understandings of social justice and the extent to which some teachers resisted what they perceived as the malign effects of specific educational reforms. This was particularly the case once students had commenced their periods of professional attachment: many of them seized the opportunity to use the theoretical concepts encountered in the course as lenses for reflecting on their practical experiences, and some of them also moved in the reverse direction, by subjecting the concepts to critique for relevance and utility on the basis of those practical experiences.

On the other hand, the great majority of student posts were submitted to the topics and categories which had been established by the teaching team members and which predictably focused on the four modules and the two summative assessment items that those team members were responsible for assessing. Students did have a capacity to create new discussion headings under "Default topic"; these ranged from "Reading 2.1 where is it?" and "Reading 2.1 found" to "assignment submitted to wrong course" to "Friday afternoon drinkies". Furthermore, the author and development and teaching team member who was also the course coordinator submitted 278 or nearly 28% of the 995 posts submitted at the time of writing this chapter. While many of those posts were intended to pose and respond to questions and thereby to facilitate discourse, the sheer volume of posts emanating from a single person who was also the course coordinator suggests the risk that much of the communication was monological rather than dialogical (Bakhtin, 1984).

#### Direct instruction

Anderson (2004) identified direct instruction as the third element of teacher presence: "....the teaching role goes beyond that of moderating the learning experiences when the teacher adds subject matter expertise through a variety of forms of direct instruction" (p. 274). Given the distributed and mediated character of the course design, direct instruction was not a prominent feature of GDE3002 Contexts and Environments; instead the emphasis was on the course study guide and selected readings and the course discussion list being used as vehicles to facilitate student engagement and understanding. The goal was to maximize links between the course content and the students' own settings, by posing questions such as "What is happening, and how does this relate to you and your setting?".

Direct instruction as an aspect of teacher presence was most clearly evident in the two hour face-to-face workshops conducted at the Toowoomba campus of the university, one workshop being facilitated by each of the four teaching team members. Yet even with those workshops the practice was generally to intersperse a relatively small amount of content from the respective module with suggested strategies for completing the summative assessment items. The provision of feedback to individual students about each completed assessment item was another opportunity for a form of direct instruction; a complication with that was that, owing to workload allocations, about 50 students' work was assessed by a contracted marker who was not a member of the course development or teaching teams and who was not paid to have direct contact with students apart from her marking of their work. Direct instruction was also facilitated by means of the Macromedia Breeze presentations, which dealt with summative assessment items and the importance of listening skills by means of focused input by two of the course teaching team members.

### Implications for the Success and Sustainability of Distance and Online Communities of Learners

It is clear from the preceding analysis that the course development and teaching team members' efforts to establish cognitive, social, and teacher presence in GDE3002 Contexts and Environments have achieved varying degrees and levels of success. This is hardly surprising, given the complexity of and speed in developing and implementing a mixed mode course concerned with largely intangible yet pervasive and influential elements of educational provision.

From this analysis, the authors have distilled four key implications for what they envisage as the potential success and sustainability of distance and online communities of learners, which in turn they perceive as one of the key contemporary trends in distance and online education. These implications focus on the ongoing centrality of presence, the multiple and mutual responsibilities for establishing and maintaining communities of learners, the requirement for media and technologies to serve different kinds of human aspirations and needs, and the importance of explicating and interrogating the educational contexts and environments in which communities of learners are situated.

Firstly, the analysis presented in this chapter has reinforced to the authors the ongoing centrality of cognitive, social, and teacher presence in any educational enterprise. Despite the concerns noted in the literature review about the continuing relevance of the concept of presence, the authors argue that these three types of presence have provided a relevant and robust conceptual framework for interrogating the course's efficacy in generating a coherent and productive community of learners. Furthermore, that framework will be indispensable in the enduring task of evaluating and refining the course so that it maximizes students' learning outcomes and the development of that community of learners. As Anderson (2004) noted at the end of his chapter about teacher presence:

As yet, we are at early stages in the technological and pedagogical development of online learning. But the fundamental characteristics of teaching and learning and the three critical components of teacher presence...will continue to be critical components of teaching effectiveness in both online learning and classroom instruction. (p. 291)

Secondly, the preceding analysis reinforces the interdependence of students, course development and teaching team members, and other stakeholders if learning is to be maximized and if a community of learners is to be generated and sustained. The

responsibilities of individuals and groups within such a community need to be both multiple and mutual. In a sense this point has been exemplified by the development and teaching team members, who despite not having worked together previously have quickly found common ground as well as areas of individual contribution, derived from their separate and collective abilities and interests. This kind of interdependent and iterative working relationship is very difficult to render scaleable, particularly across space and time, yet it is crucial to do so as one of the pillars underpinning a genuine community of learners. Here the five principles of cooperative communities (Johnson & Johnson, 1998) – positive interdependence, individual accountability, promotion of one another's success, interpersonal and small group skills, and group processing – would seem to be particularly helpful in providing some possible navigational tools for ways to proceed.

Thirdly, the analysis in the chapter calls attention to the relativities of the relationship between media and technologies on the one hand and human beings on the other. Communities of learners work most effectively when media and technologies serve the aspirations and needs of human beings, rather than *vice versa*. The best utilization of media and technologies in educational settings occurs when those media and technologies are seamless and invisible parts of the educational process, not when they act as frustrating or even ominous gatekeepers (as, for example, when some students were unable to work out how to submit their summative assessment items electronically via the course studydesk). Hodas's (1993) notion of 'technology refusal' is a timely reminder that what some technology developers regard as benign and innocent media of instruction can be seen by other people as malign instruments of control, to be resisted at all costs. The technological framework for distance and online community of learners must facilitate shared meaning-making and understanding, not replicate existing sociocultural inequities and/or create new ones.

Fourthly, the subject matter of the course under review highlights the importance of explicating and interrogating the educational contexts and environments in which particular communities of learners are situated. Some aspects of those contexts and environments are clear and visible; many other aspects are intangible and invisible, rendering that explication and interrogation even more necessary and significant. To that end, with appropriate alterations to broaden its scope and reach, the course's rationale might serve as a useful starting point for discussions of how to make the educational contexts and environments of communities of learners part of the process of establishing and sustaining those communities:

Socio-cultural and socio-political factors are powerful influences on the environments in which teachers conduct their work in schools and, in turn, on the environments that they establish for their work with students. In the broader context of globalisation, with its attendant homogenising forces, inclusive practice needs to recognise the differences that students and communities bring to the learning context. In order to design teaching and learning environments that are socially just and inclusive, teachers require an understanding of the socio-cultural realities of learners and the positioning of schools within particular cultural contexts and locations. (University of Southern Queensland, 2006, p. i)

#### Conclusion

This chapter has presented a case study of the development and implementation of a single graduate pre-service teacher education course at the University of Southern Queensland in Australia. That case study used cognitive, social, and teacher presence (Anderson, 2004), leavened by sociopolitical and sociocultural presence (Luppicini, 2002), as a conceptual framework for evaluating the course's efficacy in generating a community of learners. The evaluation demonstrated that, while the course development and teaching teams have achieved some positive outcomes in terms of such a community, ongoing work is required to consolidate and sustain that community.

The chapter began by pondering the continuing focus on communities. The analysis presented in the chapter helps to explain why community persists in exercising the minds and engaging the spirits of learners, educators, and other educational stakeholders, regardless of educational sector, system, and mode. Certainly the course development and teaching team members, and many of the students, have felt that the elements of a community of learners help in the complex task of communicating sometimes cognitively difficult content and of assisting students to engage with that content and of making links between it and their professional attachments. Assumptions about the co-construction of knowledge and that learning is cooperative rather than individualized or competitive underpin the aspiration to make the course the framework and vehicle for fostering lifelong and lifewide learning partnerships, pathways, and pedagogies (AUTHORS, 2006).

Yet the four implications distilled from that analysis highlight that achieving this aspiration is neither automatic nor easy. The authors contend that the centrality of presence, multiple and mutual responsibilities, the requirement for technologies to serve human needs, and the importance of explicating and interrogating contexts and environments are necessary but by no means sufficient conditions for the attainment of successful and sustainable communities of learners. The importance of continuing educational work – learning, teaching, policy-making, and research – to ensure that attainment is undeniable; the authors hope that this chapter and the book to which it contributes will augment the effectiveness, energy, and equity of that work.

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