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Constructing knowledge, identity and community in asynchronous discussion forums: socio-semiotic perspectives in online learning

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Constructing knowledge, identity
and community
in asynchronous discussion forums:
socio-semiotic perspectives
in online learning

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THESIS CERTIFICATION

I, Janine Louise Delahunty, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Education, Faculty of Social Sciences, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution

.....

Janine L Delahunty

20 March, 2014

ABSTRACT

This thesis explores the nature of engagement in asynchronous discussion forums in fully delivered online courses in higher education; in particular, online engagement as part of the total subject design. It addresses a number of research questions to understand how online discussion forums shape the teaching-and-learning experience, namely: What kinds of knowledge are socially constructed in online forum interactions? What is the role of interpersonal contributions in fostering/inhibiting student engagement in forum interaction, and in building a sense of community? What is the role of the instructor in mediating online discussion?

The study was motivated to understand how interaction - essential for reducing isolation, constructing knowledge and building community - was affected by the disruption to interactivity caused by lack of physical presence, hence of immediacy for clarification; lack of meaning-making cues (gesture, voice variation etc); and the incongruence of written discussion, i.e. interacting in a written format. It is concerned with pedagogical implications for online participants, as achieving effective interaction can be elusive in online discussion forums.

The study investigated three postgraduate online TESOL classes at an Australian regional university. It adopts a qualitative multiple case study design to examine the discussions as they unfolded in an authentic online classroom environment over one academic semester. Data comprises discussion forum texts, supplemented by interviews (with academic subject designers, instructors and students) and surveys of student perceptions (on learning and community), as well as pedagogic artifacts from the learning sites (topic guides, discussion tasks, learning resources etc).

The research reported takes a socio-semiotic approach; that is, it draws on the complementarity of sociocultural theory (Vygotsky, 1978) and social semiotics (Halliday 1978; 1985). The combination of Sociocultural and Systemic Functional Linguistics (SFL) theories provides a robust framework to analyse the complexities of language use in the online teaching-learning context, enabling focus to move from the macro-level of context, to the micro-level of specific instances of text. The interpersonal dimensions of forum interactions were examined using Appraisal – the system offered within SFL theory to account for linguistic expressions of affect, opinion and evaluation. Similarly, the joint

construction of knowledge, ideas via forum dialogue, are described using Transitivity and Logicosemantics – systems which describe the nature of ideas being exchanged and the relations between them.

The analysis reveals that identity formation is an important but under-explored area in online learning concluding that social dis/alignments and perceptions of (positive/negative) identity caused learners to become more or less engaged in interaction. It suggests that ‘identity trajectory’ is a way of understanding the opportunities for engagement that are taken up or constrained by one’s perceptions of identity, constructed in socially negotiated relationships. The study demonstrates the crucial role of instructor mediation in shaping dialogic opportunities that move learners towards new understandings. Close attention to the unfolding language choices of the participants provides fresh insights into the complex relationships between the intersubjective and experiential in adult learning environments. Finally the study proposes three online talk types – non-dialogic online talk, online cumulative talk and online exploratory talk. This highlights the notion of attending to (the online equivalent of face-to-face ‘listening and responding’) as a precursor to effective online interaction which opens dialogic space for co-construction of knowledge.

The thesis provides detailed analyses and commentary on how online discussion forums shaped the teaching-learning experience of the participants. The significance of the study is its contribution to online pedagogy and online design, which takes into account the agency of adult learners, the role of the instructor, and the development of mutual understanding and interpersonal connectedness. Importantly, it highlights that assumptions cannot be made of the online communicative expertise of learners (nor instructors) for engaging in pedagogically-effective asynchronous dialogue.

ACKNOWLEDGEMENTS

How to get there.

Go to the end of the path until you get to the gate. Go through the gate and head straight out towards the horizon. Keep going towards the horizon. Sit down and have a rest every now and again. But keep on going. Just keep on with it. Keep on going as far as you can. That's how you get there. (© Leunig, 2012)

Getting 'there' (or getting *here*) has not been a lone passage. Foremost, I am indebted to my supervisors Dr Pauline Jones and Dr Irina Verenikina, who have expertly guided me, stretched me and have been a source of inspiration and encouragement. I have learnt so much from you. Thank you.

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And to Patrick, Emma, Tim and Kate, words cannot express how grateful I am for our family, which you have now grown to eight. I am as proud of you as I know you are of me.

DEDICATION

This is dedicated to Patrick, who has been unwaveringly supportive of this as 'my time'.

And also to the youngest member of our family - my granddaughter Hazel, whose learning has only just begun, and what a delight it is!

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CHAPTER 1

Introduction

1.1 Overview

This study is concerned with the human, psychological aspect of online learning. Fundamental to the investigation is how people negotiate the social processes of learning in technology-mediated environments, which lack the usual ways of making meaning (linguistic and non-linguistic) that we take for granted in face-to-face interactions. Even though distance learning is not a new phenomenon, the literature to date suggests that there are still many issues with which educational practitioners are grappling, particularly around ensuring equity between on-campus and off-campus learners, and meeting the high expectations of students and tertiary institutions. This chapter points to some of the pedagogical¹ issues that have arisen in the eagerness of higher education providers to implement online learning. It also reveals the catalyst for this research project, and the aims the study hopes to achieve.

As higher education providers increasingly pursue cost effective methods for delivery of their programs, technological advancements are enabling rapid provision of contemporary, economically efficient programs. It should come as no surprise then, that options for learning online have experienced exponential growth. In an increasingly competitive market, tertiary institutions continue to seize the potential promised by e-learning technologies for bolstering student enrolments (potentially from across the globe) with relative cost effectiveness (Lynch & James, 2012; Michael, 2012). This, in addition to rising demand for flexible learning options is partly accounted for by the increasing numbers of mature-aged adults returning to (or commencing) formal tertiary study (ABS, 2007).

The affordances of online education may present as a welcome change to inflationary trends in the costs of on-campus education, such as reduced need for interstate or overseas travel between affiliated institutions, and the flexibility of transportable *anywhere-anytime* learning afforded by technologies (Michael, 2012). In the rapid shift to the affordances of online delivery, global ‘fashions’ (such as recent trends for *massive open online courses* or MOOCs) have often seen universities take on a ‘herd’ mentality for “fear of being left behind” (Daniel, 2012, p 6). Regardless, even if the attraction of technological innovations is for the anticipated benefits of increased enrolments, flexible learning options also provide access to life-long continuing education for students, and ensure the future of online learning in some form.

¹ While it is acknowledged that adult teaching and learning has been referred to as ‘andragogy’ (Knowles, 1980; Knowles, Holton & Swanson 2012) to distinguish the different approaches needed for adult learners, the present study adopts the term ‘pedagogy’ as this is more commonly accepted terminology which has grown to encompass education of both children and adults

However, research into what constitutes best online pedagogic practices continues to lag behind the rapid implementation and development of new technologies. While competition drives institutions to scramble for increased market share, this may not always be with the end-users in mind (Roberts & Crittenden, 2009). A consequence is that the online experience for both educators and learners can be fraught with tension, as decisions made to shift to online or blended deliveries at the institutional level may not always provide the practical or emotional support needed for its implementation (Mitchell & Geva-May, 2009). Some issues include management of dramatically increased class sizes, as well as apprehension towards integrating new technologies into teaching and learning, a phenomenon identified as *risk-aversion* (Howard, 2013). Other frequently reported issues are that learners are more prone to feelings of isolation (Kwon et al., 2010); that sense of community is often lacking (Koh & Hill, 2009); and that explicit development of online communicative skills is varied, together with perceptions towards online learning as a 'poor cousin' of face-to-face learning (Liu et al., 2007).

The abovementioned issues point to the complexity of the online learning experience, which by and large, revolves around the social nature of learning. According to sociocultural view, learning is not an individual intellectual exercise, but a social one (Vygotsky, 1978). This view of learning posits language in social activity as central to gaining new understandings, which occurs dynamically between the learner and a more experienced member of society, such as parent-child, teacher-student, older sibling-younger, manager-worker, etc (Vygotsky, 1978). It is through interactions, primarily mediated by language, that we learn about the world and our positioning within it, i.e. what is culturally valued, expected and appropriate. We acquire a good deal of knowledge as we make sense of the contexts we find ourselves in – described by Halliday (1978) as *becoming a person in society*. The process of *becoming a person* is a transformative one, which entails different kinds of learning: knowledge about the world, self-knowledge and knowledge about how we are positioned within different social situations, as Halliday (1978) explains,

It is by means of language that the 'human being' becomes one of a group of 'people'. But 'people', in turn, consist of 'persons'; by virtue of his participation in a group the individual is no longer simply a biological specimen of humanity – he is a person. Again language is the essential element in the process, since it is largely the linguistic interchange with the group that determines the status of the individuals and shapes them as persons (p 14).

If the shift to online learning moves too far towards what technology can *do* for learning, and not on the aspect of *people* involved in an experience of learning as a social process

(as the issues suggest), then this may put at risk the opportunities for community and expert input needed to become *who we are becoming*.

1.2 Background and rationale

"I'm more of the kind of person who likes to feed off of other people's face-to-face interaction and ideas and so I don't think it'll ever take the place of that"

"I don't think the quality of interaction will ever be as good as face-to-face discussions"

"... the biggest challenge is overcoming the isolation"

"The distance students were kind of left to fumble for themselves, and I guess the lecturer was busy with classes on-campus"

"I think for some people interaction is extremely important, and when you're studying overseas you do feel isolated sometimes"

"When I'm 80 I'm going back to uni and I'm going to live on-campus and be the old granny in the class! Because I do think that on-campus is just the best time!"

The catalyst for the research reported in this thesis occurred when I was reflecting on my own experience of online learning in 2009. These reflections were nurtured into the beginnings of a research project, and during its evolution have been continually buoyed by many people I have met during this time, eager to share their own experiences of learning at a distance. Snippets of these experiences captured in the comments above, highlight recurrent themes and, while not all were negative, they do reflect the challenges that lack of face-to-face contact brings to the online experience.

The motivation for this research began after I had completed two online subjects when in the latter part of a Masters of Education (TESOL), to bring forward my graduation date. As a part-time student for many years and as typical of many mature-aged learners, I was also juggling study with family and work commitments, so taking on more on-campus classes was not a manageable option. The decision to enrol in two online subjects was made easier because the timing of the distance intake largely coincided with the on-campus mid-session break, although there was some overlap.

My experience of the online subjects was (not surprisingly) quite different to on-campus, but the most surprising experience was in the differences between the two online subjects, specifically in how group discussion was used as part of the learning process – one in which discussion was designed-in as a central component, the other, it was not. In the first subject the discussion purposes and tasks were carefully explained and an assessment weighting given, while in the second subject there was little clarity about how

discussion forums should be used. Such different approaches fostered different participation - various levels of active through to non-participation. Non-participation on the forums rendered those students 'unseen' to the rest of the learning group. Because of my on-campus experience where interaction played a critical role in my learning process, I found the experience of the second subject to be quite an isolating one. As I embarked on this PhD study, I was soon to realise that this was a common issue in distance learning, identified in the early 1990s by Moore (1993). Moore theorised that the psychological and communications space traversed by learners and teachers increases or reduces the potential for misunderstanding (coined *transactional distance theory*). This marked my increasing interest in the different pedagogical requirements when learners are separated from each other, the lecturer and the institution, and particularly with transition to full online delivery (see for example, Garrison, 1993; Warschauer, 1997; Warschauer, 1998; Palloff & Pratt, 1999; Rourke et al., 1999; Garrison et al., 2000; Anderson et al., 2001; Garrison et al., 2001; Misanchuk & Anderson, 2001; Swan, 2002; Rovai, 2002a; Rovai, 2002c; Haythornthwaite & Kazmer, 2004; Rovai et al., 2005; Goertzen & Kristjansson, 2007) .

1.2.1 The educational issue

If the exponential development and uptake of online education by higher education providers has been more technology-driven, it has been argued that the pedagogically-driven needs of the end-users can be overlooked (Morgan & Adams, 2009; Salmon & Angood, 2013). Often universities can succumb to pressure to implement "the latest and greatest" in technology (Roberts & Crittenden, 2009 p 3) ahead of research into best practice. Indeed this was indicated by White in 2003, who argued that the issues off-campus students face have not been explored at the same pace as the implementation of new technology. As a result, feelings of isolation and disconnectedness can be exacerbated as students often grapple at once with acquiring new roles and online skills as well as being physically separated from the learning site. These are issues with which educators and learners are still grappling.

The educational issue at stake is that while face-to-face teaching and learning has had the 'luxury' of time to develop sound practice, online education has not. Technological developments provide ever-increasing means to implement a variety of flexible options such as blended learning² and fully delivered online courses. The ease for which this can occur in a relatively short space of time, provides one explanation for the lagging

² 'blended learning' is used here as a generic description of various combinations of on-campus and off-campus learning

investigation into effective online pedagogies, a sentiment echoed in the comments that begin this section. The shift to complete online delivery is perhaps *the* most significant change in distance education, which recent technology has made possible. A bonus is that communication technologies now provide greater potential for interaction and building interpersonal connections, previously unavailable in paper-based distance learning. This means that the component of 'interaction' has now been thrust into the distance learning milieu. Because of the importance of interaction in acquiring knowledge (Vygotsky, 1978; Halliday, 1978) the addition of a shared social dimension, which facilitates the potential for interaction and collaborative knowledge building through discussion, is promising for the virtual classroom. When viewed from a sociocultural perspective, it is fundamental to the learning process (Vygotsky, 1978; Warschauer, 1998; Mercer, 2000).

In any study of postgraduate learning, approached from a sociocultural perspective, it must be recognised that these learners have already mastered the resources for abstract thinking, unlike younger learners of interest in many studies (Vygotsky, 1978, 1997; Mercer, 1995; 2000; Mercer & Littleton, 2007; Gibbons, 2006). Therefore in online communications where written interaction constitutes the social activity, rather than accompanying it (such as when doing an experiment, or going on an excursion etc) as is often the case in sites of early education, the online environment would seem well suited to postgraduate learners. This of itself however, presents the challenge of how to tap into the range of diverse resources adults bring and to orchestrate these in collaborative activity. It also presents a paradox in that when communication is restricted to one mode (i.e. text-based asynchronous discussion) and not distributed between other modes of communicating, there is a greater potential in online contexts for misunderstanding, through the limitations this places on meaning-making and on the immediacy of clarification.

1.2.2 Postgraduate learners

Of course as for any part-time student you're juggling five different things – there's work, there's children, there's being a wife, being overseas, technological issues sometimes – all of that, together with trying to study and trying to use academic language again when you're out of practice a bit. Yeah, it's a bit of a challenge, and having to do it after a full day's work – baths and dinner and things like that. I think that's just a generic comment that applies to Masters programs throughout for part-time students.

The trend of increasing numbers of adult learners returning to tertiary study (ABS, 2007; Lynch & James, 2012) necessitates a different teaching-learning approach to that of younger learners due to the multiple demands on time, extensive life experience,

motivation and readiness to gain knowledge that adult learners possess (Stone & O'Shea, 2012). The comment above from one of the interviewed students in this study articulates well some of the challenges postgraduate learners are faced with on a daily basis.

This study extends sociocultural theories to the postgraduate online context. Some notable differences exist between postgraduate learners and younger ones. Knowles and colleagues argue that it is paramount for adult learners to perceive purposeful and authentic activities as relevant to their situations (Knowles, 1980; Knowles et al., 2012). Adults are most suited to collaborative group activities, according to Bonk and Kim (1998) because these mimic the reality of teamwork that occurs in their working and social lives. Teaching postgraduates also needs to take into account the considerable knowledge and experiences they bring to the learning, although not necessarily in the field of study. These authors agree that pedagogical practices need to recognise the intellectual resources and the self-directness that postgraduate learners possess (Knowles et al., 2012; Bonk & Kim, 1998), often developed through an intrinsic motivation to learn (Biggs & Tang, 2007). In addition diversity in experiences necessitates individualising interactional strategies in teaching and learning, particularly a readiness by teachers to develop links to relevant real-life situations, thus cultivating a more life-centred orientation to learning. Another point made by Bonk and Kim (1998) is that adults are often resourceful and may seek assistance from outside the learning institution through friends, relatives, work colleagues, or other text-based and online resources.

New educational settings, such as online learning, must also take into consideration that the educational experience of many older adult learners is that of teacher-centred education, in which collaborative activities and the active involvement of teachers may not have been typical of their earlier experiences (Bonk & Kim, 1998). Additionally, age difference between adult learners and their often much younger and less life-experienced teachers (even if more experienced in the subject area), is highlighted by Bonk and Kim as a substantial change in dynamics of 'student-instructor intersubjectivities' (1998, p 82). Thus in combination - new teaching approaches, diverse and paradoxical 'power' relationships, and the resourcefulness of adult learners - present as "one of the greatest challenges *and* opportunities in adult education" (Bonk & Kim, 1998, p 74; *italics mine*).

A further challenge is that adult learners returning to study after a break may bring with them insecurities, may be lacking confidence, or possess under-developed technological skills. Recognition of these as possible interferences to learning requires extra support and attention from teachers and the institution, as the following anecdote (2011, pers. comm.) illustrates,

The beginning was hard because I enrolled late, I didn't know where to log on ... the first four weeks were ... oh ... chaotic! I had to cram readings in. I couldn't manage at the beginning but now I'm on top of things ... I constantly emailed the instructor and course coordinator if I was stuck on anything ... so I felt safe and supported I guess.

There is also the likelihood that postgraduate learners return to education by choice for enjoyment with already-established careers, or as a career change (Lynch & James, 2012). In a collaborative environment the intrinsic motivation that postgraduate learners are likely to have developed can become a shared resource, which can make a valuable contribution to new understandings through discussion (Biggs & Tang, 2007; Knowles et al., 2012). Such opportunities for learning may be missed if the role of discussion is diminished in the online learning context.

1.3 Theoretical perspectives: learning, communication and language

Sociocultural theories underpin this study of learning as social activity. The position of the present study is that learning does not occur in social isolation and that social and psychological processes are mediated by language, which is a tool for collective thinking (Vygotsky, 1978; Mercer, 2000). Sociocultural approaches to understanding the nature of online interaction in teaching and learning, allow insight into the role of dialogue in the development of knowledge and intersubjectivities between adult learners and their teachers. As these relationships are constructed dialogically, the notion of linguistic choice is foregrounded – choosing one meaning over another to serve particular social purposes.

1.4 The research problem

The central concern of this project is the place of social interaction in learning – both teacher-learner and peer interaction. However in the online environment interaction occurs differently with issues of separation in time and space, as well as commitments aside from study, which beg consideration for different pedagogical approaches. In face-to-face pedagogy, the centrality of dialogue in building knowledge and a sense of community, or connectedness, is widely accepted (Vygotsky, 1978; Mercer, 2000; Gibbons, 2002; Gibbons, 2006; Wells & Arauz, 2006; Mercer & Littleton, 2007; Alexander, 2008a; Alexander, 2008b; Mercer & Howe, 2012). However, face-to-face classroom practices may not be directly transferrable to the online setting. The success of interactional strategies in face-to-face pedagogies depends on an element of trust and cooperation built up between learners and their teachers, which is made more challenging in the online environment because of the lack of physical presence and all that this entails for social interactions. Here interpersonal connections may need to be

developed in a more deliberate way for similar learning benefits to occur (Shea et al., 2010). This may involve orchestrating opportunities for interaction which is both social and task-driven, firstly to build trust and to connect interpersonally (Kreijns et al., 2004; Gulati, 2008; Devi & McGarry, 2013), and secondly to ensure the learning outcomes are achieved. (Warschauer, 1997; Rovai, 2002a; Gallagher-Lepak et al., 2009; Garrison, 2011; Coffin et al., 2012).

Effective pedagogy for online teaching and learning however, is still developing as isolation and how to actively engage learners continue to be challenges faced in online education (Tsai, 2011; Reilly et al., 2012; Kahu et al., 2013). In addition, research into strategies for increasing participation in online discussion is wide-ranging (for example, Shea et al., 2010; Ke et al., 2011; Reilly et al., 2012; York & Richardson, 2012; Gasson & Waters, 2013; Wise et al., 2013). It is argued then that online pedagogies cannot (and indeed, should not) mimic those of face-to-face.

1.5 The aim and research questions

The aim of this study is to describe and understand how participating in online discussion forums can shape teaching and learning in terms of two inseparable, but variable, aspects of human social interaction – making sense of our world and interpersonal relationships – that is for building knowledge simultaneously with building a sense of community. To achieve this, the research is guided by an overarching question seeking to answer *How do discussion forums shape the teaching-and-learning³ experience in TESOL distance online education?* Detailed exploration of this question is through the guiding research questions, which ask:

- (1) What kinds of knowledge are socially constructed in online forum interactions?
- (2) What is the role of interpersonal contributions
 - a) in fostering / inhibiting student engagement in forum interaction, and
 - b) in building a sense of community?
- (3) What is the role of the instructor⁴ in mediating online discussion?

(Note: ‘interpersonal’ is used at this point as pertaining to relationships and communication between people. In Chapter 2 the technical meaning of the term is

³ This study approaches teaching and learning as inseparable – one cannot understand one without relation to the other. The hyphenated form is borrowed from Stetsenko (2004)

⁴ The term *instructor* is used here to differentiate the online role, thus whenever *instructor* is chosen it assumes *online instructor* (whereas *teacher* refers to all modes of teaching)

introduced i.e. as a metafunction in the Systemic Functional Linguistics model. Where the technical meaning is intended, it is capitalised.)

1.6 Methods

The study uses a qualitative multiple case study approach. It explores the nature of interaction and the involvement of both instructors (lecturers and tutors) and learners (postgraduate students) in online asynchronous forum discussions. The context is an Australian regional university, focusing on three postgraduate TESOL (Teaching English to Students of Other Languages) subjects with full online delivery. Online forums represent one component of the online teaching-learning experience, however, in the online subjects of this study, they represented the main opportunity for learning as social activity. The discussion texts provide the main source of data, supplemented by data from interviews (students, online instructors and subject designers), a survey of students, and pedagogic artifacts collected from the learning sites.

1.7 Significance

The significance of the study in terms of its contribution to current research is twofold. Firstly inherent in the investigation of the complexities of online learning from a qualitative perspective, comes a depth of understanding that allowed this study to make some explicit theoretically informed principles which can be readily applied to online pedagogy and online design. A review of the literature reveals a disproportionate number of quantitative studies, therefore this study contributes also to building up a body of literature using a qualitative approach (joining other qualitative work, such as Coffin & Hewings, 2005; Coffin, Painter & Hewings, 2005a, 2005b; Goertzen & Kristjansson, 2007; Lapadat, 2007; Gallagher-Lepak et al., 2009; Coffin et al., 2012; Lander, 2013). Secondly this study is framed by well-established developmental and linguistic theories, using a combined framework of Sociocultural theories and Systemic Functional Linguistics (SFL). The depth of insight gained into semiotic meaning-making of online discussions as part of the learning process would not have been possible without the richness and robustness that these complementary theoretical perspectives provide. In addition, this study extends sociocultural theories and SFL by applying these to the new frontiers of online learning, and specifically to adult online learning. Likewise this addresses a valid criticism, that much of the literature is lacking an established theoretical framework (Hall & Knox, 2009; Zawacki-Richter, 2009). The contribution this study hopes to make is to online pedagogy and online design, as well as to qualitative methodologies useful for in-depth examinations of online learning contexts.

1.8 Organisation of the thesis

This is a thesis by compilation, which includes chapters written in a format that is consistent with journal article styles, and approved by the University of Wollongong (2011). Four of the chapters are akin to those found in a traditional thesis. These are the current chapter which provides an introduction and overview of the thesis (Chapter 1); Chapter 2 which outlines the theoretical framework; Chapter 3 which details the methods of the study; and Chapter 8 which presents a discussion of the research outcomes, as well as some concepts not able to be included in the published articles. Implications and recommendations cap the thesis.

The remaining four chapters are journal articles, two of which are published (Chapters 4, 5), one has been accepted for publication (Chapter 6) and Chapter 7 is a paper in preparation. A foreword to each of these papers is included to outline my contribution and that of my supervisors as well as to position the papers within the thesis outline. Each paper addresses a different set of issues which contribute to answering the research questions, and while Chapter 4 is a published literature review, it is important to point out that Chapters 5, 6 and 7 include additional literature pertinent to the matters under focus. Additionally, when reading a thesis defined as this particular genre, it is important to note that there will be some repetition in the published papers, particularly of approach and methodology, which is unavoidable.

Each paper in the thesis is presented as published (except formatting) - intact with its own reference list, and any related appendices⁵. In addition a complete reference list for the thesis and appendices⁶ not referred to in the papers, are found at the end of the thesis. A brief description of each chapter now follows.

Chapter 2: Theoretical orientation. Language for communicating and learning

Chapter 2 provides a rationale for using a theoretical framework combining Sociocultural and Systemic Functional Linguistics (SFL) theories, both of which posit language as central in the social process of learning. Drawing on these two well established theories enabled considerable insight into the complex nature of interaction in online discussion.

⁵ Journal articles appendices are labeled alphabetically

⁶ Appendices from other chapters are labeled using Roman numerals

Chapter 3: Methods

This chapter presents methodology of the study, as a qualitative multiple case study of three online learning sites, with data gathered from a range of primary and secondary sources, and from a range of participants (subject designers, instructors and students).

Chapters 4, 5, 6 and 7: Journal Articles

These chapters are formatted as journal articles, with the addition of a foreword to introduce each chapter. Chapter 4 addresses the major themes from a review of the literature including interaction, sense of community and identity formation. The articles in Chapters 5, 6 and 7 present the findings, including additional literature which informed the particular emphasis of each paper.

The key concern of Chapter 5 is the notion of identity, which emerged as important theme in the first case study. This paper explores identity as a dynamic social construct of self-knowledge and the effect that positive/negative perceptions of self had on interactional involvement. Chapter 6 considers the role of the instructor in mediating discussions. The findings presented here are from the second case study, in which the instructor actively guided the forum interactions. This chapter examines the effect of instructor mediation on developing a sense of community and the acquisition of knowledge. Chapter 7 examines the three case studies together, using an adapted framework of *online talk types* to understand how learning communities were (or were not) dialogically constructed, and how this shaped the online discussions. The findings highlight the similarities and differences characterising the discussions in each of the online subjects. Making visible these distinctions is a valuable contribution to online pedagogies in terms of design and practice.

Chapter 8: Discussion & Conclusions

Chapter 8 integrates the findings of the study in relation to the research questions that have been answered by mapping the contents of Chapters 5 to 7 to each individual research question. This chapter extends the discussion of identity formation (from Chapter 5), proposes a description of a genre of online teaching-and-learning (from Chapter 6), and offers a provisional system network of linguistic choices that gives insight into how interaction may be fostered or hindered (from Chapter 7). The discussion in Chapter 8 chapter is also supported by survey and interview data. These are synthesised to show the range of different perspectives brought to the study by instructors, students and subject designers, as valuable extra insights into the nature of the online learning

experience. The tensions inherent in the mode of asynchronous communications are discussed, particularly the implications for instructors and students when enacting social relations in the process of learning. The chapter includes implications of the study's findings and is capped off with recommendations and avenues for future research.

CHAPTER 2

Theoretical Orientation: Language
for communication and learning

2.1 A sociocultural and SFL framework

This chapter outlines the theoretical perspectives of Sociocultural Theory and Systemic Functional Linguistics (SFL) as underpinning the present study. At the core of this research study is the notion of meaning-making through language use in dialogic interaction. As the focus of interest is primarily on the asynchronous discussions produced as a 'natural' process of online learning (supplemented by interview and survey data), these texts represent how experience is construed simultaneously with the enactment of interpersonal relationships; how knowledge, including self-knowledge is co-constructed over the 'long conversation' of the class (Mercer, 1995); and how this helps explain the culture or context of the online learning environment. As the aim of this study is to gain an understanding that takes into account the context (as a social construct of language) as well as the prosody of meaning-making occurring during language use, the theoretical framework must have language as its central premise. Both sociocultural theory and SFL posit language as mediating dialectic interactions between the individual and the group, between the text and the context of use, and together they provide a framework which can account for the complexities of learning through language, and language in learning.

Language, text and context

It is important to note that this study uses *language* in the sociocultural and SFL sense of being foremost a semiotic resource for making meaning. As will be explicated, the ability to make language choices exemplifies the notion of human agency in utilising semiotic tools to act on the world. Further this study adopts *text* as the product or artifact of language, which can be in the form of a spoken utterance or a written text, and is imbued by the author's attempts at making sense of the world in order for some transformation to occur, either in the world or within oneself (Stetsenko, 2004). *Text* also brings with it socially accumulated life experiences and values that signify author identities in that something of 'who we are' will emerge through the language we choose to use (Ivanič, 1998). As such text can be considered 'alive' because it can be interpreted and used by readers or listeners in meaningful ways, as it unfolds dynamically into diverse situations and for diverse purposes (Stetsenko, 2004).

Context is another important concept which this study views as emerging dynamically in interaction, in a reciprocal relationship of creating and modifying – the text to the context, and the context to the text (Halliday & Hasan, 1985, p 28). Indeed this is pertinent to the online classroom setting, which being virtual, is constructed predominantly through interaction, and therefore includes socially negotiated cultural values, expectations, and history which are cumulatively developed and modified through interactional activity.

The term *interaction* is used in the broad sense of response(s) being posted to the online forums. In other words, the deliberate act of posting indicates a degree of interaction between subject content and the participant (or post-er). Meaningful interaction *between* human participants however, can and does, vary. For the moment, we can think of interaction as being on a cline of variation – more or less interactive. This, and discussion of other variations impacting interactivity will be found later in this chapter.

2.2 The centrality of dialogue in language and learning

Sociocultural theory highlights the interconnectedness of language and learning, emphasising the fundamental role of social interaction between active and engaged participants as integral to the learning process (Vygotsky, 1978). The crucial role of the expert (e.g teacher, instructor, parent, more experienced peer) in these interactions is at the heart of the sociocultural approach to learning. Complementary to this, SFL approaches cognition as negotiating meaning, with language as a meaning-making tool *par excellence*. As such, SFL offers theoretically motivated tools for examining language in use as evidence of learning, particularly that language use, or the potential for making meaning, can be understood as choices made from a system of choices. The SFL model recognises the unique properties of language as a “stratified system ... [which] is able to transform experience into meaning” (Halliday & Matthiessen 1999, p xi). When applied to the interests of this study - the learning environment of online TESOL education – written texts comprise the asynchronous interactions which unfold and develop over a period of time. The artifacts of linguistic data (i.e. the texts) from the online discussions reveal how students construe their knowledge and experience, and how they enact interpersonal relationships. Complementing the SFL perspective, sociocultural approaches to learning are concerned with the developmental process, particularly through collaborative interactions between learners and the more experienced that lead to individual acquisition of knowledge. Through the different perspectives of sociocultural and SFL theories greater insight can be gained into online learning and its positioning within the wider educational context. As such, the present study requires a two-pronged approach that is both pedagogically *and* linguistically oriented to account for language use in the process of learning.

Despite approaching learning from different disciplines, both founders of these theoretical perspectives – Vygotsky a psychologist, and Halliday a linguist – posit language or dialogue as social activity which is a powerful meaning-making resource not only in dialectic processes of communication, but also in constituting the context in which the interactions occur. Indeed a sociocultural approach argues that learning cannot be understood in isolation from context as together they entail a unified system of social practice in which psychological and cultural development are intrinsically linked

processes (Stetsenko, 2004). Therefore, it is the centrality of dialogue in both the sociocultural and SFL approaches which provides this study with a robust theoretical framework from which an in-depth examination of the dialogue in the online learning environment is possible, ranging from the broad context and culture at the macro-level, to fine grained linguistic analysis of specific instances of text.

The present study found inspiration in Wells' (1994; 1999) discussion on the complementarity of sociocultural theory as a theory of learning, and SFL as a theory of language in their combined capacity to explain the impact of interaction as a dynamic process of unfolding meaning potential. Insofar as interaction in online learning is often in the form of asynchronous communications constructed entirely as written exchanges, these artifacts provide the locus of interest for this study, in their representation of the context of learning as well as the learning as it happened in context. These interactions provide a record of a collective endeavour which encompass the creation of a learning-oriented culture in which particular knowledge is valued and certain interpersonal relations are enacted. This in turn reflects a socially constructed reality played out through language, which provides opportunities for individuals to make sense of the contexts they find themselves in. Making sense of learning also involves socio-emotional issues such as sense of belonging, feelings of inclusion (or not), and perceptions of identities valued by the social grouping. This alludes to the complexities of language as a semiotic tool in that it is a resource for construing our experiences in the world while simultaneously enacting social relations with those whom we are communicating. Indeed language as a semiotic resource for meaning-making is described as "the most complex web of meaning that we know of" (Halliday, 2009, p 60). In other words, an utterance may at once contribute to building knowledge and forming interpersonal connections and alignments (or not). It is these complexities around which the discussion now turns in order to explore them in relation to the framework proposed.

2.3 Sociocultural theory

A sociocultural approach to pedagogy posits dialogue between learners and more experienced others as crucial in the learning process, and that the social and cultural contexts constituting and constituted by effective interaction, are also important for understanding the kind of knowledge that is co-constructed. Another emphasis is that learning is mediated through the use of cultural tools and signs, with language being one of the most significant cultural tools (Cole & Wertsch, 1996). In other words during human activity knowledge is constructed through cultural tools, such as language, which has the capacity to transform behaviour and thus sets it apart from other mediating tools. As sign systems, language and writing develop and evolve historically and culturally, bringing about "behavioural transformations" (Vygotsky, 1978, p 7) which indicate internalisation of

socially constructed knowledge. Vygotsky uses the gesture of pointing to illustrate how this occurs, firstly as an uncontrolled attempt by the child to grasp something, and then as the mother interprets and responds to this as a need or want of the child, the meaning of the action changes for the child. It now has developed to something of mutual meaning-making which “engenders a reaction not from the object he seeks but *from another person*” (Vygotsky, 1978, p 56) (italics in original). This signifies the process of internalisation which sociocultural ideas adhere to – that in a series of transformations external activity begins to occur internally, that interpersonal processes are transformed to intrapersonal, and that this transformation results from a long series of developmental events from an accumulation of life experience. This Vygotskian concept is articulated by Rieber (2004) as,

Every higher mental function necessarily passes through an external stage of development because function is primarily social ... it was social before it became an internal, strictly mental function: it was formerly a social relation of two people. The means of acting on oneself is initially a means of acting on others or a means of action of others on the individual (p 103).

Dialogue is essential for intrapsychological transformations to become evident as new understandings arise from the interactions. In arguing the role of speech as transformative, Vygotsky notes that, at first, a child uses speech following an action, which only later shows transformation by preceding the activity. This represents a significant alteration of the relation between word and action, between “perception of real objects ... and a world [that has] sense and meaning” (Vygotsky, 1978, p 33):

Now speech guides, determines and dominates the course of action; *the planning function of speech* comes into being in addition to the already existing function of language to reflect the external world (Vygotsky, 1978, p 28) (italics in original).

The crucial role of language for developing understandings during adult-child interactions highlights the need for sociocultural concepts to be recontextualised to the postgraduate online learning environment. This entails considering the impact of sociocultural variables such as peers, technology, experts and classroom dialogue on adult learning and problem solving (Bonk & Kim, 1998). As a developmental theory of learning, sociocultural approaches should account for the already-mastered skills that postgraduate students have, such as the resources for abstract thinking. While this mastery is not the discipline specific abstract thought gained during higher education, adult pedagogy must take account of the kinds of life knowledge adults invariably gain over their lifetime, as exemplified by Jarvis (2012):

... older people are able to use their past learning, their biography, to understand and cope with many contemporary situations. Whilst this does not apply to every situation and or to every form of knowledge, it does apply to those forms of knowledge that are embedded in society's culture and learnt from everyday life ... a practical understanding of the world – practical knowledge, skills, attitudes, beliefs, values, emotions and senses ... (p 201).

Adult pedagogy places greater emphasis on the accumulation of life experience and practical knowledge, thus flagging a different approach to understanding the process of learning for postgraduate students. Indeed Bonk and Kim (1998) argue that there is a need for sociocultural theory to be extended to adult learning environments, particularly if we are to gain understanding of how they negotiate meaning, and what scaffolding might be more appropriate in an adult-adult learning relationship, in light of the assortment of experience that postgraduate students bring.

As postgraduates, the learners in this study are not new to institutionalised patterns of learning. When they come to the task of learning these prior experiences come with them as part of an accumulation of their life history. They will also have varying degrees of teaching and learning expertise. Inducting them into new discipline specific understandings and modes of speaking⁷ (Eggs & Slade, 1997) should not be left to 'chance' and requires a considered approach to creating opportunities for dialogic exchanges. The extent to which dialogic exchanges or dialogic interaction occurs is dependent on the opportunities created for immediate feedback, or the degree to which reciprocity becomes possible between interactants. Orchestrated interaction by the instructor, as mediating expert, provides opportunities for students to build on current understandings, gain new insights through the perspectives of others, while simultaneously creating occasions to practise new discourse (or ways of talking) modeled in the interactions and from the literature they are encountering. However lively discussion is not always the reality, and it needs to be acknowledged that postgraduates are usually independent decision makers, capable of self-direction (Knowles et al., 2012), which includes making decisions about the extent of their commitment to forum activities. As adults, they are also more likely to be resourceful in seeking 'outside' assistance if these kinds of support are not forthcoming (or sought) from the class itself (Bonk & Kim, 1998). Therefore it becomes apparent that adult pedagogy requires recognition of such resourcefulness, but also that designed-in opportunities for meaningful dialogue can fulfill the need for support and play a substantial role in increasing students' competence and confidence (Mercer, 1995; Bonk & Kim, 1998; Knowles et al., 2012), especially in a

⁷ i.e. discourse signifying membership into a profession (such as the TESOL profession)

climate of joint cooperative activity. This is best cultivated when there is a sense of interpersonal ‘safety’, which enhances the willingness to contribute as well as to take risks (Rovai, 2002; Gulati, 2008) particularly when experimenting with new discourse and new ways of thinking.

Knowles (1980) coined the term ‘andragogy’ to refer to the different method of learning required by adults that sought to recognise some of the fundamental distinctions between what adults bring to learning compared to children. Firstly, postgraduates are even more likely than younger learners to need to know the purpose and potential benefits of learning before undertaking it. Knowles and colleagues (2012) also point out that an adult’s self-concept as independent decision makers requires them to be seen and treated by others as “being capable of self-direction” (p 63), putting into question curricula which is too rigidly set. As already discussed, accumulated life experience plays an important role in adult learning. However because this forms an intrinsic link to identity, as argued by Knowles (1980), life experience needs to be provided a ‘place’ in learning, and hence, recognition of its value. In addition, strategies to incorporate life-centred orientation to learning will be more effective if sensitised to individual backgrounds, and if responsive to different life experiences.

Clearly adult learning requires a different approach than child-oriented pedagogies. The central position of dialogue in the sociocultural perspective allows the theorising of interaction which can be applied to any teaching-learning relationship. From this perspective learners, at whatever age or stage, require support through dialogue with more experienced others to reach their potential capabilities, regardless of what these may ‘look’ like. Any discussion of a learning environment must include how the development of new understandings can be accomplished dialogically in a teaching-learning relationship.

2.3.1 The zone of proximal development (ZPD)

A key, and familiar, concept of sociocultural approaches is the notion of the zone of proximal development (ZPD). The ZPD is an important conceptual tool for understanding the process of acquiring new knowledge (Vygotsky, 1978). This theorises the role of learning development in interactions between learners and the more-experienced, particularly the potential development of problem-solving skills that ‘expert’ guidance has on independent performance. The ZPD is manifested in joint activity in which the learner is guided through an activity not achievable at their current capabilities. The process of maturation and development represents the ‘knowledge of tomorrow’ or the potential for independent intellectual attainment, now only achievable with assistance but in the near future achievable without help (Mercer & Littleton, 2007).

In regard to the present study, a sociocultural perspective would position the online instructor in a role of responsibility to the learners, providing appropriate expertise and support, as well as stimulating interest to encourage learners towards intrinsically motivated, self-directed learning (Gibbons, 2006; Mercer & Littleton, 2007). However, as postgraduates with varying degrees of experience and expertise, they may at times take on the role of ‘expert other’. Notwithstanding, it is the instructor who has the mantle of expert and thus a responsibility to facilitate supported collaborative learning. This alludes to the necessity of intersubjective relations between postgraduate learners and their instructors. Intersubjectivity nurtures an atmosphere of “cognitive apprenticeship” (Bonk & Kim, 1998, p 71), in which the instructor can cede control to the learner as they gain cognitive competence and confidence through the dialogic exchanges. The notion of the ZPD is useful for educators when developing instructional support, as it recognises the potential for reaching new understandings during social interaction with more capable others. This enables a future-oriented focus on learning in which attention can fall on “what a learner can become, instead of simply testing static skills or belabouring what is already wrong with the learning performance” (Bonk & Kim, 1998, p 70).

As language is a transformative tool for learning, this problematises the sometimes optional use of guided discussion forums in online contexts (as was found in this study). It is acknowledged that some interaction occurs between learners and what has been said by the expert voices of readings and commentaries in the online subjects (Bakhtin, 1981), but unless there is deliberate orchestration of purposeful discussion these individual interactions remain so. If indeed the power of dialogue is in its transformative ability for constructing and internalising new knowledge as proposed in sociocultural theory there needs to be opportunities for collaboration between instructors and students.

However, it is also acknowledged that the online learning environment can present as a challenge because of the mode-related features of language mediated by technology. This includes the written text bearing the full meaning-making load for developing interpersonal relations *and* discipline specific understandings. Meanings misconceived can potentially create misunderstanding between people, with the added complexity presented by the lack of physical presence and all that this entails for interacting. As written conversation, it encompasses the time lag of asynchronous communications, but without the immediacy available in face-to-face situations for clarification and the meaning-making cues one usually relies on when negotiating meaning. Also one needs to ‘take the floor’ in face-to-face interactions which is not necessary in asynchronous discussions. Thus online dialogue develops unique qualities in which usual conventions of face-to-face interaction (for example turn-taking, interruptions, restrictions of time and place, etc) do not apply. Online interactions, thus take on different shapes.

The centrality of dialogue in sociocultural theories is clear. Language mediates meaning and changes the knowledge needed to become “fully responsible, free and competent members of a human society” (Stetsenko, 2004, p 504), signified by the human freedom to act purposefully according to socially meaningful goals. The transformative power of language is embodied in the choices available in meaning-making in that in choosing one meaning over another, there occurs some kind of transformation in the world, or of self, which is in contrast to passive adaptation to the world (such is the case in the animal world). The emphasis that SFL places on meaning-making aligns with that of sociocultural ideas on ‘human agency’.

Although interaction was a key interest of Vygotsky’s it remained undeveloped as a theory of language (Minick, 2005), a valid point taken up by Halliday (1993) that many learning theories had a tendency to approach learning from outside the study of language. From a semiotic perspective learning and dialogue cannot be separated, as it is this very process from which texts and contexts are dialogically constructed and re-constructed (Martin & Rose, 2008). This is best illustrated by the SFL model which accounts for the reciprocity between text and context, as well as multiple entry points for analysis.

2.4 The SFL model

As a stratified model of language SFL accounts for the simultaneous meaning-making in language as well as the integration between text and context so that “whatever is said about one aspect is to be understood always with reference to the total picture” (Halliday & Matthiessen, 2004 p 19). Such an approach addresses what Halliday (2009) describes as the ‘ferocious complexity’ of language, due to layered or stratified meanings occurring simultaneously in each language choice, as well as the “highly complex interrelations” between them (p 231). The SFL model (Figure 1) below represents the mapping of text to context through a relationship of realization⁸ represented by the lines interweaving across each strata, with stratum of meaning extending from the broadest concept of context through to specific instances of text. An explanation of the model follows.

As the broadest concept in the model, CONTEXT is non-linguistic but influences each strata below and the meaning-making potential of language choices therein. Context shapes the topic to a large degree the topic (and its appropriateness), the likely relationships between those involved in the interaction, and how the message is

⁸ Martin and Rose 2008 emphasise that realization is not directional i.e. that “lexicogrammar ... construes, is construed by, and over time reconstrues and is reconstrued by discourse semantics. It’s the same across all levels” (p 30). Also note the spelling of ‘realize’ as a linguistic term is consistent with the SFL literature

communicated - spoken or written. GENRE realizes context but is situated “above and beyond” REGISTER (Martin, 2009, p 168)⁹. Genre defines the broad cultural purposes of the text, which serves particular social functions in a given culture with predictable stages and language features. If a text does not unfold as expected, the audience or interlocutor may feel a sense of frustration or incompleteness (Martin, 2009). For example if a procedural text such as instructions for assembling a piece of furniture does not include sequential steps, or is written as an argument for using a screwdriver over a hammer, then it will not fulfill its expected social purpose. Genre therefore describes a predictable way of doing things in the culture, and the culturally determined understanding and response that readers and listeners bring to the text. Genre is of particular relevance to this study because learning environments have institutionalised patterns of activity (such as participating in lectures and tutorials). When changes in the culture occur, such as the move to online learning, this will bring about shifts in genre – shifts which are not always recognised by participants. If Genre reflects the phylogenetic evolution of meaning, it can be expected that new forms of pedagogic genres will emerge as radical shifts in technology reverberate through the culture and institutions. These emergent genres are of particular interest to the present study.

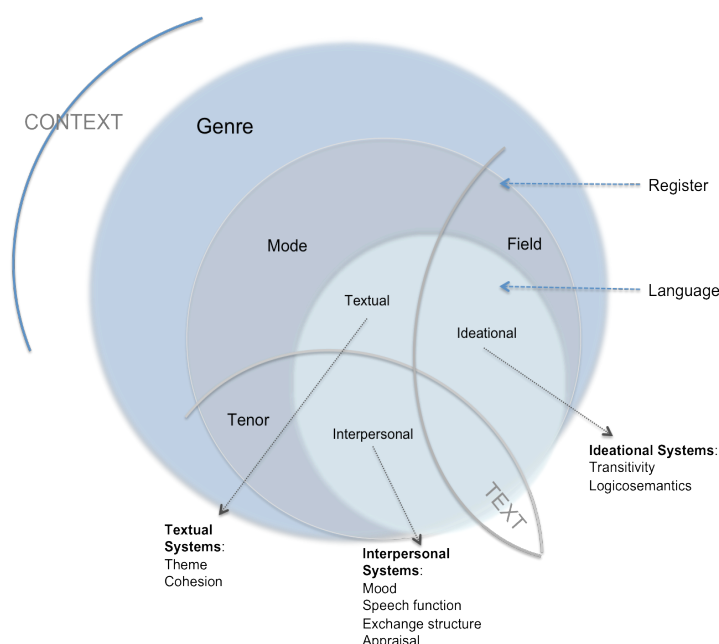


Figure 1: Genre, register and language (adapted from Martin, 2009, p 160)

Returning to the SFL model, Genre is said to be realized through REGISTER, and as already mentioned, this is through the configuration of three semantic variables always

⁹ Note: for the purposes of this study the SFL approach adopted follows that of Martin & Rose, which locates GENRE and REGISTER as context rather than language. However it is acknowledged that there are different 'dialects' of the SFL tradition in which Register is treated at the strata of language

present in a text: FIELD, TENOR and MODE. Field is concerned with what is happening, or sequences of events in terms of domains of experience in the physical world, the world of consciousness and the world of abstract relations, which includes what is being discussed (through experiential processes) and how discussion contributes to constructing new understanding (through abstract processes and relations between concepts). Discussion of what is happening (events, thoughts, feelings, sayings etc) involve participants or things, processes and circumstances (Halliday & Matthiessen, 2004). Tenor is concerned with social relationships between participants, with the extent of social distance influencing the kind of discourses between writer-to-reader or speaker-to-listener audiences, as well as the impact that un/equal power relations has on the language choices made. For example minimal social distance between interactants, such as mother-child or close friends, will be reflected in the discourse, which will naturally be adjusted as social distance increases, such as to student-lecturer, or office worker-executive interaction. We are well attuned to discourse as relationally-based: consider listening into a conversation and the interpretations we make of the relations between interlocutors based on the discourse overheard. MODE refers to the organisation of the text such as whether it is spoken or written, formal or conversational, and the role that language plays in the situation (Martin & Rose, 2008; Martin, 2009). In any social, cultural or historical context, these three variables in meaning-making – experience and ideas (FIELD), roles and relationships (TENOR), and textual patterns (MODE) - are simultaneously expressed in the text (Halliday & Matthiessen, 2004; Eggins, 2004).

For the present study Field includes what is being discussed by instructors and students in the online discussions, such as experiences (of study, teaching, travel), as well as insight into their reactions (what they think and feel) towards the experiences, the readings, subject content, or others' perspectives; Tenor includes the roles and relationships enacted between interactants (instructor-student(s), student(s)-students(s)), including attitudes and alignments; and Mode involves how these meanings are communicated as 'written interactions'. We return in more detail to these concepts in Section 2.4.1

Moving to the next strata of realization it can be seen that the language realized by Field, Tenor and Mode is expressed through the metafunctions (or bundles of meanings) of Ideational, Interpersonal and Textual. The Ideational metafunction is concerned with the experiential aspects of meaning-making, or what is happening and how ideas are linked to each other. The Interpersonal metafunction is about the social relations being negotiated, while the Textual metafunction is concerned with information flow between ideational and interpersonal meanings. The 'work' of the textual metafunction is in organising meaning in ways which build expectancies for the reader/listener, which Martin

and Rose describe as being “distributed in waves of semiosis” (2008, p 24). Each of these metafunctions has systems which enable fine-grained linguistic analysis of choices made at the level of discourse as well as specific instances of text.

SFL is described as a “multi-perspectival theory with more dimensions in its theory banks than might be required for any one job” (Martin & Rose, 2008, p 21), and thus the analytical tools are chosen to meet the purposes of analysis. The present study is primarily concerned with the social practice evidenced in the technology-mediated interaction of online forums, or what is going on in terms of what participants are discussing, and in the roles and relations that unfold dialogically in the learning community. Within the context of teaching-learning it is important to identify the progression of knowledge signified in the texts, particularly how (and indeed, if) new knowledge is being dialogically constructed - a primary aim of education.

The Ideational systems of Transitivity and Logicosemantics enable a systematic analysis for describing what learners and instructors are experiencing, reacting to, thinking, and feeling (Transitivity), and what abstract connections they are making between concepts (Logicosemantic relations) which indicate knowledge acquisition. Simultaneously interpersonal relations are enacted in the texts (Halliday & Matthiessen, 2004). The meaning potential of evaluative language is to form alignments, negotiate identities and manage social positionings and relationships.

Appraisal, as an interpersonal resource, enables us to categorise the evaluative choices in language in order to understand how sociality is affected (Martin & White, 2005). Attitudinal language signifies the speaker's/writer's values and stances, and when taking a particular stance, social alignments between interactants are negotiated, and possibly put at risk if values or ideologies are not aligned. As we shall see, Appraisal is also useful for showing how identities are socially constructed and in understanding the effect of interpersonal dis/alignments on perceptions of self in relation to others (identity) and thus on developing a sense of community. Opportunities to construct identities can enhance interpersonal relations, and may be particularly so in online learning where the dynamic shaping of identities relies on the written text (without the assistance of other forms of identity markers such as physical features, clothing, social affiliations, accent, etc). Appraisal therefore is an important analytical tool which contributes to a deeper understanding of values and attitudes that comprise the context and culture of this learning environment. A more detailed explanation of how the systems of Transitivity, Logicosemantics and Appraisal are used to analyse the data and interpretation is found in Chapter 3.

All of these aspects of meaning-making – of experience and knowledge, and of attitudinal stances and interpersonal alignments - are interwoven with MODE, or the information flow between how students and instructors construe their experience and enact interpersonal relationships. The medium of 'written discussion' however, presents a misnomer as *discussion* is not always had, and although Mode will not be used as an analytical tool specifically, a strong awareness of the impact of Mode underlies and informs this study. A more detailed discussion of Mode follows.

2.4.1 Register variations in online forum discussions

In the context of online learning it becomes apparent that one can make certain predictions about Field, Tenor, and Mode in educational activity, and one which is a TESOL-oriented learning environment. Particularly in online discussion, which may be considered as the online counterpart of face-to-face tutorials, it would be expected that Field would reflect a pedagogic purpose as topics related to TESOL and teaching are dialogically construed with insights gained through the collective contributions made to discussion.

The roles and relationships that are dialogically enacted between instructor-students and student-student account for variations in Tenor with perceived social distance and power relations unfolding dynamically with each interaction occurring and creating various social configurations. Tenor distance is an important consideration in online learning as there is additional separation between students and instructors, who are not only distanced spatially, by both time and space, but also experientially by the mode of delivery (Martin 1992). Perceptions of social distance and the effect of physical separation can have consequences for interaction and the extent to which self-disclosure will occur (Rovai, 2002a; Mercer & Littleton, 2007; Gulati, 2008). As already mentioned, an additional consideration is that where postgraduates are the learners, some may be more qualified in certain areas than their instructors (Bonk & Kim, 1998), therefore interpersonal distance takes on another variation in response to shifting roles and relations.

The present study argues that tenor relations are riskier in online discussion, predominantly because of the lack of physical presence and all the meaning-making potential that is thereby relinquished. In essence the *body drops out* of the interaction - the body, with all its capacity for socio-semiotic systems of meaning-making, such as gesture, eye contact, physical movement, voice tone and volume variation, pausing, facial expressions, and so on, from which we assemble so many cues in face-to-face interactions. Hence, the variations inherent in tenor relations are those interpersonal, and are represented in Figure 2 tensioned between relations of equal/unequal and close/distant. These relations become evident if we think of the kind of language used

between friends or students who are well known to each other, compared to interactions between strangers, as most of the participants in this study. Interpersonal relations are not static, and the interactions provide clues to the dynamic changes over time that occur in relations of social distance/closeness, and perceptions of social positionings as equals, or otherwise. By way of contrast, language choices will vary when these same students need to explain to their instructor the reasons for a late assignment, or in discussion with the coordinator about issues in their program of study. Language has evolved to adjust for cultural sensitivities to the appropriateness of the message in different contextual situations, balanced with perceived power relations between those with whom we interact. Tenor variations have been important for this study to understand the dynamic development of social relations enacted through the written texts of the discussion forums. This brings us to consider in more detail the mode of discourse in the online interactions and how this can be understood in the context of online learning.

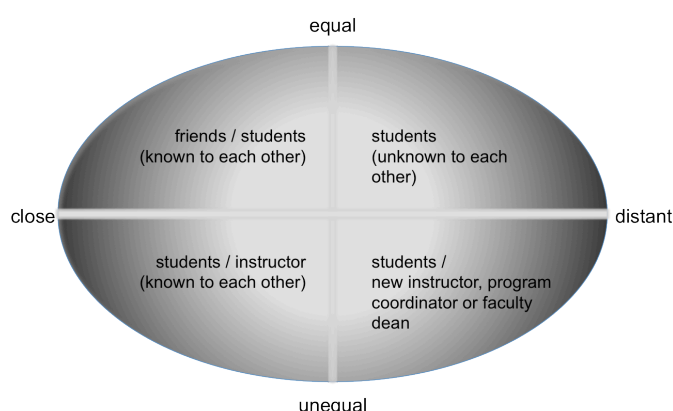


Figure 2: Tenor variations (adapted from Martin & Rose, 2008)

MODE refers to what language is achieving by its role in the context, and what participants are expecting the language to do for them (Halliday & Hasan, 1989). Hasan elsewhere (2009) describes mode of discourse as,

... the mode of contact for the actors in the discourse, since clearly the nature of the message will be different for a co-actor in absentia compared with that for the co-present interactant ... the nature of the message changes as the values of the contextual parameter change ... language [suited] itself to the speaker's socio-semantic needs (p 172)

The nature of the message is affected by four important aspects of mode: medium, channel, the type of interaction, and the role of language. Firstly, medium is how language achieves the communicative process, either through speaking, writing or a combination of the two. In daily life we use language to achieve social purposes through face-to-face conversations, telephone calls, Skype, voice messages (spoken medium); text messages, email, essays, notes to family members (written medium); or a combination of both, such as a letter to a friend (written but sounding spoken), or a

speech or lecture (spoken but sounding written). In this study the written medium of online discussions at times sounds ‘more spoken’ or ‘more written’ (and academic-like), and as we shall see, impacts on the degree of interactivity invited by the ‘blurred’ medium.

Interactivity or the potential for sharing in the process of the communication is closely related to channel, or how the text was originally received (Halliday & Hasan, 1989; Butt et al., 2009). In her discussion on channel Hasan offers the terms *phonic* and *graphic* to capture the roles of all participants in the communicative event, and the potential afforded by the channel for the speaker to be interrupted by an addressee. The ability to share in the process occurs best when the channel is phonic, and participants are co-present with opportunities for aural and/or visual feedback (as in face-to-face encounters, phone calls etc). Interactions using the phonic channel are more favourable for dialogue, afforded by the active sharing in the process between present participants – “active process sharing” (Halliday & Hasan, 1989, p 58). In addition the immediacy of a response will impact the potential for being able to share in the process. Compare for instance the instantaneous feedback possible in a conversation or in synchronous chat, with the delayed response of a reply to a letter, or in asynchronous communications. Hasan also points out that even in a lecture or speech, where there seems little opportunity to interrupt the speaker, feedback from the audience is still possible through facial expressions, eye contact, yawns, body posture and so on (1989, p 58). When the channel is graphic opportunities for instant feedback are not possible, as writer and reader are separated; and separation tends to create interactions which are monologic. Thus the notion of channel enables us to understand the potential for interactivity.

This study defines the contrasting terms *dialogic* and *monologic* using an SFL approach to the dynamic unfolding of texts. Texts evolve in contexts of situation which are characterised by the role played by language, that is a process of exchange and the roles defined in the exchange process (Halliday, 1984; Halliday & Matthiessen, 2004, p 540). The context of situation is created by the ideas expressed about the world (reflection) and the opportunities therein for interpersonal intersubjective relations to be enacted (action). The role of language as *dialogic* exchanges or *monologic* can be understood through what opportunities become possible for immediate feedback.

Thus the extent to which participants can share in the process also affects the type of interaction, that is how *monologic* or *dialogic* the communication is. Movement between the two can be understood as being on a cline of interaction types according to the possibilities for interactivity. For some kinds of communicative purposes the interaction type is congruent with medium and channel such as a conversation with a friend (dialogic

communication - spoken medium, phonic channel); or this thesis (monologic communication - written medium, graphic channel). However we also engage in social activity such as a lecture, which although spoken may sound written, and while the channel is phonic, the type of interaction is more towards monologic. Likewise in a letter or email to a friend, although written, it is intended to be dialogic and sounds spoken. The two possibilities given highlight the potential for incongruence to occur across some aspects of mode, with examples given in Table 1 below. Incongruence between medium, channel and type of interaction can also help us understand the nature of online discussions. While 'discussion' assumes interactivity, the written medium and graphic channel of online forum communication often produces monologic kinds of interaction, although dialogic would better suit the purposes of learning. An argument I return to at various moments in the thesis is the effect of online interaction which is more towards the monologic end of the cline and the consequences for effective discussion in a learning situation.

Table 1: Factors of Mode affecting congruence for achieving social purposes

Mode (of social activity)	Language role	Type of interaction (+/- interactivity)	Channel	Medium	In/congruence
Conversation (face-to-face)	ancillary	dialogic	phonic	spoken	congruent
Conversation (phone call)	constitutive	dialogic	phonic	spoken	congruent
Lecture (face-to-face)	ancillary	dialogic	phonic	spoken (sounds written)	congruent
Email / letter to friend	constitutive	monologic (intention is dialogic)	graphic	written (sounds spoken)	incongruent
Asynchronous forum discussion	constitutive	monologic ('discussion' assumes dialogue)	graphic	written (could sound spoken)	incongruent
Funding application, thesis, essay	constitutive	monologic	graphic	written	congruent

The fourth aspect of mode is the ancillary or constitutive role of language in the context which refers to whether language accompanies the social activity (such as friends preparing a meal together, or a televised sports commentary), or whether it constitutes the social activity (such as a phone conversation, or a letter to the editor). When ancillary, the context provides non-linguistic clues for mutually understood meanings which do not require language to make them explicit (e.g. friends preparing a meal: *If you pass that [what?] to me now I'll put it [what?] over the top [of what?] like this [how?]*). When constitutive, language needs to convey contextual information and other clues to meaning. The constitutive role of language is to bear the meaning-making load, for example recounting the meal preparation event to a person *in absentia* requires filling in the gaps created by *that* and *it* and *like this*. In online discussion the role of language is constitutive, and without language the social context for learning would not be created. As such participants need to make meanings explicit, with any 'gaps' opening up the

potential for misunderstanding. In addition there may be uncertainties for online participants in these interactions – to be expressed in a series of monologues, or as dialogic exchanges? Tensions such as this may account for some of the unease that participating in learning through asynchronous discussion can engender. The diagram below represents the variations in Mode which will affect interactivity in online discussions,

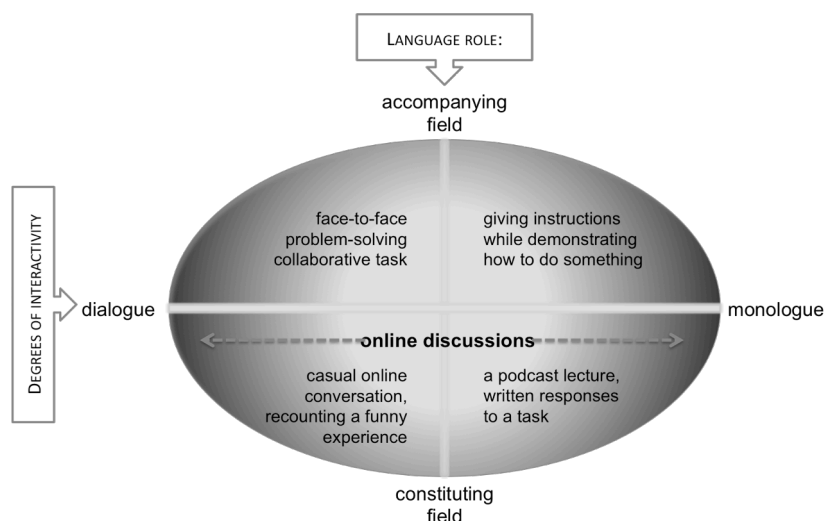


Figure 3: Mode variations and degrees of interactivity in online discussions (adapted from Martin & Rose, 2008)

Returning for a moment to medium – spoken or written – further consideration of the ‘blurred’ medium of online forums (both as ‘discussions written out’ and ‘discussions read’) will provide additional insight for this study exploring how instructors and students use, and their perceptions of using, the online forums.

Whether spoken or written, language constructs our world, being at one and the same time a *part of reality*, an *account of reality* and an *image of reality* (Halliday 1985, p 98). Written and spoken language however are presented, and viewed, differently. As a product, writing is viewed synoptically – that is, what is written is something which exists and is laid out in its entirety. It is an artifact which can be revisited, revised and (potentially) viewed by ‘outsiders’ to the context for which it was intended. As an object it is encoded in the language as structure, which predisposes the reader to take “a synoptic view” of its meaning (Halliday, 1985, p 81). Synoptic predisposition towards online discussion texts can create problems with interactivity, leading to questions such as, how might the communicative goals in the written texts of online forums be affected by the predisposal to view these texts synoptically; and how might this affect the free flow of reciprocity in communication?

Spoken language on the other hand, is viewed dynamically, as it constructs the phenomena being talked about. The participants in the conversation are availed of the process of the happening – they are present as it unfolds. They are therefore “predisposed to take a dynamic view of what it means” (Halliday, 1985, p 81). In the context of spoken language, reciprocity is potentially available to those present, who may interrupt, take a turn, or even redirect the process. Herein lies the ‘blurring’ of two mediums of language that comprises online discussion – simultaneously written and spoken, and thus viewed both synoptically and dynamically.

Martin and Rose explain the range in mode as a cline of variation, or degrees of interactivity, from “language in action to language as reflection” (2007, p 300). The texts produced in online discussion, as ‘written conversations’, may bear characteristics of informality and sharing information, typical of tutorial discussion (language in action), however, the written format usually dictates a more measured and drafted response (language as reflection). The tension between dialogic and monologic text is perhaps one of the more challenging for online participants to manage and, as already discussed the greater potential for interactivity to be influenced by incongruence presented by channel (graphic) and medium (written).

While it can be assumed that the participants in this study have a fair degree of mastery in spoken and written language separately, it cannot be assumed that this translates to effective online communication, especially given the complexities presented by Mode. Effectiveness in online discussion requires interactants to balance overly casual (as in conversation between friends) and overly formal (as in academic text). If the purpose of the online forums is to engage students in dialogic inquiry, then language which functions to ‘invite’ other voices into the discussion could be more effective in terms of mode (as well as tenor relations), with monologic texts less likely to attract responses from other participants, and thus affect reciprocity in the interaction. Online participants are often presented with uncertainties about how to convey meaning in online discussion – should it be more monologic as a written text, or more dialogic as in a conversation? This of course depends on the purpose of discussion, for example if the intention is to fulfill an assessable task then the textual patterns would align more with academic style texts. But if to encourage dialogue the meaning potential needs also to encapsulate an element of trust and social connections between online participants.

Consideration of Mode includes online discussion being mediated by cultural tools and signs such as the computer interface, various software, the internet, online resources, the mode of communication (synchronous or asynchronous), variations in how language functions (such as the choices made in chat room interactions compared with those made

on a discussion forum), as well as online etiquette for effective and appropriate communications. However, as Daniels (2005) points out, and an emphasis of this study, it is not the tools or signs themselves which are important for thought development, but the *meanings* encoded in them, which are exemplified in the SFL model.

Tenor and Mode variations give insight into some of the diverse skills students (and indeed instructors) need when interacting in online settings, which can become problematic if assumptions are made about their mastery of such skills. Hence some other questions are raised by this discussion of tenor and mode, such as, how are interpersonal relations affected by the lack of physical presence, and of not having met before, with little chance that this will happen in future? And how might social positionings or solidarity between interactants be negotiated in the virtual classroom, where physical presence for instructors and students is no longer part of the teaching-learning equation; will reliance on written text for meaning skew the 'usual' appropriacies when interactants are involved in negotiation of equal/unequal power relations; and how might this affect the kind of interaction that occurs? As rhetorical questions these highlight some of issues that online communications force us to consider, particularly in relation to tenor and mode variations.

Perhaps the salient point is that the influence of the social context, in this case of postgraduate online learning, will carry through the discussions to each strata of meaning. In other words context will shape the kinds of texts that are produced in terms of fulfilling the social purpose of online discussion (such as the instructor's purpose to teach or students' to contribute to, and continue a discussion), the topics being discussed and what kinds of social relationships are likely to develop, as well as the language choices made during the interactions and the impact on modifying the context as it responds dynamically to the text (Halliday & Hasan, 1985).

While the context influences the kinds of language choices made in the texts, the texts construct the particular situations comprising the context, in an iterative process of reciprocity. Both text and context represent different aspects of the same social activity through the process of realization (Martin & Rose, 2007, p 4). In other words the context of online forums is organised by situations in the texts, constructed as language choices which *mean* something in the context. Context-text differences are accounted for by the variables of field (what is being talked about), tenor (who is involved, their roles and relationships to readers/hearers) and mode (the type and purpose of the text). We know that online discussion forums are embedded in the institutionalised context of higher education, which influences the linguistic choices made to a forum (and the context alerts us to the kinds of 'behaviours' that are, and are not, appropriate). In turn the interactions

at once dynamically construct and reflect teaching-learning situations in the social context through and by the constitutive role of language have evolved for the purposes of the social activity. The iterative nature of unfolding text-context embodies cultural values, expectations and the evolving history of the learning group (Halliday & Hasan, 1985).

2.4.2 The meaning potential of language

The meaning potential of language is in the notion of choice, and that one aspect of meaning-making alone cannot be understood in isolation from others. Thus when attention is given to different facets of the online discussion texts, the premise of this study is that analysis of one will contribute further insight into the others, as well as to the whole. This acknowledges the intertwining and interconnectedness of meaning-making and the reciprocity between context-text. In online dialogue the variables of Field, Tenor and Mode, illustrated in Figure 4 below, are represented as interconnected by the unbroken lines linking them. While each of these may be examined separately for the purpose of analysis, they are always interwoven into the fabric of the text and context.

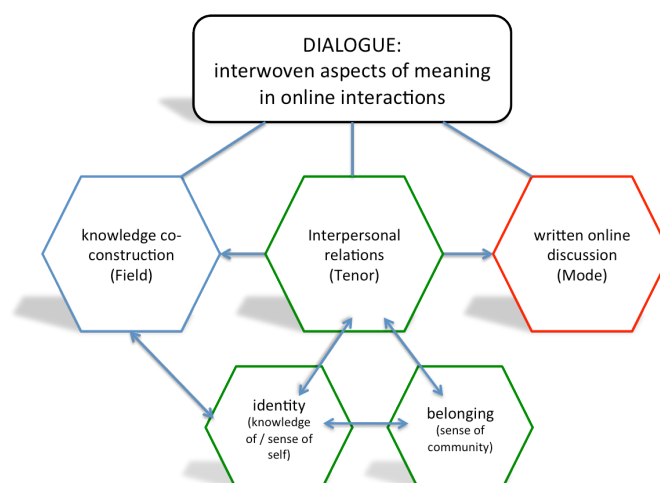


Figure 4: Interconnected aspects of meaning-making in online dialogue

The multi-directional arrows between Field, Tenor and Mode indicate the interdependency of these three variables and which are mediated by Mode, i.e. asynchronous written discussions. The study focuses on constructing knowledge (Field), together with *identity* and *belonging* (grouped below Tenor) which represent two reciprocal aspects of the interpersonal which develop and transition over time. These represent an ordinary consequence of relationships: identity formation and sense of belonging in the social grouping. Identity formation will be evident as students disclose values or experiences that project a sense of who they are, which are dialogically constructed and negotiated.

The role of dialogue in various constructions of knowledge includes making conceptual links between ideas and new understandings of self and others. As Wells (1999) points out, both sociocultural and SFL perspectives approach language as mediating interactions between the individual and the group, and that during the course of everyday social activity a nuanced process of induction into the social grouping occurs; in other words individuals and people transform their behaviour through reciprocal social relationships. Within these interactions are legacies of past developments that embody a sociocultural history (cultural development over time, or phylogenesis), an ontogenesis (the development over the life of an individual) and a microgenesis (development resulting from particular interactions in particular settings over time) (Wells, 1999; Halliday 2009). These 'geneses' indicate the complexity of language as ever-evolving. Halliday (2009) also explains this as,

... the meaning potential of language is opened: new meanings always can be, and often are being, created ... (p 60).

The meaning potential of language can be recognised in behavioural transformations which signify the social process of learning as dynamically evolving phenomena within a given culture, and that in the course of social activity the individual becomes "for himself what he is in himself through what he manifests for others" (Rieber, 2004, p 105). In other words simultaneous to the process of becoming a person, these transformations contribute to the creation of the social culture, illustrated in Figure 5 below.

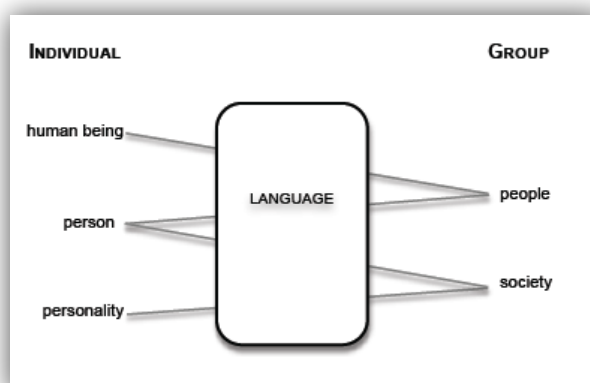


Figure 5: Language Learning: Becoming a person (Halliday 1978, p 15)

Thus, the creation and nurturing of sociality through engagement in online discussions and how this enables students to contribute to common knowledge and extend their understandings represent the main foci for linguistic analysis.

2.4.3 Transitivity: language to construe experience

As postgraduates come to learning with a diversity of life experience, it is important to explore how this shapes what is being socially negotiated in discussion. The tools in the system of Transitivity allow such insight into the topic, or the field of discourse, as it unfolds grammatically in terms of who or what is being discussed, the ‘happenings’ being construed and any additional circumstances. Because Transitivity analysis takes the clause as the unit of meaning, close attention to unfolding meaning is achievable. Central to the clause is the PROCESS type, which indicates the kind of ‘happening’ or ‘goings on’. Material processes enable the speaker or writer to construe events as physical action such as of happening, doing, creating, or changing, whereas saying and thinking processes construe events as semiotic cognitive behaviour. In contrast relational processes tend to construe experiences as symbolic relations (Halliday & Matthiessen, 2004). Involved in these processes are various participants, either people, things or ideas, as well as any contiguous circumstances indicating time, place, quality, extent, manner and so on. It is these variations in taxonomies – groupings of people, things, processes and circumstances which distinguish one field from another (Martin & Rose, 2008, p 14), and from which a systematic description is possible.

As a theory of language SFL posits language as a meaning-making resource organised around a system of choices which fulfill a functional purpose, such as articulating an opinion, getting a job done, recounting an experience or expressing emotion. These relationships of choice are described in commonsense terms by Martin and Rose (2008) and understood from two standpoints,

... basically between what you say and what you could have said instead if you hadn't decided on what you did say (p 21)

System networks build a model of differences allowing insight into meaning through the linguistic options chosen as well as those *not* chosen. As already mentioned, each process has different kinds of participants, reflecting the function of the process [Pr], such as,

An event involving some kind of action:

I [Actor] am currently **teaching** [Pr: material] a Year 1 class [Range]

A cognitive process:

I [Senser] **think / wondered / realised** [Pr: mental] ...

Relating one thing to another either through identification:

I [Token] **am** [Pr: identifying] a teacher [Value]

An attribute:

I [Carrier] **have** [Pr: attributive] no teaching background [Attribute]

Or a Circumstance, which may or may not be used, but an example is given:

I [Actor] am currently teaching [Pr: material] a Year 1 class [Range] **in a low socioeconomic area** [Circumstance: place]

To illustrate the notion of meaning potential through systems of choice, below is the first set of options available in the TRANSITIVITY system network¹⁰ (Figure 6) with the first entry options in a clause being the process type and circumstance (or not).

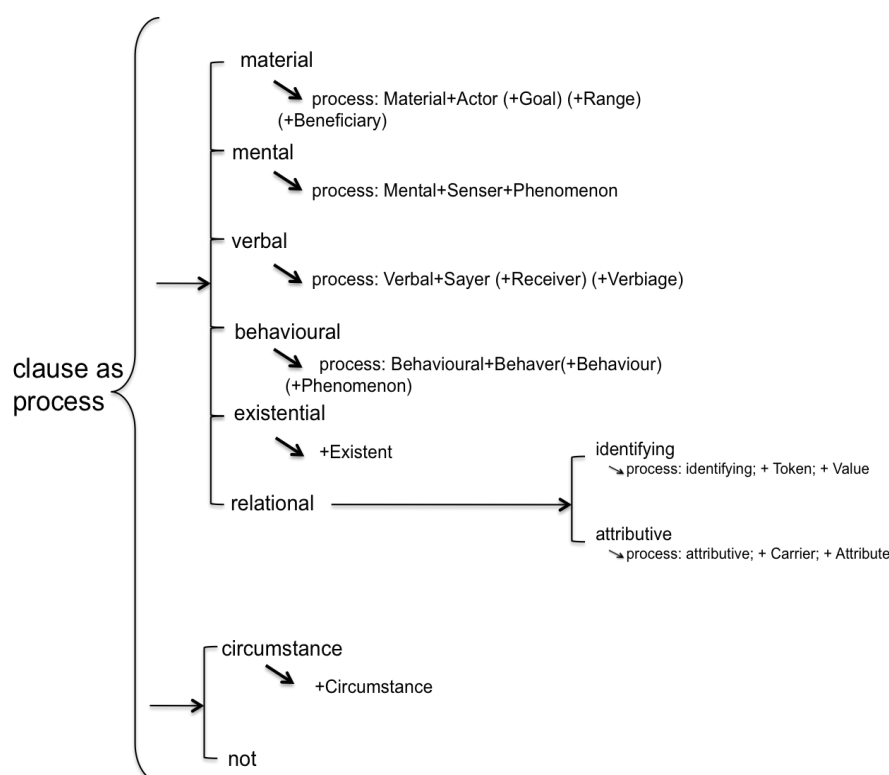


Figure 6: System network – Transitivity (adapted from Eggins, 2004, p 214)

In the present study TRANSITIVITY enabled me to understand how learners construed the process of their experience as concrete, material action or as semiotic cognitive behaviour. The field was construed through the topics being discussed (e.g. credentials, travel, aspirations, module topics, etc), who or what was involved (e.g. themselves *I*, or *my students*, the occupation *teaching*), and circumstances surrounding the experience, such as of place (an institution, a country), of time (last year, next week), of manner (*very harmonious*), as well as their thoughts and feelings (*I think ...; I absolutely love my job; I never felt like I fitted in completely*) and so on. Abstract concepts construed through relational processes give some insight into how we make sense of the world by assigning identities to people or things (*My goal is to travel; I am a teacher*), or categorising them

¹⁰ Conventions of system networks are that: '→' denotes entry points into a system, with increasing delicacy of choice (moving from left to right); '[' denotes simultaneous systems i.e. either/or choices; '{' denotes where features from different systems co-occur, with 'and' choices allowing multidimensional analysis

through ascribing certain attributes (*Travelling is the best way to learn; Some textbook activities are very uninspiring*). Transitivity therefore is a powerful tool for analyzing not only what knowledge of topics is being discussed, but also reveals what students (and instructors) are thinking, feeling and how they are interpreting this knowledge.

2.4.4 Lexical strings: tracing the flow of knowledge

In this study it was important to look across speakers and different forum discussions, thus I take a discourse semantic approach with a focus on Ideation, and particularly on lexical relations. A discourse semantic perspective approaches clauses as construing the activities that people and things are directly involved in. Lexical relations in this study of online interactions, are a strategy by which language construes experience through the people or things that participants are discussing i.e. how the field of discourse is developed over time (Martin & Rose, 2007). Lexical relations thus provide a *lexical* perspective of the discussions (i.e. rather than grammatical) by shifting focus to those linguistic patterns which show the prosodic development of the discussion texts such as how (or whether) a topic is being sustained, as well as identifying the points at which some topics are dropped out of the interactions, or recommenced, and when new topics are introduced. These are called 'lexical strings' (Martin & Rose, 2007) and were useful in this study when identifying the knowledge under construction as learners made sense of discussion by focusing on a topic (repetition), offering alternatives (contrast), paraphrasing (synonymy), or abandoning it.

Lexical strings can render more visible the linguistic resources used during episodes of teaching-learning. For example joint focus will be evident as learners use repetition of a topic or concept, signifying that they are 'on task', use synonymy as a way of making sense of new concepts, or when providing explanations which may indicate increasing abstraction or generalisation of ideas, and provide evidence of learning. In addition providing an alternative to extend an understanding will be seen in relations of contrast, as a trigger around which ideas may be further considered or explored in more detail.

2.4.5 Logicosemantic relations: developing conceptual understandings

Logicosemantic analysis is an important tool which looks at the relationships between events or activities; whether one defines, extends or correlates with another (Martin & Rose, 2007). These can indicate instances in the dialogue of co-construction of knowledge as well as individual conceptual growth.

In terms of this study, logicosemantic relations provide insight how new understandings are dialogically developed by the postgraduate learners. In focusing on the linguistic

evidence of knowledge co-construction, logicosemantic relations reveal conceptual development in understanding as students make links between events or activities. This is through adding new or more information (extending and elaborating relations) which are a feature of building a collective knowledge, and through adding extra information (enhancing relations) signifying the development of, or towards, new understandings.

2.4.6 Enacting interpersonal relations in online interactions

Learners of all ages require intersubjectivity for effective learning to be nurtured. Evidence of this can be accessed through interpersonal meaning which focuses on how participants are enacting their sociocultural roles (Tenor), with the resources of Appraisal being used to “scope prosodically over several moves” (Martin & Rose, 2007, p 253). Appraisal is concerned with how participants use language to make evaluations, adopt stances, construct textual personas, and manage interpersonal positionings and relationships (White, 2005). Appraisal, best modeled as a system network (Figure 7 below), can describe attitudes in language which involve affect (feelings), judgments (moral), or appreciation (aesthetic assessment). Appraisal will also reveal the level of engagement that the speaker or writer employs which either invites or includes others (heteroglossic), or excludes by not opening up the dialogic space to other voices or positions (monoglossic) or by narrowing the dialogic space (contract) which can have the effect of shutting down further discussion. In addition attitudes can be ‘turned up’ or ‘toned down’, or the focus sharpened or blurred, which adds meaning potential to the particular evaluative stance being taken. Attitudinal meanings affect how individuals become aligned or disaligned within the group, contributing to how sense of community and extent of sociality contribute to the learning experience. A further issue is that alongside opportunities to engage in collaborative activities are also opportunities to disengage (Hughes, 2007), signaling some of the wider concerns around participation in online environments, particularly for the busy postgraduate learner. Interpersonal relations thus, become crucially important in online contexts, especially for engaging older learners in the process.

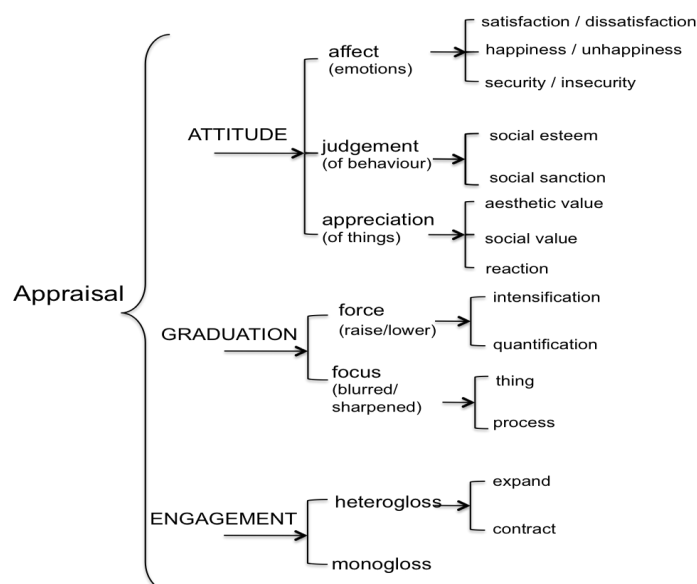


Figure 7: Appraisal showing basic systems of Attitude, Graduation and Engagement (adapted from Martin & White, 2005)

2.5 Evolving the theory to postgraduate online learning and language

Adults are learners in a society of learners ... who each contribute to and take from the learning process, who assist and scaffold each other's learning ventures, and who likely have acquired significant intersubjectivity and shared meaning with their co-workers, family, and peers. With adult thinking dependent on learning activities in the sociocultural milieu, it is imperative that we begin to understand the various contexts of adult learning... begin extending sociocultural theory to adult learning. (Bonk & Kim, 1998, p 83)

As an overarching theory, a sociocultural approach provides an understanding of human development through expert-novice interaction, which is a precursor to the development of higher mental functions and thus important in conceptualising the process of learning. As teaching-and-learning contexts experience change, brought about more recently by technological advances, so too do sociocultural perspectives need to respond and evolve. This present study seeks to achieve this by applying sociocultural ideas firstly to online contexts, and secondly to adult learners, two aspects of current education practice and pedagogy which require greater understanding.

As discussed, sociocultural theory provides the framework to understand the agency of the instructors and students on the cumulative effect of interactions to co-construct knowledge, the teaching and learning relationship as it unfolds, and how the process of induction into TESOL discourse occurs in the interactions as learners become (increasingly) confident users of the discourse, or the ways of thinking and talking (Mercer, 1995; Mercer & Littleton, 2007).

However where a theory of language is needed to account for the complexities of these relations and processes as they are realized as discoursal moves. Halliday's multifunctional SFL model provides a language theory as well as an extensive range of analytical tools. Clearly, SFL is a theory concerned with language in its context of use, and echoes the sociocultural emphasis on the inseparability of social activity and its context. As the overarching concept in the model, **CONTEXT** accounts for the social influence on what is produced in the online discussion, and will dictate to a great extent what the students discuss, how the students choose to interact, how they position themselves as learners, how they represent themselves and others in this particular context, as well as what mode of language they use and vary according to their audience (levels of formality and familiarity). In turn, the iterative shaping of the texts by the contexts and the context by the texts will be influenced by past experience (partly by the face-to-face education that is the previous learning experience of most adult learners), as well as by the nature of the relation enacted online between the more- and less-experienced.

2.6 Summary

This chapter has proposed a theoretical framework to understand the adult online learning context. This framework is a combination of sociocultural approaches, which situate learning in its social, cultural and historical context, and SFL theory of language, which offers a complementary theory for understanding the teaching-learning process. The chapter sets out how this framework enables an understanding at the macro-level of teaching and learning as well as at the micro-level of language using the tools of SFL for fine-grained linguistic analysis of specific instances of texts as they are constructed in and constructed by, context. The online 'talk' provides insight into the learning context and the knowledge being constructed, with recognition that meaning-making involves choosing one meaning over another. Close attention to systems of linguistic choice made during the online discussions enables a systematic way of understanding the discursive practices of these postgraduate TESOL distance learners.

It is argued that together sociocultural and SFL theories establish a robust theoretical platform on which to build a comprehensive understanding of the online discussion in a tertiary setting. This provides opportunities for the concepts of sociocultural theory and the tools of SFL to be put to work in new situations, for them to evolve at the frontier of postgraduate online learning, so to speak. Chapter 3 describes the methodologies for data collection and analysis guided by the combined sociocultural and SFL approaches.

CHAPTER 3

Methods

3.1 Research approach

As outlined in Chapter 2, the theoretical framework of the present study combines sociocultural approaches with Systemic Functional Linguistics (SFL) theory. This reflects my own philosophical stance that learning is inherently social, hence expert-peer interactions are crucial to the learning process, and are also a process of meaning-making. In negotiating meaning there is potential for new concepts to become appropriated as new understandings, and these are largely influenced by the effectiveness of the interactions. Sociocultural theory assisted my understanding of what teaching and learning entails, and allowed me to read across the online contexts with categories for interpreting the linguistic data. The forum texts provide the main semiotic data for tapping into unfolding meaning in the dialogue. These interactions reveal how knowledge is socially constructed simultaneously as interpersonal relationships are enacted.

This chapter outlines how this study, as a qualitative multiple case study, was conducted and how the various data collected responded to the research questions, including the analytical tools. A brief outline of the TESOL distance program at the university is given to situate each subject (together comprising the multiple case study) within the larger educational context. An overview of each learning site is also provided together with descriptions of relevant characteristics of the discussion forums and the participants. Details of how the data was managed in preparation for analysis are also provided.

The role of the researcher

It was important for me as researcher to view the process of inquiry as one involving establishing a research relationship with human participants. This is despite the lack of physical presence that might tempt a researcher of online contexts to think otherwise, and despite the fact that collection of the forum texts, as the crucial data to the present study, did not necessarily require establishing a relationship with their authors. This became clearer during a reflective process before the interviewing phase of the study (Cunliffe, 2003) and highlighted for me that even in a virtual context, the researcher-participant relationship needed to consider the inseparability of data from the participants. By this I mean that gathering data should not only be focused on the content I needed for the research project, but should be balanced with developing interpersonal relations. The special nature of the research relationship is articulated by Josselson (2013, p 33) with onus always on the researcher

... to be thoughtful about the relationship dynamics that are being created between us and our participants. we have to pay attention at all times

both to the content of what is being told and to the state of the relationship in which it is being told ...

This is a fundamental principle to any human social research, but particularly resonated for me, in that conducting educational research, whether on-campus or online, the interpersonal plays an important role for encouraging reciprocity in the giving and receiving of quality information. Perhaps this is even more so when the participants are not face-to-face, in which case there is a greater need to counter the effects of the virtualness of being an online participant.

Although my role as researcher was as an outside observer, there is no claim for 'neutrality' or 'objectivity' in this project. Into the interpretation of the evolving social contexts of online learning come my own biases, learning preferences and experiences coloured by both face-to-face and online teaching and learning (as mentioned in Chapter 1). However to minimise my own subjectivities, multiple data sources and methods of analyses ensure corroboration of evidence for credibility and dependability, based on a principled and systematic description of language in use.

Qualitative multiple case study

A qualitative multiple case study design was best suited to the inquiry of the present study. This inquiry was focused on online subjects within TESOL Distance Education in the context of higher education in Australia. Multiple case study design enabled me to carry out close examination of several individual cases which, as TESOL subjects, were linked together. This would provide an understanding not only of each individual case, but also some insight into the larger program of TESOL distance education (Stake, 2006). Case study design is most suited to a bounded system as established in this study by the temporal boundary of the 15-week session, as well as by the unique group membership occurring during this time (Lincoln & Guba, 1985; Stake, 1995).

The intention of multiple case study design is to provide thick description of the particular cases. Consequently, there is no claim made that the cases are representative of all online subjects, although some aspects may be generalisable to those of other online subjects. Even within the same institution or program, the changing dynamics of groups, instructors and the particular resources and requirements of a subject, will all impact on interaction and engagement to different extents. What this study does provide is a detailed snapshot of the subjects and their participants at a particular time, as well as qualitative case study methodology which can be applied to other research studies of online teaching and learning.

The aims of this study were achieved through a process of naturalistic inquiry to accumulate sufficient knowledge of the online subjects as they existed (Lincoln & Guba, 1985). Thick description of each case as a process of understanding its uniqueness within a “real-life context” (Yin, 2009, p 18) was possible through the linguistic richness of primary data sources particularly for the insights these give as snapshots of adult online teaching and learning relationships. Data was collected from a number of different sources to ensure triangulation in the analyses and interpretations. Texts from the asynchronous discussions were the most crucial data for this study, focusing on the centrality of discursive meaning-making. Thus, the main methodological attention was on detailed linguistic analysis of the interactions to understand the ‘real-life context’ of online learners and the learning process. Data from interviews and a survey (students only) added the dimension of stakeholder perspectives: from students in terms of how participating in discussion influenced their online learning experience; and from the academic and teaching perspectives of instructors and designers which provided some understanding of why the use of discussion forums varied in each case (i.e. ranging from being a central component of the subject, to peripheral). Indeed the catalyst for this study was the different ways the forums were used in my own learning experience. Thus a greater understanding of the nature of discussion in online forums was achieved by the research questions driving the study, which now follow.

3.2 Research questions

The dual focus of the present study is on teaching *and* learning in the online case studies. Of particular interest is how students participate in online discussions, and also how instructors utilise this facility for teaching-learning purposes. Participation provides opportunities to interact with and contribute to the learning community, with potential for developing interpersonal relations and contributing jointly to new understandings. In line with the sociocultural and SFL theoretical approach taken, which posits interaction as central to learning, the online discussion forums give insight into the nature of these interactions.

To achieve the aims of the present study, to gain insight into the nature of online discussion forums, there is one overarching question, which is guided by three research questions.

Overarching question: How do discussion forums shape the teaching-and-learning experience in TESOL distance online education?

1. What kinds of knowledge are socially constructed in online forum interactions?
2. What is the role of interpersonal contributions
 - a. in fostering / inhibiting student engagement in forum interaction, and
 - b. in building a sense of community?

3. What is the role of the instructor in mediating online discussion?

To ensure an adequate amount of discussion text data was collected, a number of criteria were developed for choosing the learning sites. Obviously successful data collection depended on texts being generated in the online discussion forums, therefore the forums had to be utilised in some way. This was the main priority for selection of the learning sites, and is detailed in the following section.

3.3 The research sites

The interactions that occur in the online forums represent the classroom 'talk', unfolding - as classroom talk does - over time. To capture some of the variations in discussion forum use that was my experience, a set of criteria was established prior to the recruitment process (illustrated in Figure 8), which ensured selection of suitable cases. To be considered for this study, the most basic criterion for a potential case was evidence of forum activity, and that this activity was content-driven by the instructor, the topic and/or by discussion tasks (that is, discussion was not socially-driven).

The development of the variables in sub-criteria was based on two of the predominant themes that were consistently raised in the literature. These were in regard to instructor involvement in online discussions, and assessment of participation in discussions (see Chapter 4 for extensive discussion of the literature). These themes form the sub-criteria variables which address the role (and/or involvement) of the instructor in the forums, and the use of mandatory, or assessed forums to 'encourage' participation. Selection of potential cases in this way also helped to ensure an overall representation of different learning contexts and teaching practices within this TESOL program. The sub-criteria were:

- A learning site in which the forum discussion is **not assessed** but where historically there has been a lot of discussion (with or without high instructor presence in the forums)
- A learning site where forum discussion is or is not assessed, but with **active involvement** of the instructor
- A learning site where the instructor is **not active** in the discussion forums (but there is a lot of forum activity)
- A learning site where the forum discussions **form a significant part of assessment** (with or without active involvement of the instructor)

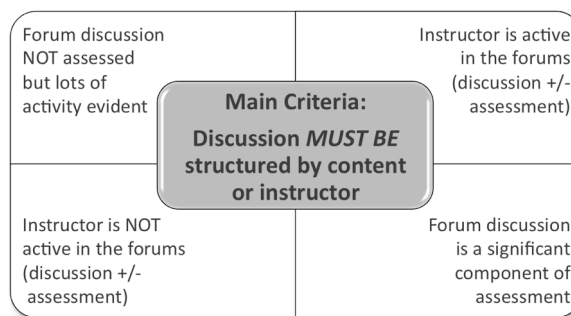


Figure 8: Criteria for choosing potential case studies

As a result five subjects being offered at the time were identified as potential cases. But before moving onto the recruitment process in Section 3.4, a general understanding of the broader context in which the subjects were situated, follows.

3.3.1 The online learning sites: an overview

In this study of postgraduate online courses, data collected from individual subjects should not be considered in isolation from the broader contexts in which they are situated. In the present study each online subject is part of a postgraduate TESOL distance education program at a regional university, and of a larger TESOL program which includes on-campus delivery. Each subject selected for the study had full online delivery, in other words there was no face-to-face component or hardcopy resources mailed to students. At the time of data collection TESOL was one of ten postgraduate specialisations offered by this particular education faculty (hereafter referred to as 'the faculty'). Beyond university faculties are governance and funding bodies with associated policies, procedures and quality assurance standards to which the university must adhere. This hierarchy, while not unusual, is nevertheless important to bear in mind when examining the teaching and learning processes, as each of the cases in this study reflects the practices and procedures of higher education generally, as well as the TESOL program offered by the university, and the individual teaching practices of the instructors.

At the time of data collection the e-learning platform used by this faculty for its online education program was Janison®, although Janison was not used by the university generally. Similar to most e-learning packages, Janison had various tools built in to allow customisation within the limits afforded by the software, and various levels of access, for example editing rights for instructors to update resources or links and customise the learning site. One option to change the front page which students were taken to after logging on was useful for drawing their attention to a current topic, a new resource or a particular discussion, etc. The ability to foreground, background and have layers of tabulated information in single screens (i.e. with minimal scrolling) facilitated access to

relevant information. Navigation around main options in the site was via the sidebar menu, or at the top of the screen for easy return to the main or previous menu.

As Janison was not the e-learning tool used by the wider university community, the faculty provided specialist support in the form of an online guide, as well as an onsite team of IT consultants who were reachable both in and out-of-hours. This support was particularly important for this program as online users can be located in different time zones, therefore accessing their learning sites did not necessarily coincide with AEST working hours.

In the original design of the TESOL program there was academic involvement in conceptualising the whole program and in the preparation of course materials. The transition to full online delivery in 2005 necessitated redesign of the paper-based distance subjects, and the development and design of some new subjects (Distance Coordinator, 2011, pers. comm.). It is important to note that subject designers were academics who were also lecturers in face-to-face learning, but also had some experiences in the role of online instructor. In addition, at this time Web 2.0 was fairly new and academics may have had fewer skills and experience with the interactive capabilities of social networking, blogs, wikis, and web browser applications. This was an important consideration in my examination of the way discussion forums were utilised, and may help explain some variations between subjects. Another point worthy of consideration is that the online subjects were not structured by the usual face-to-face delivery structure of 'one lecture-one tutorial', hence online instructors could choose how to deliver their subject.

The components of the subjects as a whole reflect the historical and continuing academic involvement in their development. These involve reading and expert commentary (such as found in the topic guides written by academic designers¹¹), including links to journal articles, university-based resources (such as library, assessment information, topic progression, etc), and links to outside resources (such as online articles, academic journals, YouTube, blog sites, podcast lectures, TESOL websites, etc). The online discussions are but one component of the whole subject.

Enrolled students had access to the subject(s) resources for approximately 15 weeks. A link for each enrolled subject was embedded into the opening page so that once logged in, students could access all their subjects from a single location. The following screen shots show an example of an opening page (on the left side of Figure 9) taken from the faculty Janison user guide. A small icon at the bottom of the sidebar indicates others who

¹¹ hereafter referred to as 'designer'

are also logged on. A mouse-over of the icon reveals names, with instant messaging available by right-clicking the icon.

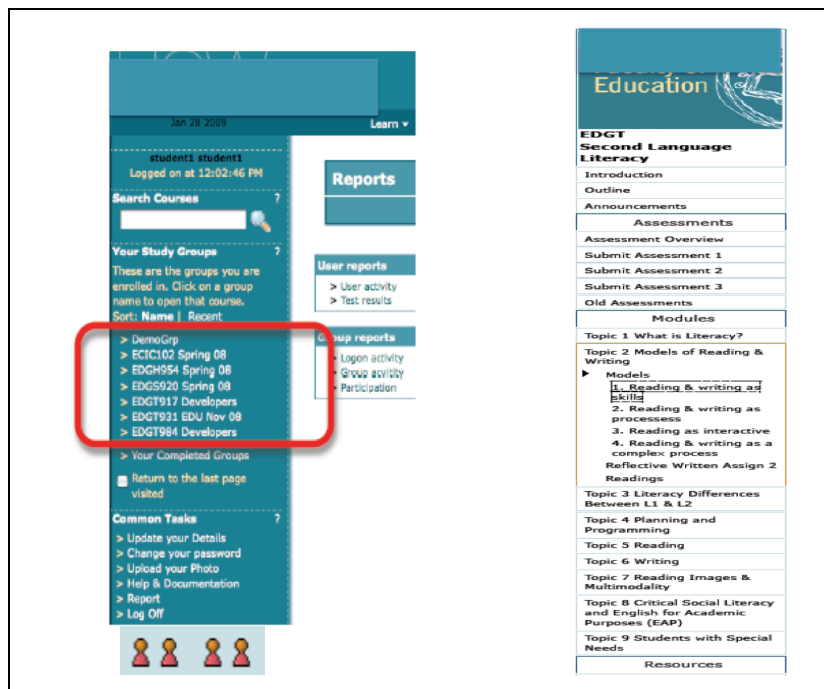


Figure 9: Sidebar examples: Janison homepage and subject homepage

After logging in and selecting a subject from the sidebar, all subject-specific links and resources are accessible, such as topic information, reading and other resources, announcements, discussion forums, chat, information and help. Access rights also include details of all group members, located in 'Your Group' to facilitate one-on-one communication should individual contact be sought.

Each of the subjects were structured similarly in that different areas of the site were accessed via the sidebar, which housed tabs for the learning modules (listed as units or topics), resources (such as for assessment or readings), discussion forums, help and administrative tasks. The content was organised in the modules in a linear fashion for progression through topics (rather than self-contained topics). The interactive features of Janison included asynchronous forums, instant messaging, and Chat. For this study on the use of asynchronous discussion, the following information was taken from the faculty Janison user guide. This indicated there were no assumptions made that students would be conversant with this means of communication:

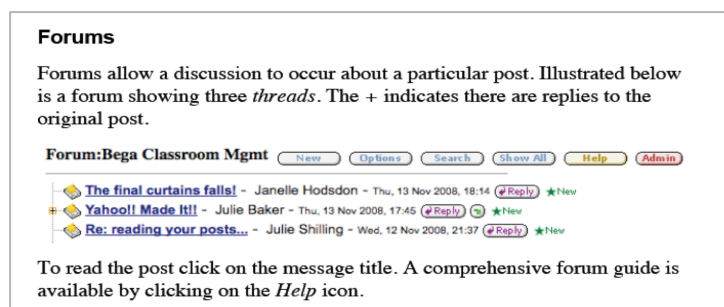


Figure 10: Forum use instructions (from Janison User Guide)

A forum is comprised of posts. A *post* (sometimes called a *thread*) to an online discussion appears as a subject line. The subject line forms a hyperlink to the content of the post which opens on the forum space when clicked. A post can be either an initiating post or a response post. *Post* refers both to the content, and also to the action of *posting* when compiling a text and making it available to the group, as one *posts to discussion*. A *threaded discussion* is created when the 'reply' function is used in an open post. In each of the subjects, students were given the 'right' to initiate posts in the discussion forums. This simply required entering a title into the subject line and typing directly into the discussion 'box' provided. To make a direct response to another post was a matter of clicking on the 'reply' button. Posts which have replies become threaded or grouped together in a cluster, and for this reason I have called these *interaction clusters*. Interaction clusters (ICs) are of considerable interest to this study of online dialogue because of the potential for indicating interactivity between participants.

3.3.2 Usability and constraints of the e-learning software¹²

The challenges of usability or functionality come with any e-learning platform, either ready-made or more bespoke as these TESOL subjects were (either as new subjects or converted from paper-based delivery). Some of the features afforded by Janison from designer and instructor perspectives were that the platform was easy to customise to a particular subject both in the design process as well as after it went 'live' with instant editing facilitating the refining and revising process. Subjects were easily compartmentalised into topics with the capacity to include separate portals (such as for assessment, or forums etc), as for embedding links so that students could access all information needed from the one place. The Janison IT support team was also an essential aspect of successful online implementation and use. For students the usability afforded by Janison, once familiar with it, were that navigating around the site was 'pretty easy' or 'pretty straightforward', and they appreciated the logical organisation of subject

¹² Information for this sub-section garnered from interviews with designers, instructors and students

topics in the sidebar and easy navigation between resources, the capacity to download and print resources, as well as the embedded links to 'external' resources. Students also at times made use of the IT support provided.

Some of the constraints from a design perspective were magnified simply because of being online – that is, not having face-to-face contact, which for one designer was 'the big constraint I was always trying to overcome'. Lack of visual, aural and other meaning making cues presents certain issues also for the instructor because it is 'much harder explaining things when it's all by text' (2011, Instructor A, pers. comm.). When designing from scratch, finding resources which were both suitable and took advantage of a range of multimodal resources, actually became a constraint due to accessibility issues, as one instructor lamented, 'how do you actually *get* them?'. In addition, the design process was time-consuming due to a lack in the kind of expertise needed for Web 2.0 technologies among program staff at the time, and hence lack of informed feedback as they moved 'from hard copy materials to online' (pers. comm., 2011). Constraints from the student perspective also meant that, as well as formal entry requirements, students needed to have at the very least, a high level of competency in English language skills, some proficiency in using Web 2.0 technologies, and good internet access.

The features afforded by asynchronous forums are that it 'lends itself to more thoughtful interaction' and, in the redesigned program, utilising the communicative capacities of the technology was considered essential for overcoming isolation. Isolation was emphasised by one designer as, 'the biggest, biggest, *biggest* problem' (pers. comm. 2011). However some constraints faced by designers and instructors included the challenge of integrating discussion tasks into the 'real learning of the unit' or into assessment tasks in a way which countered the loss of spontaneity when interacting. As a consequence asynchronous communications can often be a less satisfying experience than face-to-face interactions, as one student expressed,

I think there is some level of isolation when you study by distance. Interacting electronically can never be a substitute for the quality experienced in face-to-face interactions ...

Posting to discussions was generally found 'pretty easy' by students once they became familiar with how the thread system worked, and particularly if given specific instructions by their instructor on what to do. However using the thread system to interact was not considered to be intuitive by many of the students. Thus variation in the levels of expertise in using the software is also a contributing factor to how discussions unfolded. In fact instructors noticed that students often 'get lost in long streaming discussions', that 'not all students are tech-savvy', and that 'learning Janison can be a steep learning curve' in addition to managing the subject content. Some students confirmed these were

certainly the limitations they experienced. One student commented that an assumption was made of students' technological expertise, thus navigating the learning site and discussions was a matter of 'trial and error' or 'just sort of click[ing] around'. The thread system was also found 'a bit confusing' and some students found it hard to track conversations in order to respond. One student was 'still not clear about how it works'.

3.4 Ethics and recruitment processes

Before the recruitment process began, ethics approval was obtained from the University of Wollongong Ethics Committee (Appendices i and ii). To satisfy ethics concerns it was important to maintain a clear demarcation, particularly between student roles as research participants and as learners in the online subject. Thus, an 'arm's length' distance was achieved by delaying data collection from students until after the release of final results, and by using an off-site survey tool (SurveyMonkey®) for the online questionnaire. I was also certain that by not having any involvement in any aspect of the online subjects would provide appropriate arm's length distance.

3.4.1 The participants

The research participants were the instructors, students from each subject as well as the subject designers. To establish transparency during the recruitment of participants, particularly instructors and students, I established a 'hierarchy' of contact in the pre-recruitment stage, to commence as soon as ethics approval had been granted. The first point of contact was with the TESOL distance coordinator. This proved useful as it allowed me, together with the coordinator, to view the discussion forums of subjects as potential cases before targeting those which best met the criteria outlined previously. Once the potential cases were identified I contacted each of the instructors to gauge their willingness to participate in the research project. This step eliminated one of the learning sites due to the instructor having other pressing issues to deal with, therefore I decided not to place any undue burden on her or her students at that point in time. The recruitment process then proceeded for four of the subjects that met the criteria. Consent by the instructors was sought and granted before proceeding with recruitment of students. The following diagram shows this process,

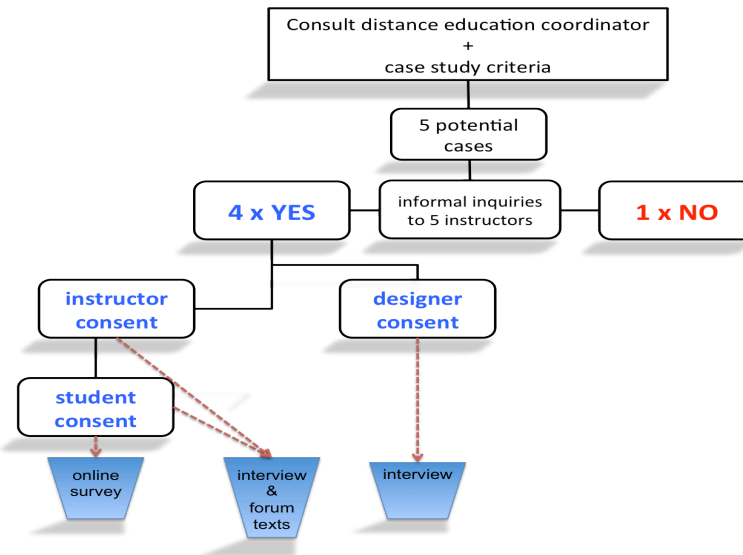


Figure 11: Participant recruitment process and data types

Before student recruitment began I negotiated with each instructor to determine their preference for how the project should to be 'introduced' to their students. Some instructors elected to inform students of the forthcoming invitation to participate in the study, either through individual contact or via a general announcement on the learning site (see example below). Others preferred to be removed from this process, allowing me to make direct contact with students. My access to the Janison subject sites was organised by each instructor, from which individual student details were then able to be accessed. I felt that each of these steps were important during the recruitment process for building interpersonal connections and gaining trust, particularly as outsider to these virtual classrooms.

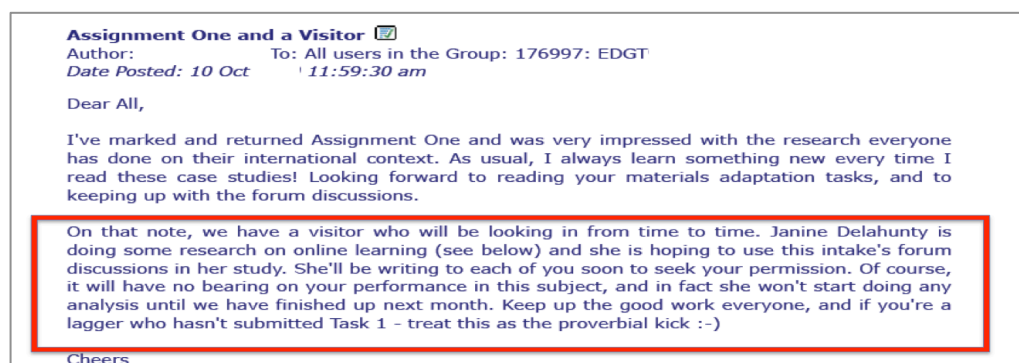


Figure 12: Example of pre-recruitment announcement to students

Recruitment of subject designers proved to be more of a challenge, as some were no longer associated with the university. One designer could not be located, but another through various collegial contacts was traced to his current workplace. Conveniently two of the recruited instructors were also the original designers of their subject. While both consented to be interviewed separately for each of these different roles (i.e. as instructor

and as designer), one of the interviews did not eventuate, therefore the designer perspective of one subject could not add to the findings and discussion of that particular case.

In total the research participants consisted of four subject instructors, two subject designers and 21 students. The demographic information gleaned from interviews and a student survey shows that instructors and designers were either from Sydney or Wollongong, and that the student body was spread across diverse domestic and overseas locations. While the majority of students were from Sydney or Wollongong, other domestic locations were country New South Wales, Queensland, Far North Queensland, and Victoria. Adding to the diversity and further afield, were a South African in Dubai, an Australian and Canadian in Tokyo and Usa-city Japan, an Australian in Hong Kong and a Japanese teaching in Sydney.

A general description of the subjects selected for this study follows, to provide an overview of some similarities and differences between them. This section also explains why analysis of one of the cases (Case X) did not proceed after careful consideration of the data collected.

3.5 Case studies: an overview

The four subjects identified as potential case studies met the criteria as set out in Section 3.3. As a PhD investigation three learning sites were considered the optimum number of cases for an in-depth qualitative analysis. However in recognition of the reality that “not all cases will work out well” (Stake, 1995, p 7) I decided to collect data from each of the four subjects selected. This was to take into account the limited timeframe of the present study as a form of contingency should one of the subjects yield insufficient data. In this case the data collected from the other three should be adequate and avert any unnecessary delays in the research. Therefore data collection proceeded for the four subjects with a decision made on which would be most effective in answering the research questions after I became familiar enough with the content of the data set to make such a decision.

3.5.1 Assessment-driven discussion forums: Subject A

Subject A is an elective subject in which the students are expected to have a high level of autonomy. At the design stage of Subject A it was envisaged that it would be most useful as one of the final subjects taken in the postgraduate TESOL program, and it was aimed at those who were preparing to teach overseas (2010, Designer, pers. comm.). In Subject A students research an international context in which to teach. As an elective this subject can be completed as part of Graduate Certificate, Graduate Diploma or Masters degree.

In total there were seven participants recruited from this subject: the subject designer, the subject instructor and five students (1 male, 4 female). At the beginning of the session there was a total of eight students but two students discontinued, leaving six students. This small number of students produced a corpus of approximately 75,000 words over eleven discussion forums. All students indicated they were native English speakers and were living in different parts of Australia whilst enrolled in this subject, although some had overseas teaching experience and most had travelled.

The discussion forums represented a high proportion of assessment, at 40% of the final mark, with students required not only to post, but also to read and comment on others' posts. This would account for the large corpus generated. The aim was to promote interaction between students stimulated by set discussion tasks, and reflects the value the instructor placed on interaction in the learning process. The instructor was not often 'present' on the forums, preferring to allow students to self-direct discussion guided by the tasks. He commented from his experience, that going onto the forum to exhort students to respond and interact was not as effective as sending individual emails to encourage waning involvement.

The instructor modified the default set-up of the forums by moving the discussion forum tab from main sidebar location and creating separate forums within each of the eleven topic areas. Each forum included three or four discussion tasks, the required readings, and instructions for posting and responding (shown in Figure 13 below). Topics and forums in this subject were thus organised as self-contained units. Some forum discussions from the previous session were retained on the discussion space. This provided useful 'models' for the incoming group, and occurred once in error, but feedback from the new students alerted the instructor to the usefulness of continuing this practice. Making previous forums available also recognises that students – past and present - are contributing to a conversation which continues beyond a particular group or time.

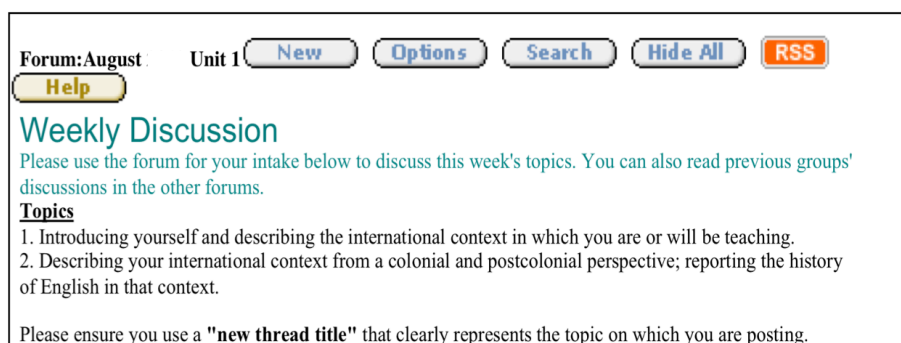


Figure 13: Forum instructions header example

The instructions for weekly discussion shown in the figure above (apart from the specific 'Topic' questions) were repeated in all eleven forum headers. Repetition ensured

constant reminders were given to students for organising their contributions (i.e. with a heading that 'clearly represents the topic ... you are posting') as well as the reminder to respond to others. This shaped the appearance of the forums in which there were many interaction clusters created. These were interspersed with single posts which had no replies attached. The figure below shows an example of a small interaction cluster as it appeared on the learning site:



Figure 14: Snapshot from the learning site: a small interaction cluster

3.5.2 Instructor-driven discussion forums: Subject I

Subject I is also an elective subject in the TESOL program. The instructor had been tutoring this subject for 6 years and noted the high level of autonomy displayed by students during this time, commenting that she

...very rarely get[s] an online student who's not capable of being very much self-directed in their learning and having their own sufficiently good standard of literacy.

The subject focuses on second language literacy. The instructor felt this subject was well suited to the online mode of delivery because it encapsulated the changing nature of literacy, impacted by new technologies. In some of her discussion tasks and response posts the instructor tried to stimulate student thought towards making such connections, that is, the changing nature of literacy understood through *what* they were learning (the subject content) and *how* they were accessing learning (through new technologies), and the different skills needed to function and communicate in different environments.

The discussion forums were all located in one forum space and accessed from the main sidebar tab (unlike the separate forums within topics as for Subject A). Each new topic was initiated as a new thread in the forum with some 'ground rules' set down by the instructor for organising the forums. This was to ensure that related contributions to a discussion topic were grouped together, forming interaction clusters. In other words, by using the reply function to respond, these responses became threaded to a particular topic, rather than being stand-alone posts. The corpus of discussion texts produced from this group amounted to around 12,000 words.

There were six participants in total recruited from Subject I – the instructor and five of the 10 enrolled students (1 male, 4 female). All except one participant student were completing a Masters degree. Two students were living and working in English schools overseas – one in Dubai and the other in Japan. All indicated that English was their first language. Three were Australian, one South African and one Canadian.

There was a small assessment value of 5% placed on online participation. Students were given the choice to be assessed on one of their discussion posts or to post a blog. Only one student in this group chose the blog option. Apart from this small assessable component, the rest of discussion was voluntary and I was not privy to which of the posts were submitted for assessment.

Subjects I and A are similar in the linear progression of module, and topics within the modules. However while Subject I discussions are initiated by the instructor, they appear to be spontaneous, as her practice was to start a new forum topic and invite comments “every couple of weeks or between assignments ...”. On the other hand discussion tasks in each of the eleven forum spaces in Subject A were already in place, so it is possible for students to look ahead (if they desired) and prepare (or be prepared) for future tasks.

3.5.3 Student-driven discussion forums: Subject S

Subject S is also an elective subject the TESOL program The subject focused on teaching listening and speaking, which seemed to be a challenging subject to deliver and to study online. This was commented on by the designer,

... how do you have subject Speaking and Listening that's all written? ... [name] suggested a lot more interactive stuff along the way, but when we did our review and the teachers themselves, they tended to be older, they ... want[ed] to download stuff and read it, hard copy” (2011, interview).

Accordingly this challenge was approached by the designer through beginning the subject with practical examples to “find out what [students] knew, what their background was ... a bit of discourse analysis in the beginning” before moving onto methods and approaches, “not hitting them upfront with the theory” but to relate it as much as possible to their own practice and “to start off with them having an awareness of their own approach” (2011, interview).

There were seven students enrolled in this subject – 1 male and 6 female. One student had been living and working in Japan for a number of years, and another had moved to Hong Kong to teach in an English language school at the time of the interview. All indicated that their native language was English. In total seven participants were recruited

from Subject S – the subject designer, the instructor and five of the students (1 male, 4 female). The instructor had tutored this subject for three years.

There was no assessment value attached to forum participation, however encouragement to post to discussion was incorporated into each of the topic guides as one of a variety of activities students could choose. When scanning the data sets I observed that in the earlier weeks of the class when the directive was to *post it on the discussion board*, or *summarise... and post your description on the website*, students tended to respond. However I also noticed that there were no responses at all to some later tasks, overtly entitled 'Discussion Forum'.

Unlike Subjects A and I, students in Subject S tended to use the discussion as a repository to post tasks as attachments, rather than entering text directly into the discussion space. This meant that in order to be read, the attachment needed to be opened (and saved) separately. This created additional steps for those wishing to access the post. As a result the forum was comprised predominantly of individual posts and, when opened many contained just the attached file, often devoid of interpersonal niceties such as a greeting or a lead-in to the task response largely absent (for example, *This is my response to Task 1 and comes from my experience teaching academic English. I hope you find it helpful*). A screen grab showing how these appeared on the discussion site is shown below,



Consequently when 'entering' the Subject S forum space, I noted that it had a 'flat-line' effect. Flat-lining describes the appearance of the forum when each contribution is posted as a new thread, and consequently are arranged one after another, with few interaction clusters. In this subject there were only two interaction clusters. This pattern of stand-alone posts, or flat-lining indicates a low level of interactivity, and reflects the posting behaviours of this particular group. As such the evidence of interaction with others and/or their ideas was not immediately obvious. However this could not be confirmed until after close reading of the corpus.

The corpus yielded approximately 13,500 words (when attachments are included in the count) or alternatively 4,000 if attachments are not included. The instructor commented on the practice of uploading attachments to the forums as it was not the result of any directive given by her. The instructor noted that,

... some of them upload attachments with the forum, I think that's great, but others, ... because they're coming from such a diverse background, they don't have the wherewithal to draw on that experience to put that on the forum ...

These kinds of posting behaviours, such as stand-alone threads and uploading files, may be due to students interpreting how they will benefit from using the forums, particularly if there is a lack of explicit instruction and/or no instructor presence on the forums. Another possibility is that, as an elective subject, it might be assumed that students are experienced communicators in online forums. In lieu of assessment, Subject S topic guides contained encouragement to use the forums, such as “participating in online discussions will enhance and consolidate your learning”, and provided a range of tasks, with some requiring students “to post to the online discussion forum”. The initiative to use the forums was clearly to come from the students themselves, and consistent posting of tasks would suggest some students had heeded this advice.

3.5.4 Task-driven discussion forums: Subject X:

Subject X is a core subject of the Graduate Certificate and Graduate Diploma TESOL programs. It is recommended as the first subject to take in the course progression as it is a prerequisite to the professional experience (practicum).

There were 14 students enrolled in this intake, and it could be assumed that this was the first subject undertaken by most of them. Six participants from Subject X were recruited for this study – the instructor and five of the students. Two students were enrolled in the Graduate Certificate, one in Graduate Diploma, one in Masters, and this information for another student not disclosed. One student was of Japanese nationality, teaching Japanese in a Sydney high school, two indicated that English was their first language, while this information from the others was not made available. Only two of these students consented to be interviewed in this study, while three consented to the use of their discussion forum texts only.

Topics were set out under 12 topics in the sidebar, with other main resources, such as the discussion forum, also accessed in the sidebar, similar to the set-up for Subjects I and S. The discussion forums were provided as a space for students to post learning tasks, as suggested in the topic guides. Exhortation to use the discussion came in the first announcement in which students were told,

... don't be afraid to use the discussion forum. It is there to enable some interaction which is always a good thing for teachers, who spend a lot of time in classrooms. It's also a way for those new to the field to get a feel for how those with experience cope with all the demands of language teaching ...

This exhortation together with a variety of reflective and reading tasks resulted in the generation of a large corpus of 56,500+ words. However as I began to read through the discussion texts it became apparent that the forum was predominantly used to post responses to tasks set out in the topic guides, rather than for group discussion. The task-driven purpose was also evident in that despite the high level of forum activity, there were very few interaction clusters formed, as would be expected in a discussion. A closer reading of each post confirmed that there was negligible interaction between students. The forums were essentially a series of monologues, connecting individually to the topic but with minimal dialogic or interpersonal connections being made to each other through forum discussion, and thus functioning more as a 'virtual display board'.

At this point it was noted that there were similarities in how the forums were constructed (indicating also how they were used) between this online subject and Subject S. In addition Subject X was a core subject, rather than an elective, and was fundamentally different to the other three subjects. While I acknowledge that making one's task responses or perspectives 'public' on the forum is not without benefits to others in the group as these become shared resources, I decided that proceeding with analysis of this data set would not add anything strikingly different to the whole project. Both its similarity to Subject S (in its structure), and its difference to the other cases as a core subject, together with the lack of dialogue, informed my decision not to continue with analysis.

From this point on in the thesis, although data collection was completed for Subject X, discussion of specific methods of inquiry will only be in relation to Subjects A, I and S. These were the subjects selected as having the most appropriate data, as well as being suitably diverse from each other to contribute to this project as a multiple case study.

3.6 Data collection

Data collection included primary and secondary sources. A range of data sources augmented the main discussion data, as well as adding to the reliability of the results by helping to ensure triangulation in the analysis and interpretation. Primary sources included the discussion forum texts, the interviews and the student online survey, and secondary data included pedagogic artifacts of each subject. The artifacts were gathered from the Janison learning site and included soft copy screen grabs, or PDF files. Pedagogic artifacts are any information that was produced for and provided to the students over the duration of the subject session, such as subject outlines, topic guides, readings, announcements, assessment details, links to resources, etc. After the data collection process was completed, pseudonyms were allocated and any other potentially identifying information removed or modified (such as subject codes, year stamps etc). The research questions would be answered primarily by the discussion texts, and

supplemented by interview and survey data. Secondary data sources collected from the learning sites would provide additional contextual information.

3.6.1 Student data

As outlined above in the Ethics section, procedures for data collection from students ensured that arm's length distance was maintained. However, the recruitment process was completed a few weeks before data collection commenced. This was to facilitate collection of the different forms of data once the subject had been finalised, *and* while students' memories and perceptions were still fresh. Interviews could then be arranged as soon as academic results were released. A further benefit in delaying collection was that this would help preserve the 'natural' flow in the discussion forums to mitigate any undue influence that my presence as an 'outsider' may have placed on this flow, had data collection occurred earlier.

The discussion forum texts encapsulated the interactions that occurred, so to ensure the greatest possible collection of these texts from students, they were offered a number of options for involvement in the research¹³. First of all, minimal involvement (in terms of time) allowed busy adult students to consent to collection of their forum texts only, which required no additional outlay of time over and above the requirements of the already completed subject. The forum data would then be complemented by an online survey and semi-structured interviews, which provided student perspectives on various aspects of discussion and the online learning experience. Hence, the next level of involvement was for students to complete an online survey (taking no longer than 10 minutes). Full involvement included both the above options, plus a semi-structured interview of approximately 30 minutes. Providing these options to students helped guarantee the data set was adequate, as well as recognising that these adult learners were often time-poor, managing multiple roles in the home, work and study. It also acknowledged that even if willing to participate in the research, time constraints may have dictated otherwise. Therefore it was important that they could nominate a level of realistic or manageable commitment to their involvement.

Those students who elected to, completed the online survey, and those who nominated for full participation completed the survey prior to their interview. This served two purposes: firstly, it enabled me to gain some insight into the student experience of 'learning' and 'community' in the online class through the Likert-style questions of the survey, which also included opportunities for comments and demographic information

¹³ Collecting adequate data sets from subject designers and instructors did not hold the same concerns and therefore did not require different involvement options as offered to students

(discussed further in 3.6.4). The survey was useful in providing me with a glimpse into student-participant identities, as diverse individuals before I spoke to them.

3.6.2 Discussion forum texts: preparing for analysis

As already discussed in 3.3.1, the software included default settings. The default organisation of any posts to the forums is descending date order (i.e. the most recent post appearing at the top) within interaction clusters, as well as posts made to the general forum space. When the forum space is open, there is the option of viewing a summary of main threads, or 'unexpanded' view (which includes the subject line, such as 'Health and Welfare Literacy'), and another option to view all responses to these initiating threads, or 'expanded' view. This shows any responses threaded together as interaction clusters (see Figure 15). A small '+' next to the subject line indicates a response has been made, as shown below:



The '+' as well as the expanded view provided at-a-glance some of the posting patterns within the subject forums. Identifying interaction clusters in this way was a convenient starting point when I was making decisions on what texts would be most useful to consider for initial analysis. However, I also realised that I could not assume that interaction clusters contained *interaction* per se, and that stand-alone posts did not, and so I read all posts.

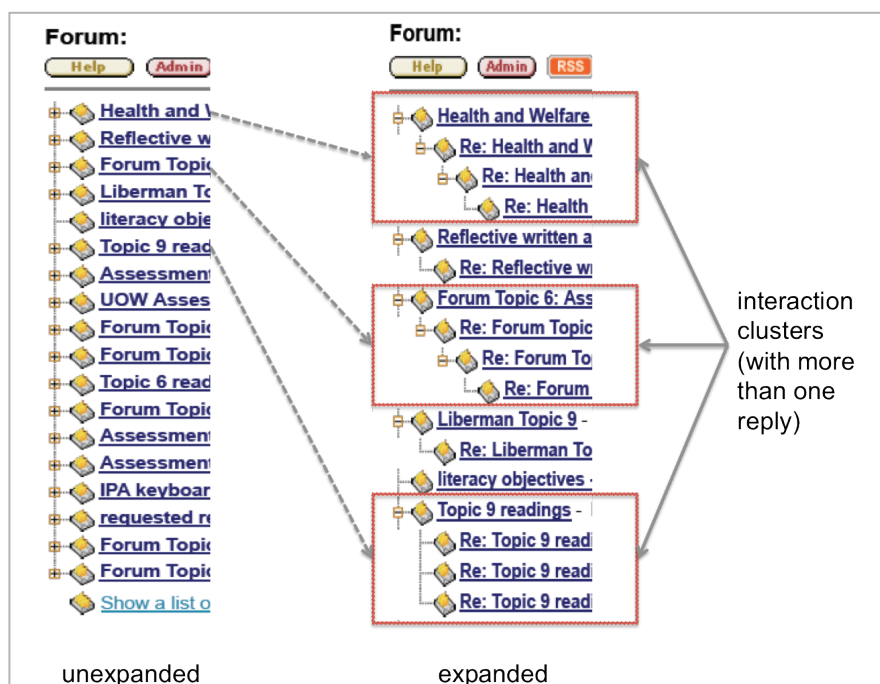


Figure 15: Forum snapshot showing 'unexpanded' and 'expanded' views for Subject I

The descending date order within interaction clusters presented some challenges to reading and subsequent preparations for analysing the interactions to accurately capture the order of interactions. This needed to take into consideration the time (as in unfolding discussion), as well as which post in an interaction cluster was attached to which. In other words, because the reply function can be used in any open post, whether this is the main thread, a response, or a response-to-a-response, and so on, there is potential for the structure of interaction clusters to become quite complex. This is mentioned, mainly to stress that online discussion does not usually unfold as in face-to-face discussions (i.e. linearly over time), therefore care must be taken to manage the data to capture the interactions accurately once analysis commences. To explain this, the simple cluster construction from Figure 14 is replicated below. We can see that Cluster 6 is initiated by Vicky (on 4 August) who uses *Hello!* as the subject line. There are two direct responses to Vicky, which are offset underneath the main thread. The first is by 'RF' (date stamped 6 August), and the second is from Wendy. Wendy's response on 7 August, is the most recent in that 'section' of the thread, and therefore appears above RF's. In the final response from Vicky, the post is threaded directly to RF's (even though it is a combined response as indicated by the changed subject line) because Vicky clicked 'reply' while in RF's open post. The potential for forming complex interaction clusters is limited only by when and where participants place their responses.



In order to prepare this cluster for analysis it needed to be reorganised to reflect the logical order of the discussion, i.e. Vicky – RF – Wendy – Vicky. This kind of organisation was most necessary for Subjects A and I, which had a high number of interaction clusters, as summarised in the following table:

Table 2: Summary of forum posts and interaction clusters

Subject A	Subject I	Subject S
75,000+ words	12,000+ words	13,500+ words
157 initiated posts in 11 separate forums (151 student-initiated / 6 instructor-initiated)	18 initiated posts	31 initiated posts
67 interaction clusters	17 interaction clusters	2 interaction clusters

A procedure for managing the discussion texts in each subject including the interaction clusters was devised. This was a layered numbering system using Excel, which could capture levels of responses in the hierarchy as displayed by the default software organisation, as well as the capacity to reorganise the texts to reflect the logical order of a

discussion. Levels were numbered from 0 (i.e. representing the initiating post), with response levels numbered 1, 2, 3 and beyond, depending on how interaction clusters were constructed. Further details can be found in Appendix iii, however it is acknowledged that as technologies continue to improve, especially in how data can be manipulated, this kind of organisation may soon be redundant, if it isn't already.

In the following diagrams, for the purposes of visual clarity (especially of the hierarchy in responses), interaction clusters have been re-constructed from the default display in Janison (see Figure 15), to a 'hanging' display of threads and response levels, as shown below. This is to provide a clearer illustration of some of the typical posting behaviours in each of the subjects, which I will now discuss briefly.

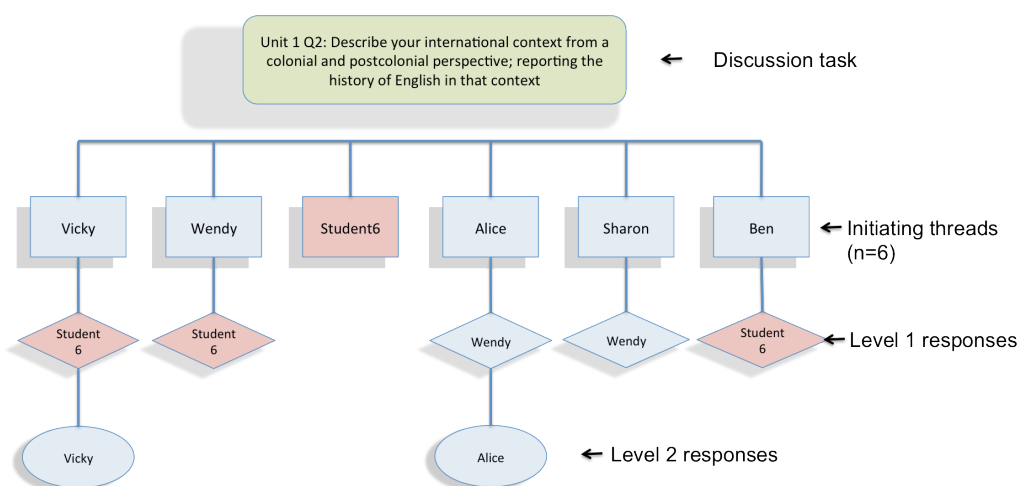


Figure 16: Interaction cluster in Subject A

Figure 16 above is a re-representation of the online interactions in Subject A, showing the posts and responses to part of a discussion task (in the green box). Six students initiated a thread under this particular task. Most of these contributions were responded to at least once (i.e. at the first level of response i.e. level 1) with two responses at the next level. In both these examples the interaction was completed by the original post-er, i.e. Vicky and Alice who were 'responding to their responders' (thus forming the next level of responses).

The cluster from Case I in Figure 17 below shows that the instructor posts directly to the forum. This gives an indication of her role in instigating and leading the discussion. Two students, Will and Amanda, respond directly to the instructor forming the main interaction cluster. A sub-interaction cluster can be seen to form around Will's contribution as others respond to his post.

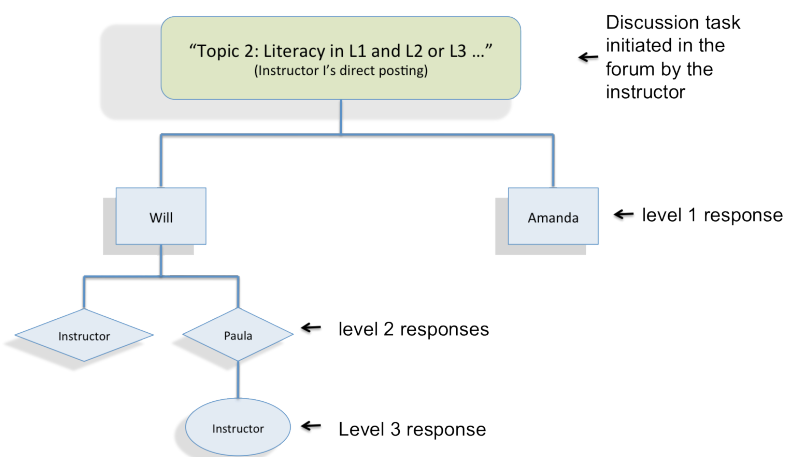


Figure 17: Subject I – different response levels in a discussion

In contrast to Subjects A and I, the reply function was rarely used in Subject S. Figure 18 shows one cluster of only two which occurred throughout the discussion forums of this subject. The predominant posting behaviour of the students was to initiate individual posts (rather than reply to other posts), represented by the green boxes. These stand-alone contributions gave the forum a 'flat-line' effect as described earlier (in 3.5.3), which indicates a low level of interactivity.

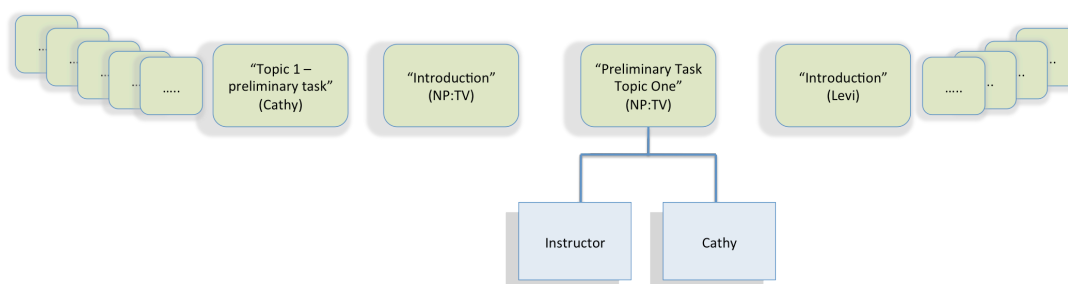


Figure 18: Subject S - 'flat-lining' effect of single threads interspersed with occasional replies

As with substantial corpora, such as these forum texts, it is not always feasible to analyse the complete data set, especially when managing also the complexity of online interactions. Therefore only texts which represented the kinds of discourse needed to answer the research questions were 'lifted' for closer analysis. Decisions on which were most appropriate were made after several readings of the whole data set, and as a sense of the salient themes or issues in each case became more apparent. Therefore because the focus of the findings is based on the texts that in a sense, 'jumped out' in relation to identified themes and the research questions, other aspects in the interactions may have been unobserved in the present study.

3.6.3 Interviews

Interviews were conducted with three stakeholder groups: the subject designers, the subject instructors, and the students¹⁴. All interviews were semi-structured to allow for the range of individual perspectives. To align with this research project as being “fundamentally a special case of human relationship” (Josselson, 2013, p 33) it was important for me to develop a level of interpersonal rapport with the participants, so that they felt at ease and could share freely of their experiences. Therefore interviews were conducted always at the interviewees’ convenience, particularly for those located in different time zones. An additional consideration was to offer a range of options for the interviewing to cater for individual preferences such as by Skype, telephone, chat room, or if feasible, face-to-face. Students opted for Skype or telephone (one opted for chat room), and subject designers and instructors were interviewed either face-to-face, Skype or telephone.

I recorded and transcribed all interviews and gave the transcript to each participant for checking before any analysis commenced. This was an important part in the process as it allowed participants to include afterthoughts or to clarify anything in the transcript that was not representative of their meaning, as well as giving me the opportunity during transcription to highlight any data which was unclear or missing. After checking, pseudonyms were allocated to each participant across all sets of data.

In the research design, there was only one interview factored in for each participant. To capitalise on this limitation, I developed probes for each interview question. This helped to ensure that I collected a sufficient amount of data by being able to prompt interviewees (if needed) to talk in depth, and at length, about different aspects of their learning experience. The development of probes was largely influenced by the challenge identified by Glesne (1999, p 92),

Are you listening with your research purposes and eventual write-up fully in mind, so that you are attuned to whether your questions are delivering on your intentions?

An unexpected factor during recruitment and interviewing was the enthusiasm expressed by some participants at the invitation to become involved in the research project and the extra insights volunteered, as received in the following comments,

¹⁴ All de-identified interview data is provided for the thesis examiners in a separate file (on CD for hard copy or as a PDF file)

I'm more than happy to be involved in your study, and in fact am honoured to be asked! ... Count me in and let me know the next steps ... (instructor)

Happy to be part of your research, though I'm doing precious little online interaction ... anyway, use me as you see fit – I'm eager to learn from your work ... (instructor)

... very interesting what you're doing ... I often thought about ... how *do* universities know how their distance people are getting along? Sometimes after each course there's a chance for a little survey / feedback type of thing, but not an overall one like you're doing (student).

In addition, one participant visiting Australia from Dubai, Amanda (pseudonym) was keen to meet me and an arrangement was made to meet socially. This was important for both of us to build on the rapport developed during her Skype interview, as well as reiterating for me the significance of establishing a level of interpersonal relations with participants when researching online educational contexts. The challenge of gaining the confidence of a participant is perhaps magnified by the virtual-ness of the online context. Yet another student, Levi, consented to the research three months after I had completed the data collection, very keen to participate but had not checked his university email account since completing the subject, and had in the meantime, moved overseas. Others, post-interview, emailed additional insights gained after checking their interview transcripts or reflecting on their learning experience. One student expressed that talking about her experiences had “helped clarify some of the things that I had been feeling” (2011, student participant, pers. comm.). This indicated that opportunities to reflect on the online experience can be beneficial for those directly involved in it.

Interviews, while not the main data source for this study, nevertheless were an important primary source, used to capture a range of perspectives and insights into how the different ways discussion was used across the subjects affected the teaching and learning experience. In addition these perspectives would add depth to my analysis and interpretation of the forum data. As semi-structured, the interviews allowed for a range of perspectives which could be explored within the themes identified in the literature. They were also important for providing a 'space' to the interviewees for individualised insight.

Themes guiding the student interviews

I was keen to understand the student perspectives on some of the key themes in the literature around online interaction. In particular on how interacting in discussion forums fostered a sense of belonging (or not), as well as how participating in discussions affected their perceptions of learning the subject content. The interview questions were grouped around support and connections (to build sense of community), perspectives on the interaction that occurred in the subjects (in terms of interpersonal relations and

learning development), the impact on their experience of the role taken by the instructor in the forums (i.e. active or not). There was also a general question inviting comments or raising issues about their online learning experience (see Appendix iv). The latter was included to allow for more individualised perspectives and was considered a particularly important opportunity to recognise and acknowledge the diversity of perspectives brought by these adult learners (Knowles, 1980).

A total of eleven students participated in the interviews. From Subject A and I there were four students each, and from Subject S there were three.

Themes guiding instructor and subject designer interviews

The questions asked of instructors were in relation to: their role as an online instructor; teaching in an online context; interaction and use of discussion forums; and their level of (active) involvement in the forums. I was keen to gain insight into instructor perspectives on their teaching philosophy, and how this may have transferred to teaching in an online context, which could also have influenced the way the discussion forums were utilised. In regard to the latter point, I wanted a clearer understanding of any decisions made by the instructors about how much, or how little, to involve themselves in discussion and why these decisions may have been made. As all the instructors had taught their subject for a number of years I also wanted to know if, and how, the subject had been modified as part of an evaluative process over its history.

Interview questions to the subject designers sought insight into the 'architectural' constraints (or otherwise) of designing a subject for online delivery. The particular interest of this study was on decisions made during the design (and implementation, if this information was available) of the subject on the role of the discussion forums. As mentioned earlier (in 3.3.1) there was academic involvement in each stage of subject development ensuring the program's alignment with university quality in teaching, as well as particular subject goals and outcomes. However individual subject designers were responsible for decisions made about how goals and outcomes were incorporated into an online learning format. This particular TESOL department had the 'luxury' of designers who were experts in the field, and each subject was designed and taught by academics who contributed their own research and that of others to the subject content. They were also working closely with those who would be implementing the re-designed or newly designed subjects. This kind expert input does not always occur, especially with commercial e-learning packages which may be designed around the technology rather than with pedagogical considerations at the fore. With the degree of expert involvement in the design or re-design, I could make some assumptions about the high quality of the subject content.

However, it was obvious that incorporation of forum discussion varied for each subject. It was important to understand why this was so, particularly given the emphasis on interaction with theory as well as practical application of instructional activities that was my own experience of on-campus TESOL classes¹⁵ for immediate education and social benefits.

Interviews added essential support to the discussion forum data from different participant perspectives. While the data sets were significant, for the purposes of this study they were used mainly to cross-check my interpretations of linguistic analysis in the findings, as well as to build thick description of the cases. However these perspectives are brought more fully into the discussion chapter.

(The matrices for all interview instruments including probes are found in the appendices section - Appendices iv, v, vi).

3.6.4 The online survey

The online survey was targeted at students only, using SurveyMonkey®. A link to the survey was sent to students and completed before the interviews took place. This was partly to prepare students for the aspects of online learning I was interested in, and an opportunity for me to refine the interview questions, if needed. It also provided an opportunity to opt out of (or into) the interview, should their circumstances have changed since recruitment, which was finalised quite a few weeks before the survey link was emailed.

The survey instrument was based on Likert-style survey developed by Rovai (2002b), with ten questions relating to community interspersed with ten relating to learning, with space also provided for qualitative comments after each section. The final section of the survey required short answers of demographic information. The survey instrument can be found in the appendices (Appendix vii).

Information gathered from the survey data augmented the forum and interview data, in the form of demographic information and general attitudes towards the learning and sense of community developed in the recently completed subject. The demographic information is summarised in Appendix viii, which also shows the various types of data

¹⁵ The on-campus TESOL classes typically incorporated various methods of discussion (e.g. pair work, groups, information gap and communicative activities etc) which emphasised TESOL pedagogy of the importance of language use for language learning, as well as allowing TESOL teachers-in-training to experience the kinds of interactive activities that they would subsequently be able to employ in their future classrooms

collected from each participant, as well as with the level of research involvement consented to by students, as discussed in Section 3.6.

Survey responses were also used to cross-check analyses as well as adding to contextual information, such as to an overview of each subject in relation to the two key concepts of the survey – community and learning. The survey results are summarised in Appendices ix and x.

Each of the data discussed in this section added an extra dimension to understanding the learning sites as a whole, and the different perspectives on teaching and learning in online contexts from teachers, learners, as well as the more ‘removed’, but important, perspective of the subject designers.

3.7 The discussions: understanding the ‘goings on’ in the online class

As already discussed sociocultural perspectives underpin this study, complemented by the linguistic theory and analytical tools of Systemic Functional Linguistics (SFL). The centrality of dialogue in the online classroom in building interpersonal relations and in building knowledge, particularly between (inter)active instructors and students, is acknowledged. A variety of analytical tools were required for greater understanding of text-context reciprocity. That is, the social situations created from the interactions between instructors-students reflected the ‘goings on’ in the online classroom. These interactions dynamically construct and reconstruct the context of the online subject, which in turn, shape the discussion and the sociocultural practices therein. The complementarity of sociocultural and SFL approaches provides the means to an understanding at a micro-level of analysis as well as a macro-level of understanding. Unfolding meaning in dialogue reflects the sociocultural context, with the systematic approach to analysis of SFL able to unravel the complexities of meaning making created in and influenced by the sociocultural context.

When applied to the same data the different methodologies of sociocultural and SFL theories ensure another method of triangulation in the interpretations made, important for the credibility of qualitative study (Leech & Onwuegbuzie, 2007). Depending on the particular focus of the research as reported in the published papers of Chapters 5, 6 and 7, various combinations of analyses were used, each of which are detailed in the methodology sections of those chapters.

The sections following turn to a description of Sociocultural methodologies and the particular tools of SFL theory that were used in this study.

3.8 Sociocultural methodology

Sociocultural theory offers a non-linguistic framework for understanding learning, and provides the categories which enabled me to read the linguistic data. In researching educational contexts, both teaching *and* learning should be considered as a whole, rather than as separate activities. Because the interactivity between expert-novice in the learning process is intrinsic to sociocultural concepts, this framework allowed me to identify key teaching and learning moves found in the online texts, as indications of knowledge being socially constructed between active participants. Additionally, the sociocultural approach provided insight into the online learning environment when there was an absence of linguistic data, such as lack of interactivity in discussion, and how this may have impacted the learning process.

3.8.1 Scaffolding support for interactive learning

Briefly, *scaffolding* is a metaphor which describes the temporary, but timely support provided by a teacher, parent, or expert other, which extends learners to work beyond their current capabilities. Importantly, the term is used in this thesis with the sociocultural emphasis on the active involvement of expert-learners in reciprocal negotiations which help clarify and construct new meanings. Hammond (2001) points out “effective scaffolding is support provided at the point of need” (p 5) so that the learner experiences increasing competence to perform a task on their own, after which the support can be gradually withdrawn to encourage independent learning.

Hammond and Gibbons (2005) identify two types of scaffolding – at the macro-level there is *designed-in* scaffolding, and at the micro-level of interaction, there is *contingent* or *interactional* scaffolding. Designed-in describes the organisational aspects of teaching in which identified learning goals are realized through carefully selected tasks which are sequenced to achieve these goals. In this study the online learning site, which contains the subject outline, the topic modules and all the resources needed to complete the subject, represents the macro-level of organisation – the designed-in scaffolding. Contingent, or interactional scaffolding needs to occur dynamically as needs arise, and are difficult to pre-plan. In online learning contingent scaffolding may occur individually between instructor and student via email, or more publically in the online forums if the instructor mediates the interactions. Hammond and Gibbons argue that both are necessary, “the designed-in level of scaffolding [enables] the interactional level, which in turn, enables teachers and students to work within the ZPD” (2005, p 20). However, it is the variable of contingent scaffolding provided in the online discussions of this study which helps to explain how the forums in each of the cases evolved differently.

Discourse strategies to provide contingent scaffolding are those deliberate teaching moves used by online instructors which are intended to lead students towards particular learning goals. These strategies include: prompting students to think more broadly about a topic; posing a question to stimulate discussion; focusing on a particular aspect or issue; organising tasks or activities; or giving directions at key moments so that students are clear about what is expected of them. As we shall see in the findings chapters (particularly Chapters 6 and 7) contingent scaffolding is a critical component in the success or otherwise of productive online discussion.

3.8.2 Learning and online discussion

As students respond to the support provided by the instructor (designed-in and/or contingent) these online interactions contribute to the process of knowledge construction. A number of coding schemes used to examine learning in asynchronous communications were considered for use in this study. For example, Gunawardena and colleagues (1997) explored how knowledge was constructed in computer conferencing. However, their categories emerged from contributions to a debate task organised as a for / against structure, which is not the usual structure of discussion forums. In the late 1990s and early 2000s as e-learning technologies contributed to the growth of online learning, Garrison and colleagues developed a framework called Community of Inquiry (CoI) to understand the nature of learning in technology mediated text-based contexts. In the CoI model three overlapping variables of the online educational experience were identified: Cognitive Presence, Social Presence and Teaching Presence (see Garrison, Anderson & Archer, 2000; Garrison & Arbaugh, 2007; Swan & Ice, 2010). Coding categories were developed to explore each of these 'presences'. While the aforesaid coding schemes and others (such as Hull & Saxon, 2009; Ke et al., 2011; Xie & Ke, 2011) could have been used for this study, none was compatible nor specific enough to use with the theoretical framework integral to this study. However, an instrument developed by Hendriks and Maor (2004) to explore the social construction of knowledge in asynchronous forums (based on Gunawardena et al., 1997) was found to be more closely aligned with the descriptive categories in the SFL model while also being compatible with the sociocultural stance. Consequently this instrument was adopted for the study.

From the asynchronous interactions investigated by Hendriks and Maor (2004) five levels of knowledge progression were identified, beginning at the basic level of sharing information (level 1), to agreeing and applying newfound knowledge (level 5) which indicates new or deeper understanding. Where appropriate in this study, these categories were applied to the discussion data, and were found to be an effective method of coding the student learning process, before linguistic analysis commenced. The following table (Table 3) shows the levels of knowledge progression, together with data examples from this study, which are mapped to each of the sub-categories.

Table 3: Coding categories for the social construction of knowledge in online discussions

Communicative strategies levels: codes	Communicative strategies sub-categories	Empirical data from student texts
1. Sharing/comparing information	exchanging ideas, experiences / pooling resources, stating opinions (incl. social exchanges)	<i>Anyway, it is only one day per week so I have time to think it plus continue my studies</i> <i>My thoughts on reflection are that it's a necessary part of my learning</i>
	presenting arguments	<i>I personally think these technological advances are so influential they have changed our role as literacy teachers</i>
	seeking opinions, suggesting	<i>I'm wondering if it will ever get to the point when writing by hand will become a lost art, and people will look to their grandparents to see 'how it was done'.</i>
	Agreeing	<i>I'd agree with Paula's comment that a closer analysis of the fourth stage would be necessary to go beyond evaluation ...</i>
	Posing questions	<i>I wonder if people will be considered literate because they can sign their name rather than printing it?</i>
2. Experiencing cognitive conflict	Counteracting	<i>I'm not sure I agree with this quote ... if there were fewer constraints on teachers more would take the time to become reflective practitioners</i>
	Critiquing	<i>I haven't been very successful in taking my students to the level of 'dialogic reflection'</i>
	Disagreeing	<i>I do not fully agree with this concept as many of my students do not have access to a computer at home</i>
	Restating an argument	<i>Another point ... he talked about was that it doesn't matter how much you know ... but how well you can pass that information onto others</i>
3. Negotiating meaning	To show compromise, propose, and negotiate a new understanding	<i>I somehow assumed that this ... would be happening in many schools and once I left I remember being to surprised to discover ...</i>
		<i>Many of the hardships that I have encountered ...have given me a new respect for the students that I teach</i>
		<i>I realise now it was a very good learning curve</i>
4. Testing and modifying the new proposal	Testing against cognitive schema	<i>I can think about different things that might help in my own teaching/learning but until I start to experiment and take the new knowledge on board, then I haven't really progressed much</i>
5. Agreeing and applying the newly constructed knowledge	Having a new and deeper understanding; Synthesising	<i>I find now when I approach a ... topic, I am alert to the perspective students bring to the situation</i>

As will be seen in Chapter 6, the combination of these methodologies - scaffolding and social construction of knowledge - is able to account for the complete online teaching-learning process (see Appendix xvi for data coding and analysis). A whole-process approach was invaluable in understanding the role of the instructor in mediating discussion, and how this impacted the extent that students involved themselves in dialogue to construct new understandings.

The selection criteria for choosing the cases for this study, as mentioned earlier, ensured that each of the discussion forums had diverse characteristics. A three-part typology of classroom 'talk types', developed by Mercer and his colleagues (see Mercer 1995; 2000; Mercer & Littleton, 2007) was a particularly useful sociocultural framework for understanding those variations that were contributory factors to this diversity. The framework is in accord with the present study in its approach to interaction and learning

as inseparable. The talk types, described as *disputational*, *cumulative* and *exploratory*, however were developed from face-to-face classroom data and did not accurately reflect those interactions occurring in adult online learning. Hence I extended these talk types to reflect the *online talk* of the forums. My reframed online talk typology provides another approach for understanding the learning process as it is socially constructed in forum discussion. This is explored in detail in Chapter 7, also making links between participant interactivity, community building and knowledge construction as important factors in the online learning experience.

Sociocultural perspectives also informed my understanding of how learners (and instructors) form their identities (or self-knowledge) through the written online forums. Identity became a key concern of this study when it emerged as a strong theme in one of the cases, and is discussed in detail in Chapter 5. The view of identity that I take in this thesis is a sociocultural one; that is identity formation is a dynamic process, which is socially constructed during interactions, including those online. Because forming one's identities involves language use in social exchanges, participants may become more or less aligned depending on the situation variables¹⁶ i.e. the topic being discussed; the interpersonal relations being enacted; and the skill with which this is communicated (and hence received or interpreted) in a written form of discussion. The dynamic 'ebb and flow' in identities – as a social construct of being forming and re-formed - can only be found in online environments if there are opportunities for interaction. As Chapter 5 argues, and is supported by the literature reviewed in Chapter 4, opportunities for online participants to construct identities are an important aspect of the learning process.

In the next section I describe the particular Systemic Functional Linguistic (SFL) analytical tools used, which provide more detailed linguistic insight into the context of learning, and into the learning processes of online roles and relationships, as 'told' through the online discussions. Importantly, the tools of SFL have been used by prominent researchers, such as Hasan (1996) on mother-child talk, Martin (1999) on genre-based progressive pedagogy to enhance literacy in schools, Christie (1999) on pedagogic device in shaping secondary students' understanding of literature, Cloran (1999) on mother-child interactions in the home, Painter (1999) on mother-child interactive experiences prior to school, Eggins & Slade (1997) on casual conversation, and Gibbons (2006) English language learning in multilingual primary classrooms, to name a few. However apart from Coffin and Hewings (2005), Coffin, Painter and Hewings (2005a and 2005b), Love & Isles (2006), Don (2007) and Lander (2013), few studies have applied SFL analysis to online interaction.

¹⁶ These are variables known in SFL as Field, Tenor and Mode which comprise the Register of a text, and explained in detail in Section 3.9.2

3.9 Linguistic analysis

The previous section indicated the interpretive capabilities of the sociocultural perspective for understanding the context of online learning created through language and acknowledged as a powerful semiotic tool for learning. When combined with SFL, the language used in the process of teaching and learning can be described and explained using the vast descriptive categories available in the SFL model. This can be articulated because of the SFL approach to language as systems of choice, and consequently systems of difference, so that when speakers or writers make certain choices it is to *mean* something.

The overall research aim was to gain a deeper understanding of the discussion forums, as one important component of the online subjects. As reiterated throughout this chapter, the discussion forum texts were the most critical source of data for this study, and the Systemic Functional Linguistic (SFL) model can more than adequately provide the variety of linguistic tools needed. The two functions of language of crucial interest for the present study are *what* students and instructors are talking about, and *how* they negotiate interpersonal relations dialogically. This recognises that experience, knowledge, and relationships are inextricably linked to learning to 'becoming a person in society', which for these students included their aspirations to become TESOL teachers.

A principled approach to analyzing the discussion texts is provided by SFL. From the SFL model explained in Chapter 2 and included in part below, an overview of the SFL tools which were most appropriate for analysing and understanding the nature of online discussion follows. The power of SFL is best appreciated in the array of analytical tools in the model and the range of entry levels into analysis and the descriptive categories it provides. In relation to this study, the tools relevant for this study are Genre, Register variations (at more abstract levels of the model), and systems in the Ideational and Interpersonal metafunctions (for more detailed analyses).

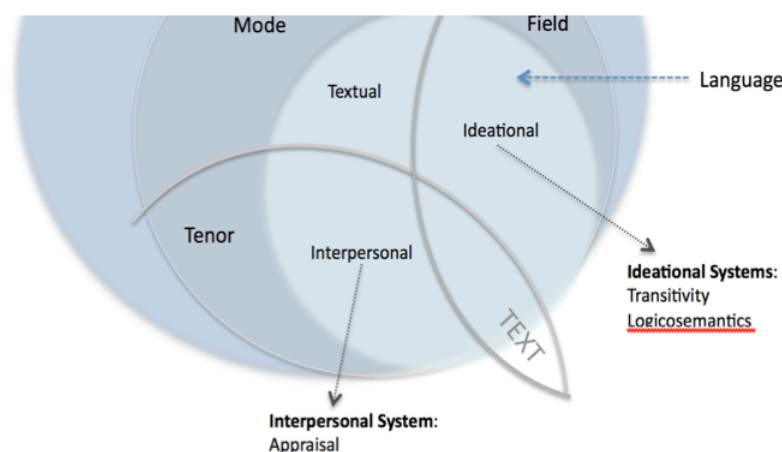


Figure 19: Spotlight on SFL systems used for this study

3.9.1 Genre

To understand how text and context act iteratively in the online learning sites I approached this from the perspective of Genre. Genre is a way of understanding the predictable stages and phases of texts according to their social purpose and the norms of the particular culture. In this study, the online discussion texts situated within the culture of TESOL education. Genre is hence a way of describing the function of an artifact or text and the responses that these generate, for example when an instructor gives directions, such as *Post your answer to the discussion* or *Share your thoughts and respond to others*, particular, and predictable types of activity should result on the forum. It is through predictable discursual patterns that enable interactants to know what to expect and hence, what is expected of them within the cultural and historical values of the learning context. Genre analysis was particularly useful in analysing the data from the instructor-driven discussions of Case I, in which clear patterns in the interactions rendered instructor and student roles more obvious. A full discussion can of this be found in Chapter 6.

3.9.2 Register variations in online forums

FIELD, TENOR and MODE as variables in Register, are ever-present in the context, being three important functions of interaction in any learning situation. Field refers to what being talked about – what is happening and who/what is involved; Tenor reflects the relationship of those taking part in the interaction; and Mode is the role that language is playing in the interaction. Each of these elements represent three variables of meaning-making in a text (written or spoken), creating and modifying the context reciprocally with the text. SFL's functional approach to language use and analysis allows for a closer focus on these different facets of meaning-making which occur simultaneously as participants interact, depending on their relationships with each other and their "sense of [the] academic content" required (Love & Isles, 2006, p213).

In terms of the online forums, what is being discussed and how participants are thinking and feeling about topics construes Field, which varies for each of the cases in this study. Tenor encompasses how interpersonal relations between instructor-student and student-student are enacted through social distance, power relations and negotiation of identities between people from diverse backgrounds, life experiences and a variety of expectations of the online experience. In other words, how people relate to each other interpersonally is evident in the language choices made in their interactions. Mode describes how these interactions are communicated – in the case of online discussion forums this is through the written medium and the graphic channel. As discussed in Chapter 2 the blurring of medium and channel presents online interactants with some uncertainties about tacit ‘rules’ of online discussion.

Together, Field, Tenor and Mode contribute to interpreting the data because they enable me to articulate the variations that exist in the forums of each online subject. In particular the SFL model allows entry to more detailed analysis through metafunctions of language through which Field, Tenor and Mode are realized. These metafunctions are known as Ideational, Interpersonal and Textual, each having systems which allow for detailed linguistic analysis at the level of discourse, or specific instances of text, through the notion of choice. A description of the SFL systems most useful for answering the research questions follows (as shown in Figure 19 and discussed in detail in Chapter 2).

3.9.3 Construing the field in online discussion

Transitivity and Logicosemantics are from the IDEATIONAL metafunction, which realizes the Field. Field is comprised of the topics being discussed and the patterns in interaction leading to the construction of knowledge - collectively and individually - and how this occurs over time. The purpose of the Transitivity analysis of the discussion forums is to understand what is being talked about and how interactants think and feel about this. In other words, Transitivity allows insight into the nature of interaction in online discussion, in particular what was being discussed, and then tracks the knowledge building process as unfolding through the interaction.

3.9.3.1 Transitivity

Transitivity analysis reveals how students were construing their knowledge of the physical world (such as experiences of teaching, work, education, culture, language, travel), the abstract world of relations (such as representing and positioning of self in this context, descriptions of places, people, cultures), and the world of consciousness (feelings about teaching, travel, evaluations of experiences or readings) (Halliday & Matthiessen, 2004). Transitivity therefore is a powerful tool for analyzing not only what knowledge of topics, or self, are being discussed, but also reveals how the students are construing these experiences in the subject.

In Transitivity analysis meaning is analysed at clause level and is encoded in the Process, together with who or what is involved in the process (Participants) as well as any additional information – Circumstance, such as location (time or place), extent in time, manner (how), cause (why), accompaniment (who/what with), matter (what about). Language users make choices from networks of meaning options according to their purposes for using language and the context in which they are operating. With respect to Transitivity, these choices can be described according to the different ‘worlds’ of experience that the meaning represents, i.e. the processes of doing or happening have a different function to processes of thinking, feeling or existing, and therefore are categorised differently, as are the participants in these processes which reflect the different functional roles (Halliday & Matthiessen, 2004; Eggins, 2004; Halliday & Hasan, 1985). This is summarised in the table below:

Table 4: Summary of Transitivity

The Experiential World	The Processes	The Participants in the process	Circumstance – such as: Location (place/time); Extent in time; Manner; Cause; Accompaniment; Matter
Physical world of doing, happening and creating	Material	Actor Goal Range Beneficiary Recipient Agent	
Physical world of behaving	Behavioural	Behaver Range Phenomenon	
World of consciousness: thinking and feeling	Mental	Senser Phenomenon	
World of consciousness: saying or signaling	Verbal	Sayer Verbiage Receiver Target	
World of abstract relations: existing	Existential	Existent	
World of abstract relations: being	Relational Identifying	Token Value	
World of abstract relations: having	Relational Attributive	Carrier Attribute	

An example of Transitivity analysis is applied to one of the responses in an interaction cluster, initiated by Vicky and responded to by various others. One of these responses from Alice is replicated below, with clause boundaries as the unit of analysis indicated by ‘//’,

Hi Vicky, I agree with your reflections on learning the cultural norms of English.// I think // initially that the learners would focus on their own reasons for learning the language, // be it communication, business etc.// Once that was achieved // the question of culture may or may not become more of a focus // depending on who they were communicating with // ie people from native English speaking or non-English speaking backgrounds.

with ellipsis retrieved shown in (...), and substitution shown as (=xxx) in the analysis tables below, This short text shows the variety of meaning making choices and the range of process types:

Table 5: Transitivity analysis of a response post

I	agree	with your reflections on learning the cultural norms of English
Senser → i.e. Alice	Pr: Mental	Circ: Matter

I	think
Senser → i.e. Alice	Pr: Mental

the learners	would focus on	their own reasons for learning the language
Behaver	Pr: Behavioural	Range

be	it (=the focus, or =the reason/s)	communication, business etc
Pr: Rel: Identifying	Token	Value

Once	that (= learning the language)	was achieved
	Goal	Pr: Material

the question of culture	may or may not become	more of a focus
Token	Pr: Rel: Identifying	Value

depending on	who [[they were communicating with]]	i.e. people [from native English speaking or NNES backgrounds]
Pr: Material	Range	Range (incl. [qualifier])

The Transitivity interpretation of the ‘goings on’ in the above text are reflected through a range of processes such as of saying, thinking, doing, behaving and relating one thing to another, in contrast for example, to a text which was comprised predominantly of material action (i.e. doing, creating), such as what would be produced if recounting what was done in a classroom activity. Alice’s positive response is firstly as agreeing with Vicky’s reflections, and thus aligns herself with Vicky, and then projects her own thoughts on the issues presented and from the prescribed reading around culture and language.

Alice allows her interlocutor a glimpse into her inner world as Senser. The first two processes of agreeing and thinking (*I agree with your reflections* and *I think*) allows her to project her ideas. *I think* is also an example of interpersonal metaphor, which softens her opinion by making it less direct. She represents learners of English as behaving in a certain way, i.e. through a Behavioural process of *focus[ing] on* their own motivation for learning English. She then identifies two reasons for learning the language. The first is for *communication, business etc* purposes, and when this purpose has been achieved, culture is identified as perhaps being *more of a focus* for learners. Learning the language becomes an action through the Material process of being *achieved*, and repetition of *focus* and *reasons* for learning English creates a prosody of meaning threaded throughout this short excerpt on the question of cultural norms in language learning,

which is then connected to being *dependent on* the attributes of their audience, *native or non-native English speakers*.

To reiterate a core concept of SFL, meaning making is a series of linguistic choices as one option is chosen from other possible options. This is theorised as system networks as introduced in Chapter 2. Even in the short response above in terms of experiential meaning, options are varied. As an exercise to consider ways of meaning that *could* have been chosen, the following is offered as an equally plausible response:

Learners focus on their own reasons for learning the language. // They learn English for communication and business reasons.// Culture comes up // once they've learnt the language // when they talk to native English speakers or non-native English background speakers.//

This is written as a more direct response, which is realised in the grammar of the language choices, as the following Transitivity analysis and interpretation show:

Table 6: Transitivity analysis of a possible alternative response

Learners	focus on	their own reasons	for learning the language
Behaver	Pr: Behavioural	Range	Circ: cause: purpose

They	learn	English	for communication and business reasons
Behaver	Pr: Behavioural	Range	Circ: cause: purpose

Culture	comes up
Actor	Pr: Material

once	they	(ha)ve learnt	the language
	Behaver	Pr: Behavioural	Phenomenon

when	they	talk to	native English speakers or non-native English background speakers
	Sayer	Pr: Verbal	Receiver

While essentially the same information is conveyed (i.e. the field: learners, language learning, reasons and culture), its meaning is different. Firstly there is no interpersonal softening such as use of modality, or *I think*, so the opinion expressed here seems 'matter of fact' (and could be open to misinterpretation depending on the roles and relations between interactants). Secondly, the second language learners being discussed have more active roles in this text, as Behavers and Sayers (i.e. it is the learners who are focusing on, learning and talking). While in the first text learners also are *focusing* and *achieving*, Alice speculates on their motives for learning and on the question of cultural norms in the language learning process, using more abstract relational processes. This positioned Alice in an active role which allowed her to project her thoughts *about* the learners who become less central to the activity of the text.

These examples of Transitivity analysis are given to illustrate the range of choices available to instructors and learners, when construing experience from abstract ideas and generalisations, or from more anecdotal, material events in real time.

3.9.3.2 Logicosemantic relations

Logicosemantic relations, as discussed in Chapter 2, are used to identify the relationships made in the language between concepts, and indicate the kind of knowledge being constructed (i.e. extending [+], elaborating [=] or enhancing [x]). This is most easily recognised as individual acquisition of knowledge revealed in text such as, *I realised after reflecting [x time] that I could have organised the lesson better [x manner]*. However in this study of interaction, logicosemantic relations are best utilised for tracing knowledge constructed through joint contributions to the online discussions. Logicosemantic relations are discussed extensively in Chapter 6, but the short excerpt below illustrates the usefulness of this tool for demonstrating jointly constructed knowledge.

Table 7: Logicosemantic relations: example of analysis

<p>First response to a discussion task by Mary:</p> <p>I personally think that these technological advances are so influential they have changed our role as literacy teachers. At the rate technology is advancing I'm beginning to wonder whether or not we will have books, newspapers, pens and pencils in fifty years from now ... the pieces of technology that could be used to replace each of these items are now available (e.g. laptops, iPads, e-readers, mobile phones, etc.) at a fairly affordable price</p>		
Logicosemantic relations	Response excerpts	Comments
[+] extension	... Our group is taking steps to incorporate video, listening exercises from radio such as interviews and discussion topics and mp 3 recordings of student discussions into our lessons. It may be basic but I think even finding your way around the computer in a second language is not always easy (try working it out when everything is in Russian or Chinese!) ...	Paula extends on previous contribution
[+] extension	I am currently teaching a Year 1 class ... and it is very surprising to see the range of technology that my children have access to. I have two ipads, three desktops, three laptops and a digital camera ... I have tried to incorporate technology into my teaching as much as I can this year. I have created a blog for my children to use, this is something new to them ... but they can not stop talking about it ... Using information technology in the classroom is an important aspect in today's society and it is going to be the way of the future. As teachers I feel it is our responsibility to incorporate as much technology into our classroom as possible ...	Beth extends
[=] elaboration	I read your observations with great interest and I agree that the trend seems almost inevitable.	Amanda uses elaborating relations i.e. the trend restates previous ideas relating to technological advances
[x] enhancement: manner	The reading about Media Literacy, too, gave much food for thought. Cordes comment ... however true,	... and uses enhancing relations
[x] enhancement: cause	made me wonder whether we are set on a path of inevitable, irreversible polarisation, globally?	
[x] enhancement: cause	What made me mull over this is that in South Africa, there is a small percentage of schools ... that enjoy access to the kind	

Logicosemantic relations	Response excerpts	Comments
	of technology we are reading about. The majority of schools ... simply do not have this technology ...	

We can see from this excerpt in Table 7 that Paula and Beth add their perspectives and experiences to the information given by Mary around technological advances in the classroom. This shows how joint contributions add to the groups' shared knowledge, i.e. of one's opinions, speculations, and classroom practices, which accumulates over time. In Amanda's response she links what has been shared previously about the 'trend' towards technology in the classroom, with what she has been reading, and her experience of South African schools. Enhancing relations indicate where a speaker/writer show some kind of new understanding, and this must take into consideration what has been contributed to in the earlier posts. For Amanda making links between concepts causes her to question whether discussion of these trends as the 'norm' should also take into consideration ethical issues for underprivileged or under-resourced schools. Hence the analysis shows the point where the discussion moved to a deeper level than was possible through the earlier additive contributions. Other examples of enhancing relations are:

Enhancing relations of:	
Place	... my reflections might sit somewhere between a descriptive and dialogic reflection
Manner and Place	I have realised how much more I do that ... the further into my studies I go ...
Manner	It doesn't matter how much you know ... but how well you can pass that on
Time	... it wasn't until I came to Japan 13 years ago that I became aware of the complexity of becoming functionally literate in a society
Cause	... many of the hardships I have encountered ... have given me new respect for my students
Time and Manner	now ... I reflect more deeply on how best to bridge the gap ...

3.9.3.3 Lexical strings

Lexical strings analysis shows the "semantic relations between particular people, things, processes, places and qualities" (Martin & Rose, 2007, p 75) and represent prosodic development in the dialogue. Lexical strings account for units of meaning in which ideas or lexical items are related through repetition, similarity or contrast. These form 'chains' of related ideas across texts making it possible to see lexical cohesion as the discussion unfolds over time. Lexical relations of repetition, synonymy and contrast provide a way to understand the extent of joint focus on a topic (repetition), making sense of concepts (synonymy), or offering an alternative (contrast).

Lexical strings analysis was useful for looking both within and across discussion forums to show how topics being discussed evolved over the course of the academic session. The following diagram is a summary of lexical strings analysis over five discussion forums from Case I which extended for 82 days. The instructor initiated the forum discussions and students jointly contributed to the topics in focus.

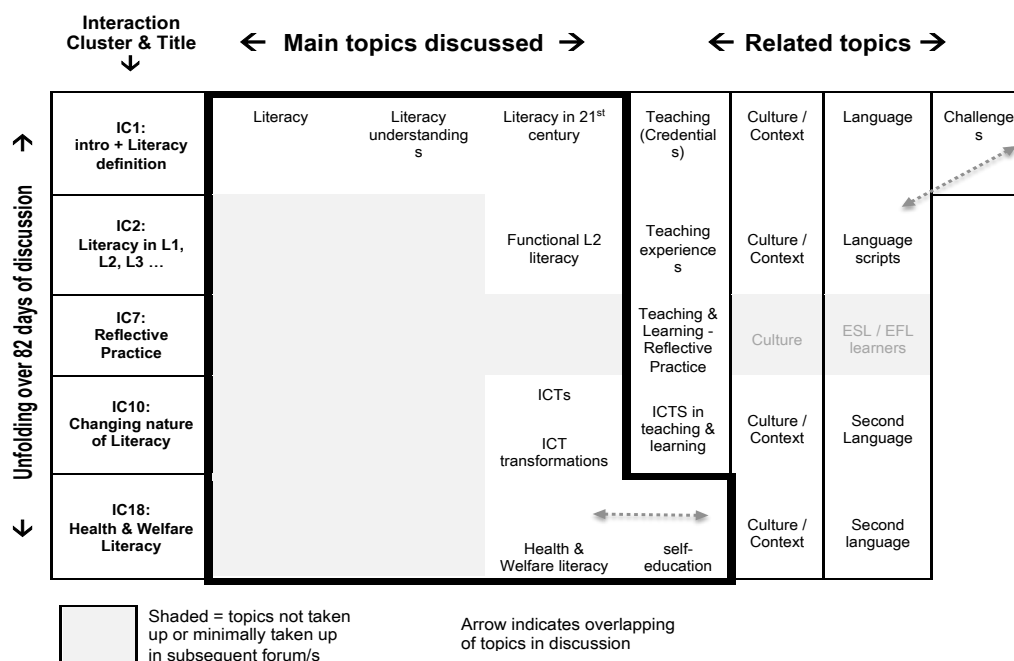


Figure 20: Lexical strings analysis summary of five online discussions

The main topics focused on in each forum are shown horizontally and subsequent forums are shown vertically indicating the evolution of the initial topics. For example, in the first forum the most repeated lexical items were *literacy*, *teaching credentials*, *context* and *culture*, *language* and *challenges* (i.e. of becoming literate in the 21st century). The notion of *challenges* is taken up again in the next forum topic in relation to becoming literate in a second (or third) language, but drops out of subsequent forums. *Literacy* and *literacy understandings*, which were also predominant in the first forum, do not appear in later forums, as these topics have been exhausted, and focus is now placed on *literacy in the 21st century* as relevant to subsequent discussions. Thus the columns show how a topic from the first discussion evolved over time to related topics (such as aspects of *teaching* evolving to *self-education*), while culture and context were simply repeated concepts which were not developed differently (interestingly this was a student-initiated topic which the instructor did not take up).

Chapter 7 provides an analysis of the forum discussions using lexical strings which was useful for showing how students built common knowledge through joint focus (using repetition), through proposing alternatives (using contrasting relations), and through making sense of topics by unpacking ideas (using synonymy).

We now move from the Ideational systems to the Interpersonal metafunction, to discuss how Appraisal has been used in this study for understanding the roles and relationships being discursively negotiated between participants in the online discussions.

3.9.4 The Interpersonal: Appraisal analysis

Appraisal, from the INTERPERSONAL metafunction, which realizes Tenor, provides access to more specific aspects of interpersonal meaning, such as how interactants are making evaluations, how these impact on discussion, how participants position themselves in the learning community and enact their social relations. Appraisal identifies attitudes in language which express affect (feelings), judgments (moral), or appreciation (aesthetic assessment). It also reveals the level of engagement that the speaker or writer employs which either invites or includes others' positions (heteroglossic), or excludes by not opening up the dialogic space to other voices or positions (monoglossic). In addition the graduation or strength of what is being said can be turned up or toned down, or the focus sharpened or blurred (refer to 2.4.7 for Appraisal system network).

Thus, in the present study, Appraisal analysis can identify those evaluative language choices which indicate a speaker/writer is adopting a stance, creating a textual persona, or managing interpersonal positionings and relationships (White, 2005). Consequently, the unit of analysis may be a single word (e.g. *hero*; *disdain*; *accolades*), at the clause level (e.g. *the future looks bright*), or may extend over several clauses or more. This is because the evaluative language choices speakers or writers make vary in intensity, with prosodic meaning extending across a whole text, or in a single word. As an interpersonal system, Appraisal analysis enables visibility of the sense of community and how learners (and possibly instructors) view themselves and others as a community of learners. Learning to become a TESOL teacher involves interpersonal alignment to this identity, which is understood through the evaluative language choices students make during the learning process.

The range of evaluative language used in even short excerpts can be extensive, as the Appraisal analysis given in Table 8 below clearly indicates. A brief interpretation of this analysis is that students are 'telling' others what they are like and what they value, that is something of their identities. Alignments through attitudes of emotion are seen here as enjoyment of or satisfaction in studying, traveling, working and future aspirations, which would be common amongst those becoming TESOL teachers. In these examples interpersonal manoeuvring occurs when students make veiled judgements of themselves and others, which raises or lowers their esteem in line with their perceptions of social similarities/differences with other identities or social positionings. Where attitudes are invoked, the writer/speaker relies to a certain extent on the interpretation of the reader/listener to align with their intended meaning. For example when turn-taker no. 4 uses hyperbole: *I've been slogging my way through Graddoll ... and posted a few comments ... unedited and rough*, the intended meaning is invoked. It would suffice to say that the intention is to construct an identity of a hardworking and industrious student, and if others do read the rest of the post, perhaps *intelligent* or *modest* would be added to this, as the response was extensive and articulate. Other judgements in these texts are

usually indirect, or invoked, judgments of someone's capacity or tenacity (e.g. positively, *I'm hoping to get right back into it*, in other words declaring, I am capable and tenacious; or negatively, *I am a late starter so don't have a lot of teaching experience* i.e. self-deprecating). Appreciating the social value of things such as Mark's 'very interesting post' and the class of elderly learners as 'quite a challenge' are other ways in which interpersonal manoeuvring becomes evident as in the process of learning to become TESOL teachers, these students are more likely choose language which aligns themselves with others or the profession, rather than disaligning. The potential to invoke attitude can also be through upscaling or downscaling the force of focus on what is being said,

Table 8: Appraisal analysis example

Legend: Appreciation Judgement Affect Engagement Force Focus ↑ ↓

Turn #	Empirical data examples	Appraised	text focus (unit of analysis)	Appraisal analysis (including +ve and -ve)
1	I'm Mark. I currently teach English at a language school ... I started this Masters while teaching in Thailand ...			
	... I really ↑ enjoy study but my last couple of units have been disrupted by the pressures involved in changing jobs, selling and so now that has settled down, I'm hoping to get right back into it ...	self my study self	<u>really</u> enjoy study disrupted by the pressures involved ... to get right back into it	Affect : satisfaction +ve Force: intensity ↑ Appreciation : social valuation -ve (invoked) Judgement : social esteem: capacity +ve (invoked)
	... look forward to meeting you all online ... [followed by extensive discussion of Thailand]		look forward to you all	Affect : inclination +ve Engagement : heterogloss
2	Hi there Mark, It was very ↑ interesting to read your post after I had researched Thailand for the first task. You have obviously ↑ been to Thailand to have such ↑ an in-depth knowledge of the culture and language ...	Mark's post Mark	<u>very</u> interesting to have such an in-depth knowledge <u>obviously/such</u>	Appreciation : impact +ve Force: intensity ↑ Judgement : social esteem: capacity +ve Force: intensity ↑ (x 2)
	... I want to travel, work, experience culture and meet new people ... and teaching English is a lucrative way of achieving this ...	self teaching English	want to ... a lucrative way	Affect : desire (x 4) +ve Appreciation : social value +ve
	... I want to teach primary aged children for the rest of my life ↑ ... but I think that adults who want to learn ... would perhaps ↓ be more ↑ willing and appreciative of their education ...	herself teaching adults	want to ... for the rest of my life but would <u>perhaps</u> be more willing and appreciative ...	Affect : desire +ve Force: intensity ↑ Engagement : heterogloss: counter Judgement : social esteem: tenacity +ve Focus: blurred ↓ Focus: quality ↑
3	Hi everyone. I'm Louise and I've enjoyed reading everyone's posts so far ...	self	everyone enjoyed	Engagement : heterogloss Affect : satisfaction +ve
	I am a late starter so don't have a lot of teaching experience ...	self	a late starter	Judgement : social esteem: capacity -ve (invoked judgement)
	but I worked on a voluntary basis with a group of elderly whose English ranged from elementary to advanced. It was quite ↓ a challenge but very ↑ enjoyable ...	self teaching the elderly group	but (x 2) voluntary basis with ... elderly quite a challenge very enjoyable	Engagement : heterogloss: counter Judgement : social esteem: tenacity/capacity +ve (invoked) Appreciation : social valuation (invoked) Force: quality ↓ Force: intensity ↑ Affect : satisfaction +ve
4	I've been slogging my way through Graddoll, which is quite ↓ interesting and thought I would post a few comments . They are unedited and rough ...	self self	slogging my way through quite a few comments ... unedited and rough	Judgement : social esteem: tenacity/capacity +ve (invoked Judgement) Force: quality ↓ Judgement : social esteem: tenacity/capacity +ve (invoked Judgement – comments are extensive and well-written)

The discussion of the main Sociocultural and SFL methodologies used in this study show the complementarities in these approaches, as well as the richness of analysis that becomes available through this combination. Together Sociocultural theory and SFL provide the analytical tools for examining the online learning experience from a range of perspectives, as well as helping to ensure reliability in the results.

3.10 Summary

In summary, this chapter outlined the methodology and analytical tools most appropriate for gathering a range of data that will provide insight into the role of discussion in online learning, the impact of discussion on interpersonal relationships, and the process of knowledge construction through discussion. The combination of sociocultural theories and SFL are key to gaining detailed understanding, as both privilege language as crucial in the process of learning.

Chapter 4 is a review of the literature and is the first of the published articles presented in this thesis.

CHAPTER 4

Socio-emotional connections: identity,
belonging and learning in online
interactions. A literature review

Journal Article One

FOREWORD TO CHAPTER 4

Delahunty J, Verenikina I and Jones P. (2014). "Socio-emotional connections: identity, belonging and learning in online interactions. A literature review". *Technology, Pedagogy and Education*, 23(2). pp243-265. DOI: 10.1080/1475939x.2013.813405

Chapter 4 is the first of the published articles presented in the thesis, although in terms of the sequence of publications, this paper was published after Chapter 5 in which identity (i.e. a social construction of self-knowledge) was beginning to emerge as a key concern of this study. My role is lead author of this paper, with my PhD supervisors as co-authors. In this role they made a substantial contribution through collaborative discussions and critical revisions of the paper. Dr Irina Verenikina is second author due to the sociocultural emphasis of this paper.

This chapter presents a review of empirical research synthesising some of the prominent themes in the online learning literature. This review informed the direction of the research project as well as the gap the study aimed to fill. The literature review is written in a style appropriate for a peer-reviewed article, and was targeted for the particular journal and its readership. As with each of the published articles, it begins with an abstract and keywords, and is presented intact with references and any appendices, as published.

In this chapter I attempt to sharpen the focus on the human psychological aspect; that is, to consider the themes in the literature from the perspective of those involved in the processes of learning online, particularly in higher education. Because *people* are central to teaching and learning, socio-emotional aspects also become centrally involved in the process – in face-to-face situations or online. I argue that socio-emotional factors come to the fore even more so in the virtual learning situation. The trajectory of the chapter is the notion of identity, which I have identified as an under-explored, but critical, area of research into in online environments and is important to consider as one of many socially constructed knowledges that comprise the learning experience.

ABSTRACT

This review focuses on three interconnected socio-emotional aspects of online learning: interaction, sense of community and identity formation. In the intangible social space of the virtual classroom students come together to learn through dialogic, often asynchronous, exchanges. This creates distinctive learning environments where learning goals, interpersonal relationships and emotions are no less important because of their 'virtualness', and for which traditional face-to-face pedagogies are not neatly transferrable. The literature reveals consistent connections between interaction and sense of community. Yet identity, which plausibly and naturally emerges from any social exchange, is much less explored in online learning. While it is widely acknowledged that interaction increases the potential for knowledge-building, the literature indicates that this will be enhanced when opportunities encouraging students' emergent identities are embedded into the curriculum. To encourage informed teaching strategies, with particular focus on higher education contexts, this review seeks to raise awareness and stimulate further exploration into a currently under-researched facet of online learning.

Keywords: identity; sense of community; interaction; online learning; asynchronous communication; higher education

4.1 Introduction

The recent era of virtual education has been ushered in by the rapid implementation of online learning options in higher education, with the potential to meet student demand for flexible study options as well as the promise of equity for those unable to attend on-campus classes (White, 2003; Kelly & Stevens, 2009). In addition, many higher education providers worldwide have been wooed by the potential for cost-cutting and a larger share of an increasingly competitive market (Yelland & Tsebas, 2008; Roberts & Crittenden, 2009).

It could be argued that what has ostensibly been seen as a cost effective solution has been at the expense of research into appropriate pedagogies for this unique learning environment (Salmon, 2005; Hull & Saxon, 2009). This is reflected in volumes of literature documenting issues faced by online providers and their students. Some of these concern student retention (Moody, 2004), student satisfaction (Swan, 2001; Stein, Wanstreet, Calvin, Overtoom & Wheaton, 2005), challenges around development of critical thinking skills (Maurino, 2006; Garrison & Arbaugh, 2007; Garrison & Vaughan, 2008), beneficial levels of participation (Coffin, Painter & Hewings, 2005a; Exter, Korkmaz, Harlin & Bichelmeyer, 2009; Tsai, 2011), and the effect of tutor involvement (Gilbert, Morley & Rowley, 2007; Liu, Magjuka, Bonk & Lee, 2007), to name a few. The news is not all grim however, with some reporting on strategies for reducing isolation (Ice, Curtis, Phillips & Wells, 2007; Kelly & Stevens, 2009), identifying how to harness asynchronous communications to develop deep learning and critical thinking skills (Arend, 2009; Richardson & Ice, 2010), and exploiting the communication time-lag of discussion boards as a tool for second language development (Birch & Volkov, 2007). Despite these encouraging indications, it is still consistently reported that a sense of isolation is more commonly experienced by distance learners than by on-campus students (White, 2003; Bartlett, 2008; Huijser, Kimmins & Evans, 2008; Owens, Hardcastle & Richardson, 2009; Kwon, Han, Bang & Armstrong, 2010). The wider concerns emanating from this are implications for learners as individuals, for the learning group as a whole, and for the flow-on effect to the distance learning experience.

What is perhaps the key pedagogical issue is the physical and geographical separation of the student from their instructor and the institution (Hull & Saxon, 2009), creating a greater potential for misunderstanding in what Moore (1993) described as the “psychological and communications space” (p 22). This notion recognises the presence of socio-emotional factors in any activity involving relationships between diverse individuals (Gunawardena & Zittle, 1997). While students and tutors must negotiate this ‘space’, how best to do this can be time-consuming for staff, who have other workload concerns to consider, such as quality of subject content, resources and administrative duties (Salmon, 2005; Kelly & Stevens, 2009). Since Moore’s first writings on distance

education, technological advancements have dramatically changed the face of distance learning. What remains relatively unchanged though is the very real challenge to subject designers and educators of how to reduce the risk of misinterpretation and facilitate meaningful learning experiences that are not diminished by the mode of delivery (Garrison, 2011).

In terms of online pedagogy, rapidly changing technologies have outpaced research on how to appropriately address the intangible social space of the virtual classroom. These distinctive learning environments are often created through text-based communications, but despite their 'virtualness' they are no less socially or emotionally 'real' than face-to-face interactions. This requires a shift that focuses more on "pedagogical innovation" (Salmon, 2005, p 205), as appropriate online pedagogic practices are not neatly transferrable from traditional approaches. The assumption being made here is that students require participation in interaction to learn (Vygotsky, 1978; Alexander, 2008), regardless of whether learning in a virtual environment or in face-to-face. A sociocultural approach to learning views interaction and the development of new understandings as intrinsically linked and as inseparable from the context (Vygotsky, 1978). The challenge then is to understand how online communication, disconnected from a physical presence, impacts on learning and how this social context may contribute to the sense of isolation felt by many more distance learners than by face-to-face students. The question of *who* these learners are also arises, and whether (or how) being able to communicate a sense of identity (or not) impacts the learning experience.

4.1.1 Defining online 'participation' and 'interaction'

At this point some clarification of what constitutes *participation* and *interaction* is necessary. The terms both suggest some kind of reciprocal action and are often used interchangeably in the literature, however there are some nuanced differences which might be amplified in the context of online learning.

In online contexts participation is commonly text-based and most often evidenced through written artifacts or 'posts' of the authors' ideas. However, while 'public' display of a post indicates participation, the level of meaningful interaction in which the person engages, might differ. Interaction, from a sociocultural perspective, refers to both the individual and collective transformation of knowledge occurring through dialogic exchanges between people (Vygotsky, 1978). It is through these kinds of social exchanges that individual learning is driven by the dialectic between individual and collective understandings (Mercer & Howe, 2012). Thus, it is how individuals involve themselves in the conversation which defines their engagement in a meaningful dialogue, which is not unlike how it is determined in a face-to-face context. Interaction perhaps could even be considered as the online counterpart of tutorial discussion where there is a sense of cumulative understandings being developed through talking and listening.

Ascertaining the level of participation of those who 'lurk' is difficult even in face-to-face situations. It becomes even more so in asynchronous online environments where immediate and apparent contextual or behavioural cues do not exist, especially as participation is text-based. Thus in online discussion there may be a tendency towards utterances that are minimally dialogic, sometimes referred to as monologues (Garrison & Cleveland-Innes, 2005) or as the "separate voice" (Rovai, 2002a, p 8). This belies a complexity of participation as monologic contributions can be beneficial in co-constructing knowledge (and thus beneficial to the learning community) but are often perceived as non-conducive to community building. This may in part be due to dialogic processes being shut down or discouraged by monologic utterances as they tend not to invite discussion (Martin & White, 2005). Open interaction can be hindered if monologic contributions are interpreted as a lack of willingness to interact, and can seem particularly so when sensitivity to the interpersonal is backgrounded by the 'facts' being put forward, such as in task-oriented contributions. This may be more indicative of a lack of skill in communicating in this mode, but could equally be positioning manoeuvres in expert/novice power relations. Despite this there may still be some sense of community being developed as a result of the contribution to cumulative knowledge. However, even though this may be participation *per se*, it is not the kind of online interaction that is encouraged for building a sense of community amongst learners, and alludes to a complexity that warrants further discussion. Participation then can manifest as individualistic (even insular) behaviour and range to more inclusive behaviours, which display a value attached to sharing and collaboration for the benefit of the group (Rovai, 2002a). If dialogue, in which ideas are heard and jointly considered (Mercer & Howe, 2012), is a defining characteristic of interaction, the kind of participation that is usually espoused in online learning is that which also involves dialogic interaction with others. Wenger's definition of participation is that it is "both personal and social" (1998, p 56), and therefore involves the whole person, which comprises physical, cognitive and socio-emotional makeup. It is perhaps the absence of 'body' in online relations which foregrounds socio-emotional influences on participation.

4.1.2 Socio-emotional aspects in online learning

Socio-emotional factors in learning include personality, emotions, and values of socially participating individuals. Since being physically present is redundant in online learning, participation of the 'whole person', as Wenger (1998) argues, must be reconceptualised as dialogic exchanges involving the cognitive, the emotions, and interpersonal social relations. Participation is well represented in the literature as closely connected to interaction and sense of community. Indeed identity construction through interactions in an ongoing process of negotiation between self and others, and the impact this may have on the online learning experience, are not yet extensively researched phenomena (Perrotta, 2006; Hughes, 2007). On the other hand, identity formation in 'real' contexts

has been widely discussed (see for example Gee, 2000; Norton, 2000; Bucholtz & Hall, 2005; Richards, 2006; Norton, 2010), establishing that whenever people socialise, so too exist their identities – that is, a sense of who they are, and are becoming, in a process of dynamic formation and redefinition of self in response to the social context. When a student contributes to the online class in some way they engage in a process of portraying something of themselves to the group, with unfolding clues about who they are, what they know, what they value and how they think. Online learning communities, just like any other community, would not exist without the participation of these individuals, through which identity also emerges (Cunliffe, 2003; Hill, Watson, Rivers & Joyce, 2007). For this reason this review couples identity formation with interaction leading to community building as unequivocally important in understanding what contributes to appropriate online pedagogies.

The purpose of this review therefore is to explore the literature in terms of how interaction contributes to building an online community in the context of higher education including the co-construction of knowledge, together with the impact that interaction affords for identity formation. This brings psychological and socio-emotional dimensions to the fore, with online environments being more affected by social and cultural factors (Mercer, 2000). From this it may then be deduced that socio-emotional considerations are important for any pedagogic endeavour that takes place in the online environment.

4.1.3 Search strategy

To ensure a focused review of the literature the following questions were proposed:

- What is the role of interaction in online learning?
- What fosters or inhibits community building in online learning?
- What affordances do interaction and sense of community give to identity formation and how might this explain sense of belonging/isolation in online higher education learning contexts?

Preliminary literature searches established that community, or 'sense of community' is closely connected to interaction and participation. Based on this, the first strategy was to set up a basic search model to be used across multiple databases such as Scopus, ERIC, Education+, ProQuest, ScienceDirect, Informaworld and Wiley Interscience, and was performed as a two-step process (see Table 1 in the appendices). The first involved a combination of 'online learning', 'community' and 'interaction', searching for these terms in the abstract and/or titles of peer-reviewed articles. Synonyms were included for 'online learning' (such as distance learning, e-learning, online education, distance education, web-based learning) and for 'interaction' (such as discussion), as well as spelling variations of online (on-line). If there were an excessive number of results, these were managed through filtering (for example excluding some subject areas, or pre-1990s publication dates). Of the articles retrieved, the abstracts were read, discarding those

deemed irrelevant to answering the questions. After synthesis of these results contributed to an understanding of questions 1 and 2, 'identity' was added to the search strand to explore the third question. This step had the effect of highlighting the small proportion of identity-specific articles that exist in the current literature. As an exercise to substantiate this a separate search of article titles containing 'identity' or 'identity + online' was performed across ERIC and Scopus. This exercise demonstrated clearly the disproportion of 'identity + online' articles to 'identity' only articles, with the results provided in Table 2 of the appendices.

The next stage in the search strategy involved locating relevant literature from the reference lists of the retrieved articles. This provided useful leads to a range of literature such as other articles, journals and books. As a result the material gathered for this review represents a broad range of literature from across the globe.

The discussion section of this paper follows the sequence of the questions, firstly dealing with some of the issues around online interaction, which tend logically to lead to its impact on forming and sustaining online learning communities. Finally these two well-represented themes will be drawn together by considering the impact that identity construction has on interaction and community building, concluding with a short discussion on pedagogic implications.

4.2 Interaction in online learning

It is widely accepted that interaction is important for building interpersonal connections and conceptual understandings, and that it occurs differently in online contexts than in face-to-face situations. Online interactions are often via the keyboard such as synchronous chat rooms (i.e. in real time), or asynchronous discussion boards, emails, and blogs (i.e. unconstrained by time). Because flexibility around other work/life commitments is one of the main reasons for choosing distance study (Priest, 2007; Muller, 2008) this review will be largely focused on asynchronous communications, as these best support the demand for flexibility. In addition these are often the preferred method of interaction for educators, as the time delay allows students time to refine their responses before sending or posting, often resulting in a deeper level of thinking (Liu et al., 2007; Arend, 2009; Hull & Saxon, 2009). Even so, Hughes (2007) points out that "flexibility provides learners with more opportunities to disengage as well [as to] engage" (p 709), signalling some of the wider concerns around participation in online environments.

Asynchronous communication raises the issues of separation, different time zones, lack of opportunity to meet or interact in 'real' time as well as commitments aside from study, which immediately alert to the need for a different pedagogical approach. In traditional pedagogy, the practices of thinking together to build knowledge, community and

connectedness (Vygotsky, 1978; Mercer, 2000; Alexander, 2008) are widely accepted. However, due to the way dialogue happens online, particularly asynchronously, these practices may not be directly transferrable from the face-to-face classroom. In online learning, the success of interaction may depend more so on a high level of rapport and cooperation built up between learners and their instructors (Goertzen & Kristjánsson, 2007), often without the benefit of ever seeing or hearing each other (Rovai, 2002a). One obvious difference is the absence of usual meaning-making cues such as gesture, voice tone and interactive immediacy supporting negotiation of meaning and clarification. As such a more deliberate construction of the social setting may be necessary to ensure students feel included and self-assured, thus adding value to the group and to learning through active participation (Hughes, 2007). This is especially so for the fully delivered online course across different time zones where opportunities for real-time meetings are not an option. The necessity of interaction is not in question here, but an awareness of how to harness its benefits is, to boost intellectual and socio-emotional investment in the learning. The fact that isolation and lack of connectedness continue to be felt by students across culturally and linguistically diverse online environments (Birch & Volkov, 2007; Bartlett, 2008; Uzuner, 2009) strongly suggests the presence of socio-emotional factors when interacting with others, of which online pedagogy needs to take account.

The major issues from the literature revolve around, not whether interaction is important, but how to encourage and sustain it. To this end the debate vacillates between whether participation should be compulsory or voluntary, and whether encouraging social interaction or task-driven interaction will better contribute to educational objectives.

4.2.1 Compulsory participation or voluntary?

Advocates of compulsory participation maintain that high levels of interaction can be encouraged if made an assessable component. Pelz (2010) argues that prolonged engagement with the content is directly connected to greater levels of learning for students. This, together with high visibility and involvement of the course instructor, will 'compel' learners to participate (Lapadat, 2007). In Lapadat's study, tutor-modelling of appropriate interaction, negotiation strategies and critical thinking approaches, demonstrated that a good level of sustained interaction could be achieved, and provides some evidence for mandatory participation. Although Lapadat acknowledges this study was too small to generalise, and her involvement as the course instructor and co-designer makes it atypical, it does provide valuable insight into the potential for maximising participation, for catering for a diversity of online learners, and for creating an equitable learning experience.

While compulsory participation encourages regular contributions to discussion, it may also develop satisfaction in the learning experience. Interaction fosters interpersonal connections between group members and at the same time can help learners "feel their

educational needs are being met” (Rovai, 2002a, p 6). It can also be useful for encouraging students who may not feel comfortable in this relatively new semiotic domain (Gee, 2003) or who need extra ‘incentive’ to participate. Compelling students to interact may be a valuable strategy for shy students (Garrison, 2011), or second language learners who may be reluctant to contribute due to perceived language limitations, although this reluctance can be felt by many students regardless of language background (Brick, 2006).

Students though, often have mixed feelings about compulsory participation. There may be some students who are keen participants, and others who, for many reasons are not interested, impacting the whole group dynamics if participation is mandatory (Exter et al., 2009). Perceptions of compulsory participation were investigated by Birch and Volkov (2007), whose participants were a group of ESL/EFL (English as a second language / foreign language) students. These students were informed of the social and cognitive benefits of participation, which aimed to replicate their experience of on-campus tutorials. While the paper reported positive results overall, closer reading indicated small but perceptible differences in how students viewed compulsory participation. Peer interaction for the purpose of encouraging a sense of belonging, reducing isolation and developing friendships, was not rated as highly (‘beneficial - quite beneficial’) as instructor interaction through feedback or the development of effective electronic communications skills (‘quite beneficial – very beneficial’). That participation connected to learning goals was regarded more highly than the maintenance of inter-group dynamics is perhaps unsurprising. However a different conclusion was reached by Skulstad (2005), in a study of trainee teachers of EFL who were required to participate in online discussion during their practicum. The tasks of critiquing each others’ analyses of learner texts taken from the practicum, as well as responding to these comments, were intended to provide purposeful and authentic reasons to engage in ‘EFL teacher discourse’ and develop critical thinking skills. However the findings revealed that students were more concerned with ‘saving face’ socially, using strategies to downplay their growing expertise, rather than in demonstrating their knowledge. This suggests that although the production of interaction can be pre-determined by the task to a certain extent, the impact of some other factors, in this case cultural factors, such as face-saving, hedging and politeness strategies, may skew learning aims, and highlights the need for ongoing evaluation and facilitation, as well as close moderation to achieve desired outcomes (see also Coffin, Painter & Hewings, 2005).

Proponents of voluntary interaction, on the other hand, believe exchanges between participants can be encouraged and sustained if provided in a “sound social space” (Kreijns, Kirschner, Jochems & van Buuren, 2004), which is embedded into course design (Kirschner, Strijbos, Kreijns & Beers, 2004). Kirschner and colleagues (2004) describe social space as:

"... the network of social relationships amongst the group members embedded in group structures of norms and values, rules and roles, beliefs and ideals ... a social space [is] 'sound' if it is characterized by affective work relationships, strong group cohesiveness, trust, respect and belonging, satisfaction, and a strong sense of community" (p 208)

Creating a 'sound social space', which perpetuates the interaction necessary to sustain it, is possible through collaborative group work. This lends itself well to enhancing work and social relationships leading to an affinity together as a community of learners (Kirschner et al., 2004; Hull & Saxon, 2009). If authentic problem solving tasks are used, the need to interact contributes to a sense of achieving shared goals, which can contribute to group relationships and cohesiveness as learners involve themselves in the co-construction process. Indeed the functional role of collaborative talk can stimulate extended interaction creating a more cohesive group who have shared responsibility for the outcomes (Kirschner et al., 2004; Yeh, 2010) and does not require grading to sustain it. Voluntary participation in online group work was investigated by Brindley, Walti and Blaschke (2009) in a longitudinal three year study. Online discussion postings were collected from over 15 cohorts during this time, with two of these being ungraded. Due to the collaborative nature of group work, the authors found that students were just as active in the tasks even when ungraded. It seems that voluntary participation 'works' with clear collaborative strategies that encourage purposeful student interactions as well as for building up a social space where students can develop relationally.

Regardless of whether participation is assessed or not, the studies discussed above affirm that interaction is pedagogically desirable for online learners. The issue under contention is how best to achieve sustained levels of interaction in practice. This leads to another aspect in the debate which focuses on the type of interaction students engage in. Some educators advocate for 'quality' in interaction that is connected to learning objectives, while others value more socially oriented interaction. While this divide is apparent in much of the literature, another consideration must be the interactive purpose, which is often the determiner of what is produced in discussions.

4.2.2 Task-oriented or relationship-oriented interaction?

When meeting together occurs through asynchronous and text-based communications, the ensuing participation raises the issue of what type of interaction and how much interaction might be appropriate for the purposes of the online class. One argument is that interaction which fosters deep learning best suits the purposes of higher education. Garrison and Cleveland-Innes (2005) make a distinction between the voluminous 'quantity' of interaction often seen in social discourse and the more critical discourse they regard as 'quality', proposing that while there is some value in social interaction for building community, a 'higher level of discourse' is more important. They state that,

“high levels of interaction may be reflective of group cohesion but it does not directly create cognitive development or facilitate meaningful learning and understanding” (Garrison & Cleveland-Innes, 2005, p 135)

This is echoed by Hill, Song and West (2009), who noted an increase in meaningful interaction over the course duration revealed in “in-depth online messages” (p 91). However critical discourse can sometimes be hindered by concerns for nurturing a positive interpersonal environment, reducing the depth of engagement and development of these important skills (Coffin, Hewings & North, 2012). Levels of engagement in interaction can be influenced by many variables including cultural factors, involvement of the tutor, tutor moderating skills, access to materials, levels of support, feedback, access to others’ ideas, as well as “insecurities about learning” (Owens et al., 2009, p 56), especially for students returning to study after a break or if attitudes or values are culturally diverse (Cleveland-Innes & Sangrà, 2010). In regard to accessing others’ ideas, this requires that ‘others’ are willing to disclose, which will not occur unless there is some level of trust. This can only be built over time through connecting interpersonally (Rovai, 2002a; Gulati, 2008; Yeh, 2010). While the emphasis on the nature and quality of interaction may be the “overarching issue” (Owens et al., 2009, p 69), consideration needs to be given to insistence solely on producing in-depth responses. This may have ramifications for ‘lurking’ or insecure students (Gulati, 2008) who may need to develop confidence through building supportive social connections first, before becoming willing to self-disclose.

The debate around quality in interaction or quantity of messages, continuing the terms used by Garrison and Cleveland-Innes (2005), signals that interaction serves different purposes. Asynchronous interaction is more often associated with depth of learning while chat rooms are not, with the tendency for instructors to view chat rooms as having more social value than as a potential learning tool. This notion is challenged in Tudini’s study (2003) in which some students expressed the learning value of being able to engage in real-time talk with each other. To this end, Rovai (2002a) makes a distinction based on dialogic purpose, by identifying two types of interaction – one for task-oriented learning and the other for meeting socio-emotional needs which are relationship-focused. Rovai (2002a) argues that both are necessary but that “socio-emotional-driven interaction is largely self-generated” (p 5), while the instructor has more control over task-oriented interaction. Social interaction helps build trust and familiarity with others, potentially affecting students’ feelings towards the learning experience with some impact on motivations. This must influence the extent of participation in the learning activities, which do not exist in isolation from the “broader systems of relations in which they have meaning” (Lave & Wenger, 1991, p 53). Rovai (2002a) found that students made more meaningful connections when they were engaged in different types of interaction, which he identified as playing diverse, but important roles. Moving from the getting-to-know-you

stage towards contributing interpersonally and intellectually to the group often occurs in incremental stages, with the early stages of building friendships through frequent interaction being essential.

Arguably, an abundance of social interaction can be likened to 'thinking out loud' and from the contributions of others also thinking out loud, there emerges some depth in the process of co-construction of knowledge (Vygotsky, 1978; Mercer, 2000). This perspective can be understood as the learning value of interaction being realized in its dialogic development, thus rendering the product as secondary to the process. If only in-depth interaction is demanded, the discussion may miss important increments in the learning process that are born from shared cumulative thinking.

4.2.3 The 'elephant in the room'

Regardless of the debate around interaction, mature-age, part-time students who are often the learners enrolled in distance courses (Rovai, Wighting & Liu, 2005), are more than likely juggling responsibilities and commitments in addition to the demands of study. It needs to be acknowledged that the reality for them may be that even if a desire exists to interact, developing interpersonal relationships may not be a high priority. In Owens and others' study (2009) it was found that these types of students are likely to be "goal oriented and [assessment] focused" (p 62) with little interest in social interaction. This concurs with a response from one of Exter and colleagues' (2009) participants who felt satisfied with the challenge of the course content but "... the other parts, community, and all that ... I'm an old fart, that's just not what I need in my life" (p 189). This could also be explained as some not strongly identifying themselves as a member of that particular community (Hughes, 2007). Others may simply dislike having to comply to 'forced' participation (Arend, 2009).

Despite Birch and Volkov's (2007) positive findings overall, almost a third of the ESL/EFL students said they would choose not to participate if discussion was voluntary. Yet while some students feel little need to interact, others feel that *only* their classmates can understand their issues (Liu et al., 2007) and the collegial support and networking becomes a very important priority (Exter et al., 2009). Interestingly Liu and colleagues (2007) reported that some students were resigned that online could not mimic face-to-face and that a lack of connectedness was the 'trade-off' for the convenience of flexibility.

It also needs to be acknowledged that some faculty staff may not actively encourage the use of discussion in their online classes (Mitchell & Geva-May, 2009). This could be due to a lack of awareness (or even perhaps acute awareness) of the different pedagogical requirements for online learning, or of the benefits of building community. There could also be uncertainties about what to do with tutorial-like discussion which, unlike verbal discussion - 'disappearing' once uttered - is given permanence on the discussion space,

and may seem to be inviting some form of assessment, with the resultant flow-on to workload (Pelz, 2010). In fact findings from Mitchell and Geva-May's study (2009) of faculty attitudes towards online learning, show a level of resistance from faculty staff, particularly in relation to the change of practice required to meet the different needs of online learners (see also Exter et al., 2009). This could be related to workload as online instructors often are managing multiple roles (White, 2003) as well as the time it takes to provide the individual and timely feedback expected by the students (Bailey & Card, 2009; Koh & Hill, 2009). In addition, adapting to a different pedagogic approach requires "flexibility and a shift in mindset" (White, 2003, p 69; see also Salmon, 2005), placing challenges on mental energies as well as on time (Kelly & Stevens, 2009).

4.3 The online learning community

As social beings the socio-emotional desire to belong is a fundamental human need (Maslow, 1968) and has been seen historically through geographically defined communities. In recent years however, the boundaries defining 'community' have shifted dramatically, with ease of travel and communications technology making it possible for communities to develop beyond time, space or the physical proximity of its members (Rovai, Wighting & Lucking, 2004). By no longer needing a physical locality to exist, the emergence of online contexts have redefined traditional notions of community by making it accessible to a diverse and widely distributed membership, in which it becomes the shared interests that denote the community (Mercer, 2000; also see for example Perrotta, 2006). Without the restrictions of physical or geographical location, community becomes "what people do together" rather than "where or through what means" (Rovai, 2002a, p 4). An understanding of what may constitute an online community can be found in the Communities of Practice framework. This framework operates a structure of community comprised of diverse members involved in multiple levels of participation and communal negotiation, from which the shared pursuit creates meaning making resources in the process of becoming part of the 'in-group' (Wenger, 1998). The community is defined by the practice its members are mutually engaged in, which necessarily involves interaction, and is described by Lave and Wenger (1991) as "a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" (p 98). The communities of practice framework emphasises engagement in some kind of practice as essential for developing community, rather than on the physical or geographical proximity of its members. This portability of community has great potential for virtual classrooms.

In the context of education, a community is built through cooperative and reciprocal exchanges in supporting each others' learning and is crucial for building knowledge (Alexander, 2008). Community 'happens' through dialogic exchanges where pooling of individual mental resources along with appropriate support results in cognitive

development beyond individual mental capacity (Vygotsky, 1978; Brown & Cole, 2000; Mercer, 2000; Bower & Richards, 2006). In this regard the literature is clear about the fundamental role of interaction in bringing an online learning community into existence, and for building and maintaining interpersonal relationships. In a learning environment where a community may be short-lived or seem contrived, how much socio-emotional investment is channelled into study-related relationships is an individual choice which can impact the development of community. Rovai (2002b) argues that community involves a deeper emotional response that is more than just sharing ideas and resources, but where membership is signified by “strong feelings of community” (Rovai, 2002a, p 199). This suggests that socio-emotional investment is needed before feelings of community can emerge, and expressed as a sense of belonging, trust between members, shared expectations and learning goals, and a level of concern for each other (Rovai, 2002a). This is not to claim that community is homogenous, but rather that communal negotiation allows for diversities in the pursuit of joint endeavours (Wenger, 1998). The result is a shared commitment and faith that individual needs will be met within the community (Dawson, 2006).

In line with Rovai's (2002a) distinctions of task-oriented and relationship-oriented interaction, Rovai and colleagues (2005) highlight the operation of two different online communities - ‘social’ community, where interaction fulfils a need for friendship; and ‘learning’ community where learning goals drive the interaction. While the distinction is being made, in practice this may not always be clear-cut, as learners are quite adept at using ‘talk’ to achieve different purposes, often concurrently. For example using hedging devices to tone down a critique of another's work can safeguard relationships at the same time as fulfilling institutional requirements, as shown in Skulstad's study (2005). This distinction is not to say that one is more important than the other, as it is often the social which precedes learning-oriented interaction. What this does allude to however is that students take on a number of roles when engaged in learning. These can at times be competing roles (Skulstad, 2005), such as the role of a friend or student, novice or expert and requires a level of skill and awareness when balancing learning goals with social harmony of their community.

4.3.1 Enacting a sense of community in online learning

While ‘community’ can be defined as being developed around shared goals, interests and experiences through what group members do collectively and cumulatively, ‘sense of community’ is the individual perceptions of community. It is an emotional response to relationships between group members, and where one perceives themselves positioned socially can determine their interpersonal investment in the community, resulting in a connecting or isolating effect.

Lack of sense of community or feeling disconnected from the learning community are key issues for online learners (Rovai, 2002a; White, 2003; Hughes, 2007; Gallagher-Lepak, Reilly & Killion, 2009). Insight from the learner perspective into factors contributing to building community has been the driving force behind many studies (such as Rovai, 2002b; Ouzts, 2006; Bartlett, 2008; Exter et al., 2009) with a strong connection between sense of community and student satisfaction (Rovai, 2002c; Dawson, 2006; Liu et al., 2007; Koh & Hill, 2009). Liu and others (2007) propose links between sense of community to perceived learning, as well as perceived learning outcomes to student satisfaction. In addition, they found that feeling a sense of community lowered feelings of isolation as well as the risk of attrition, substantiating similar findings such as Owens and colleagues (2009). In response to lingering concerns of distance education being inferior to on-campus classes, the connection between feeling isolated and attrition rates prompted the study by Owens and colleagues (2009). These authors found that there were multiple 'outside' factors which impact on sense of community including course content, teaching staff, the technology and course delivery support, the type of communication engaged in or expected, as well as the 'inside' influences or "psychosocial factors" (p 56) which can be a significant determiner in student perceptions, success and experience.

Sense of community is directly impacted by the extent of interaction between group members. A comparative study conducted by Exter and others (2009) found that only a quarter of online students regularly interacted while almost all the on-campus students in the study engaged in multiple weekly interactions. In light of this, the authors discuss the responsibility that some online students felt was theirs for actively creating a sense of community, while also being aware that others in their group did not share this same level of enthusiasm (see also Hughes, 2007). This indicates the potential for disappointment resulting from a mismatch in expectations, even if students do understand the competing obligations and demands on time that their classmates experience. Notwithstanding, of significance for these off-campus students was to be recognised and remembered by peers and staff with sense of community being impacted negatively if students felt unknown or anonymous (Exter et al., 2009). The need for recognition is intrinsically linked with being able to portray *who* we are. Identity construction has potential ramifications on motivation to participate, the extent of self-disclosure, as well as on self-confidence and self-assurance. This may be viewed as an ongoing process in which aspects of identity emerge and are responded to, which then feed back into the community (Penuel & Wertsch, 1995; Gee 1999, 2000). Consequently the focus now turns to the impact that identity formation has on interaction and community building in online learning environments.

4.4 Identity

From the previous discussion it is clear that the literature makes consistent connections between interaction and sense of community. Yet identity, which plausibly and naturally emerges from any social interaction, is much less (explicitly) explored in online education research (Hughes, 2007). Database searches conducted according to the steps outlined in the 'Search Strategy' section (detailed in Tables 1 and 2 of the Appendices), revealed a disparity in the current literature that explores online identity formation, although the relatively new phenomenon of online learning and the challenge that virtual identity conjures could in part account for this. Because of the novelty of online identity research, this section will firstly discuss a conceptual framework, from which online identity formation may then be understood within the larger context of research.

4.4.1 Conceptualising identity: a social construct

Exploring the notion of identity formation is first necessary in order to frame identity in the context of online learning. Most significantly identity is socially constructed, being forged through human involvement in social activity. During the process of making it clear to others (and to oneself) about *who* you are and *what* you do (Gee, 1999; Henderson & Bradey, 2008), identity constructs, and is constructed by, language (Penuel & Wertsch, 1995). This occurs within a group of people who, through social interactions, share some kind of "distinctive practices" (Gee, 2000, p.105).

From a sociocultural perspective, human activity is mediated by language in interacting moments, which is intrinsically linked to consciousness and higher mental functioning (Vygotsky, 1978). Although Vygotsky did not talk about identity as such, a sociocultural approach to forming identity can be considered when individual functioning is viewed as inseparable from sociocultural processes. The centrality of dialogue in community and co-construction of knowledge is coupled with its centrality in the construction of identity in continual negotiations between self and others. Identity formation therefore is as much about the sociocultural processes as the individual.

When applied to the context of the online classroom, in particular asynchronous communications, interacting moments are evidenced in what is written and placed in the 'public' group space. These texts represent thoughts, responses, re-casting of knowledge, values and attitudes, which are manipulated for an intended audience in a particular social context. Underlying these is the accumulation of life experience continually being augmented in a dynamic and influential process, along with changing perceptions of self and others (Perrotta, 2006). In the language we choose to use, something of 'who we are' will emerge (Ivanic, 1998).

4.4.2 Identity and the 'discoursal' self

To date much of the research on identity has been conducted in physical locations with participants who can be observed in 'real' contexts. Physical and verbal clues to identity formation are readily observable as well as non-verbal semiotics occurring during the interplay between participants, their contexts and their (unfolding) perceptions of self and others (Norton, 1997; Norton, 2000; Beijjaard, Meijer & Verloop, 2004; Varghese, Morgan, Johnston & Johnson, 2005; Kanno & Stuart, 2011). In online environments, when the social meeting space is entirely a construct of written language, lacking any of these contextual factors, the evidence of identity construction must be found in the disembodied text of discussion boards or chat rooms. Despite this, Burgess and Ivanić (2010) argue that identity will emerge in *all* social practices, a stance also taken by Richards (2006). This has been described as 'discoursal identity' as the written text will contain something of the writer's identity, which in turn will be interpreted by the reader (Olinger, 2011). Even in the context of academic writing, often regarded as void of the subjective self, Ivanić (1998) found that authors bring their "discoursal repertoires" (p 181) to the writing, influenced by cumulative life experience, as do their readers to the interpretation. Ivanić states that "who we are affects how we write, *whatever* we are writing" (1998, p 181) (*emphasis added*), indicating the often unconscious interplay of the sociocultural and socio-emotional with subjectivity in what is written.

Identity as emerging from written text, such as asynchronous interactions, can be viewed therefore as a product of interpersonal relations and sociocultural processes. It can be understood as emergent and socially-dependent, being "shaped moment by moment" (Bucholtz & Hall, 2005, p 591) by the social context, perceptions of values, power-play and the social positionings brought to the online context by contributors (Perrotta, 2006). In fact, these perceptions of identity are formed, often unconsciously, when readers draw clues about others from the information presented, but also from what is left 'unspoken' (Hughes, 2007).

4.5 Identity research in online contexts

To date research into identity formation in online learning contexts is limited. However from the literature reviewed, interaction is fundamentally involved in the process of constructing identities. Therefore this discussion will focus on issues raised in the literature most pertinent to belonging/isolation, such as the challenge of managing the incongruent identities of dissimilar members (Hughes, 2007), and the impact of this on learning. The position taken is that identity and learning are intrinsically linked (Wenger, 1998).

Diversity is a 'fact of life' but not often overtly mentioned when discussing online community building. However the identity trajectory may provide an explanation for why

certain students engage with or invest in the learning community, and why others exclude themselves, or are excluded. An individual's perception of how they are perceived by others and their positioning in the learning group can impact the extent of interpersonal and intellectual engagement, and consequently their experience of distance learning. Differences in identities that result in exclusionary behaviour towards others, have been described by Hughes (2007) as 'incongruence' in identities. The effect of incongruent identities in online classrooms is perhaps one of the most 'lived', but least identified phenomena contributing to participation levels and retention concerns (Hughes, 2007). Hughes cites a typical example of the student who may not conform to class expectations, such as coming late into forum conversations, or seeming not to pull their weight in group collaborations, causing anxiety for other group members. Indeed Yeh (2010) describes such behaviour as 'trouble-maker', which was viewed as a hindrance to the development and functioning of the online community. But rather than sidelining the issue of incongruent identities by assigning 'trouble-maker' to these students or accepting this as an inevitability in online learning, Hughes (2007) extends a challenge to the community, which she claims has some responsibility for finding ways to embrace the diversity displayed by others. This must also be a tutor priority (Irwin & Hramiak, 2010). Hughes (2007) makes the suggestion that rather than expect the habitual latecomer to conform to the status quo, that the community change their posting behaviours to accommodate their non-conforming peer. There are many valid reasons why reconfiguring behaviours for learning online can lead to incongruent identities, and not all learners will embrace the disembodiment factor. For some personalities and learner styles, this presents challenges particularly being physically non-existent and existing instead as "expressed identities in virtual space" (Ke, Chavez, Causarano & Causarano, 2011, p 350). These are very real socio-emotional issues at the core of the learner, for if an individual perceives they are not recognised or valued by the community, particularly given the challenges presented by learning online, then the flow-on effects of incongruent identities to interaction, community, learning, and motivation could well be at stake. Conversely, congruence in identities, or inclusion despite diversities, is more likely to have positive socio-emotional effect, encouraging motivation to participate, and hence increase the potential for a more emotionally and intellectually stimulating learning experience.

Power in relationships and culture also impact on identity (in)congruence. An investigation by Perrotta (2006) explored online forums which were established to cater for more or less experienced psychologists in Italy. Operating as open-ended forums, unlike the 'usual' semester-bounded discussion forums in educational contexts, these discussions continued over many years, allowing an extended view of the unfolding issues. Using Bourdieu's approach to explain the cultural capital held by an academic psychology degree, Perrotta found participants with these credentials saw a responsibility to protect what they perceived to be the common identity of 'psychologist', using the

power of their cultural capital to diminish the authority of those without the same credentials. Similarly Irwin and Hramiak (2010) found evidence of 'them and us' identities in the online contributions of trainee teachers during their practicum. Discourse analysis of personal pronoun use indicated the vacillations between novice and professional identities, between feeling like an outsider or an insider in the teaching community. These highlight one of three paradoxes suggested by Hughes (2007), that the inclusion of one identity can render the exclusion of another. Perrotta (2006) noted that the construction of a common professional identity "will always involve a commitment, often unconscious, to a systematic bid to gain more power" (p 462). This was also captured to a degree by Ke and others (2011) in their examination of discursive practices in the online interactions suggesting that "power, inequality and relations between social groups" (p 356) at the macro-level of meaning will frame how the text is interpreted, while the text itself is framed by the presence of the students' identity at the micro-level of meaning. From the abovementioned it is evident that identity construction will almost always involve an element of power-play, overt or not, impacting on the self-assurance of those lacking the valued cultural capital of a particular community.

Learning and identity are intrinsically linked, a connection highlighted by Wenger (1998) as "all learning eventually gain[ing] its significance in the kind of person we become" (p 226). In the space of the discussion forums students communicate what they know of the content, but also (even if unconsciously) present their identities "by communicating who they are and how they perceive others" (Ke et al., 2011, p 350). The interconnectedness of interaction in the processes of identity expression, knowledge building as well as maintenance of trust and rapport is strongly argued by Ke and colleagues (2011) as only achievable through participation in online discussions. This is supported by Yeh (2010), who measured the success of online communities through the roles taken on by students indicated by collaborative and meaningful participation behaviours. Yeh's interpretations are drawn from the community of practice and community of learners models in which interdependence between students is necessary for cognitive learning to occur (see also Hull & Saxon, 2009). As identity is negotiated socially, and as the learning community is comprised of a diversity of learner identities, this inevitably presents tensions in the levels of collaboration and participation, hence extending to the potential for learning (Skulstad, 2005). On the other hand, identities which are "well-articulated" (Ke et al., 2011, p 351) and favourably recognised and reciprocated by the community, are conducive to academic and interpersonal success.

4.6 Online pedagogy and task design

While investment in interaction increases the potential for knowledge-building, it is also clear that this will be enhanced by encouraging students' emerging identities, which unfold and evolve dynamically over time. According to Alexander (2008) what we believe

about pedagogy is played out practically in the act of teaching, therefore task design is crucial for creating opportunities for identity to develop. This is a paper in itself, but because pedagogical principles and issues were invariably raised in the literature reviewed, some require mentioning.

As interaction has been clearly established as a key component in creating an online learning community, the challenge is how to inspire interaction that also allows the interactants opportunities to construct and negotiate their various identities. Carefully managed and monitored interaction that elicits most from the students (Hill et al., 2009) must be balanced with the typically short time duration of an online subject. Hill, Song and West (2009) argue that simply providing a resource for interaction does not mean it will be utilised, also echoed by Garrison and Cleveland-Innes (2005). This is reflected in the following which represent a selection of the pedagogy-related themes.

4.6.1 Task type

Identity presence will be greatly influenced by the task type, such as open ended and sociocultural related discussions (Ke et al., 2011); collaborative, purposeful, relevant, task-driven discussion tasks (Warschauer, 1997; Kirschner et al., 2004; Goertzen & Kristjansson, 2007; Arend, 2009; Brindley et al., 2009); and introductions and 'ice-breakers' (Pelz, 2010; Xie & Ke, 2011). However, Hughes (2007) highlights the tension between students knowing too much or too little about others, which raises the challenge for educators to balance how much students *really* need to know about each other in order to encourage identity formation in a way that contributes favourably to the learning environment.

4.6.2 Explicitness

The absence of many of the meaning making cues usually relied on necessitates clear and unambiguous guidelines in online learning, such as explicit protocols for performing online discussions; providing understanding about the social purpose and audience of the discussions; explicitness of roles and responsibilities to encourage higher levels of thinking (Arend, 2009; Hull & Saxon, 2009; Ke et al., 2011); upfront awareness about the purposes of tasks and discussions (Kelly & Stevens, 2009); as well as foreseeing potential misunderstanding and specifically addressing it before it leads to misinterpretation (Pelz, 2010). Finely balanced with this is the caution that such explicitness does not create incongruence of identities so that one person cannot be interpreted as privileged or preferred over another (Hughes, 2007).

4.6.3 Instructor role

Throughout this paper the implicit assumption is that the instructor plays a crucial role in online classroom interactions. Instructor decisions will impact what can happen between

class members as opportunities for engagement and learning are largely orchestrated and steered by the instructor through facilitation, structure, leadership, modelling and explicit guidelines (Garrison & Cleveland-Innes, 2005; Hull & Saxon, 2009; Garrison, 2011). In this role, setting expectations around student participation, creating a safe social environment in which this can occur, as well as providing an appropriate level of moderation/intervention, are decisions which have strong potential ramifications on students' engagement and identity expression. Therefore careful consideration needs to be made around designing in the desired or most suitable interaction – i.e. more 'natural' or more structured?, voluntary or mandatory? (Rovai, 2002a; Kreijns et al., 2004); deciding appropriate instructor intervention and guidance in argumentation skills development (Coffin & Hewings, 2005); structuring the social space to encourage learning as well as building up trust and rapport (Kirschner et al., 2004; Kreijns et al., 2004; Gulati, 2008); providing timely and appropriate feedback (Bailey & Card, 2009; Koh & Hill, 2009); and very importantly, having an adequate knowledge of one's students so they feel known and recognised (Exter et al., 2009), thus helping to validate their identity and thwart feelings of isolation.

4.6.4 Instructor reactions and involvement

How an online instructor reacts is possibly more crucial than their level of involvement in the discussions (Ke et al., 2011), impacting on socio-emotional well-being perhaps more so than in face-to-face situations. Expression of identity from students is more likely when instructors value contributions drawn from personal experience by rewarding or highlighting meaningful posts; when the tutor probes for elaboration that allows students to incorporate their identities into the learning; and where instructors share from their own personal perspective rather than always displaying their academic identity (Irwin & Hramiak, 2010; Ke et al., 2011). This not only brings a sense of reality to the virtual tutor, but also models appropriate identity discourse in learning, which Richards (2006) sums up nicely in the following:

“... if there is indeed a compelling case to be made for conceptualizing our interactional work as teachers in ways that engage both the discursal and the personal, we must also recognize that any actions arising from this will involve an investment of self, with all the emotional, relational, and moral considerations that this invokes” (p 72)

4.7 Conclusion

From the literature reviewed it would appear that the identity trajectory needs careful consideration in online learning, if the goal of education is for the learner to *really* engage in the learning. Over the duration of the subject being undertaken 'identity trajectory' may be a way of understanding the opportunities for engagement that are taken up or constrained by perceptions of one's identity, as impacted by socially negotiated

relationships and positionings. The socio-emotional challenges associated with developing one's disembodied identities can be a significant determiner of participation levels, sense of community (or isolation), as well as of motivation and satisfaction, with potential ramifications on learning. Without doubt the role of interaction is fundamental to identity construction, community building and learning. When there is an imbalance or breakdown in interaction this results in other issues such as feeling isolated, reduced confidence, non-participation, reluctance to contribute, 'trouble-making' and so on. These may well be symptomatic of incongruent identities, while on the flip-side congruence of identities is more likely to foster engagement in the learning community with increased likelihood of sustained investment in academic and interpersonal pursuits. Indeed the challenge for the instructor, who plays a crucial role in the learning process, is for identity to be managed in a way so that one identity is not seen to be privileged over another, and hence one person over another (Hughes, 2007; Irwin & Hramiak, 2010). Socio-emotional factors are necessarily involved as individuals construct their identities, respond and are responded to during interactions in the learning community, and from which a sense of belonging (or not) can result, leaving little doubt of some kind of impact on learning, and the online learning experience.

As a result it is hoped that some of the issues raised from this review stimulate further exploration of what is at the core of learners and learning, particularly the impact on learning that identity has in online environments. The influence of cultural factors is one area that would greatly contribute to our understandings of identity in online learning, and would merit a literature review in its own right, which cannot fit in the limited space of this paper. This becomes even more pertinent when considering the opportunities that internet technologies provide for cultural diversity to exist as the 'norm' rather than the exception. From the literature reviewed here it seems clear that online learners, perhaps more so than face-to-face learners, need deliberately orchestrated, multiple opportunities to engage with others so that expression, development, tolerance and recognition of their diverse identities may in part compensate for any lack felt by not having a physical presence.

APPENDICES

Basic Search Model		Number of articles retrieved†	
<p>Step 1: [online learn* OR on-line learn* OR distance learn* OR e-learn* OR web-based learn* OR online education OR on-line education OR distance education] AND [communit*] AND [interact*] OR [discussion] in the abstract and/or title and/or keywords ✓peer-reviewed (if this option is available)</p> <p>Step 2: AND [identit*]</p>	⇒	ERIC	Scopus
		57	284
		12 (after filtering)	156 (after filtering)
	⇒	1	11
		1 (after filtering)	5 (after filtering)

† as at 3 February 2012

Table 1: Basic search model and example of results across two databases

Search Criteria	Articles Retrieved:	
	ERIC	Scopus
1. [identit*] in article title + peer reviewed + journal articles only + higher education only	No. of articles†: 696 in last 10 years: 694 last month: 4 last 6 months: 82	No. of articles†: 29,686 in 2012: 71 in 2011: 2405 in 2010: 2430
2. [identit*] AND [online] in article title (+ criteria as above)	= 0 / 696	= 85 / 29,686
Percentage of articles on 'identity' compared to those on 'identity and online'	0%	0.29%

† as at 3 February 2012

Table 2: Comparative search for 'identity' and 'identity + online' in article titles

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CHAPTER 5

‘Who am I?’: Exploring identity in
online discussion forums

Journal Article Two

FOREWORD TO CHAPTER 5

Delahunty J, (2012). "Who am I? Exploring identity in online discussions". *International Journal of Educational Research*. 53, pp 407-420. DOI: 10.1016/j.ijer.2012.05.005

In Chapter 5 I present the second published paper in the thesis which reports the findings from the first case study (Case A – assessment-driven discussions). The paper focuses on the theme of identity, which emerged as significant for understanding sociality in the process of learning, and how engaged (or not) learners became in forum interactions. My role is sole author of this paper.

In this chapter I explore the nature of online interaction for the kinds of self-knowledge that became socially constructed between participants – known as identity formation. The issue of identity came under the spotlight when a mismatch, or disalignment, in the perceived social values of one identity over another (in this case – teacher/non-teacher), came to the fore and was substantiated in detailed linguistic analysis of these discussions.

The literature review in this chapter takes a sociocultural approach to the notion of identity formation, i.e. that identity is not static, but rather a dynamic social process. The chapter likens this dynamic process to an 'ebb and flow' effect, which became noticeable as students formed affiliations (or not) according to identities being portrayed and negotiated in the various discussions. In the chapter I argue that the strength of students' involvement in particular discussions is reflected in their perceived sense of identity at those points in time, and reiterate that identity formation in online environments is an important area for further research.

ABSTRACT

Identity became apparent as an important theme while investigating the role of interaction in the asynchronous discussion forums of an online postgraduate TESOL (Teaching English to Speakers of Other Languages) education subject. Identity emerged through dialogic choices as students projected an impression of themselves, negotiated their positioning within the group, and established what was valued in this context. Without usual face-to-face meaning making cues, what students post to the forums carry the load of what they *mean*. Discourse analysis of the initial forums using systemic functional linguistics, provided insights into how identity was being constructed concurrently through interpersonal manoeuvring. This reveals a process of multiple identity construction, with the effect of perceived negative identity discussed. The impact of different tasks on identity formation is also considered.

Keywords: identity; asynchronous discussion; discourse analysis; online learning; teacher identity; TESOL

5.1 Introduction

The increasing popularity of online learning options in recent years has been punctuated by consistent research findings that distance students experience a sense of isolation compared to their on-campus counterparts (White, 2003; Liu, Magjuka, Bonk and Lee, 2007; Owens, Hardcastle, and Richardson, 2009). As 'social' beings communication with others is a human necessity (Vygotsky, 1978). However there are issues of communication which may be heightened in an online context, despite the availability of the 'latest and greatest' communications technology (Roberts and Crittenden, 2009). Some of these are uncertainties about interpreting others' attitudes and values, lack of 'real-time' communication, concerns about where an individual perceives they 'fit' in the group, as well as the relatively short duration of the subject intake. These issues may not be unique to the virtual classroom, nor is the asynchronous nature of communication always problematic (Garrison and Vaughan, 2008). However it is the lack of access to interactive immediacy and meaning making cues which may be magnified in this 'body-less', 'face-less' context. This can also increase the potential for misunderstanding (Moore, 1993) which can shut down or discourage the interaction necessary to counter feelings of isolation.

In light of these issues, it is suggested that interactional opportunities are crucial for distance learners to be able to project a sense of *who they are*, in constructing their online identities through the unfolding dialogue (Richards, 2006). From a sociocultural perspective interaction is crucial in communicating a sense of who you are with an emphasis on the inseparability of the individual and the environment in which the social activity occurs (Vygotsky, 1978; Penuel and Wertsch, 1995). In this study, the site for social activity is the asynchronous discussion forums of a postgraduate TESOL (Teaching English to Speakers of Other Languages) distance education subject. Any reciprocal opportunities for students to communicate and project an impression of themselves occur here, and provide the primary, if not the only means to do so.

Recognising when, how and why identity is important (Bucholtz and Hall, 2008) for online learners is integral to understanding the role of discussion in virtual learning contexts. Research into the process of identity formation and identity negotiation as told through the 'voices' of these becoming-TESOL-teachers is essential, particularly in the semiotic domain of asynchronous discussion (Gee, 2003), and in light of the increasing implementation of online education programs. To date, studies of the turn-by-turn construction of identity through dialogic choices during a bounded event such as discussion in a postgraduate online subject, are few.

The purpose of this paper is to present how identity emerges as part of the 'natural' exchange of ideas that occur in online discussion forums. As a result this will contribute to a better understanding of the role of interaction in online learning.

5.2 Identity formation

"... we make meaning between us as we talk and listen to the voice of others and of self; as we try to figure out who we are; what we should do or say; what we should have done; and how we should relate with others"
(Cunliffe, 2003, p 489)

Identities are forged in social activity during the process of making it clear to others (and to oneself) *who* you are and *what* you do (Gee, 1999). It follows then that identity formation can be seen as a process that largely constructs, and is constructed by, language (Penuel and Wertsch, 1995). This occurs within a group of people who, through interactions, share some kind of "distinctive practices" (Gee, 2000, p 105), such as those occurring in the context of online learning.

5.2.1 Defining identity

Common features of identity formation across vastly different research contexts were found in the literature. According to Norton (2000), identity negotiation is inextricably linked to language use in social exchanges. In particular Norton's interest lies in what this means for the second language learner (SLL) as identity negotiation can be impacted when opportunities to use the target language are controlled by others in unequal power relationships. The result can be twofold - SLLs are denied access to vital social networks necessary for negotiating a sense of self, and language development necessary for engaging in these social networks is thwarted. This highlights the constraints that inequity in interpersonal power relations can have on an individual's prerogative to negotiate their identity. The theoretical and practical applications of identity are also considered by Norton (1997) in a critical review of five papers, themed under 'Language and Identity'. Although each of the five authors approach identity differently due to vastly different research contexts (such as, a Vietnamese woman in Canadian ESL night school, Japanese and American EFL teachers in Japan, Mexican families in the U.S etc), Norton notes that their conceptions of identity are consistent. These are the impact of social processes and power relations on identity, the central role of language in identity construction, the transitional nature and dynamic formation of identity, and a rejection of any simplistic notions of identity (Norton, 1997). Similarly, Varghese, Morgan, Johnston and Johnson (2005) juxtapose three popular theories used to examine teacher identity and the application of theory to understand certain aspects of identity. Despite the differences in theories and research contexts, Varghese and colleagues (2005) also note the common notions of identity similar to the above conceptions (in Norton, 1997, 2000).

In synthesising these identity formation can be seen to embody three broad characteristics: as socially formed and driven, including the influence of interpersonal power relations; as constructed through language; and as multi-faceted, complex and dynamic.

Of particular interest in this study of teachers-in-preparation is the notion of teacher professional identity, a concept that Beijaard, Meijer and Verloop (2004) set out to define in their systematic study of 22 papers. Perhaps reflective of the complexity of identity, Beijaard and colleagues (2004) note that many of these studies did not provide explicit definitions of professional identity. The authors subsequently provided their own interpretations which can also be synthesised under the three abovementioned characteristics, with the additions of identity as shaped by self-perception of their role, and as related to aspects of the profession such as standards, knowledge, skills, and social perceptions of the 'ideal' teacher.

5.2.2 Issues for defining identity formation in online contexts

The online context lacks the physical contextual factors that contributed to understanding identity formation in the above studies. This raises the question of what happens when the 'social space' is not physical and where identity is constructed solely through written texts posted to forums, chat rooms or blogs.

The notion of 'discoursal identity' provides an understanding pertinent to the online context (Ivanič, 1998). Ivanič insists that the written text will contain something of the writer's identity, which in turn is interpreted by the reader. In the construction of their autobiographical self, writers come to the activity with "discoursal repertoires" (Ivanič, 1998, p 181) resulting from an accumulation of life experiences. One's identity or *who* we are, Ivanič argues, "affects how we write, whatever we are writing" (1998, p 181). This approach to understanding identity is also supported by Burgess and Ivanič (2010) and Cunliffe (2003), who are convinced that identity will emerge through discoursal construction in *all* social practices. When viewed as social practice the written language of the forums becomes the hub around which the social life of the online group is organised (Lave and Wenger, 1991; Pennycook, 2010) and from which identity can be constructed.

5.3 Identity formation in an online context: towards a definition

In the online context the concept of 'discoursal identity' recognises the power of meaning conveyed in the authorial voice and all the sociocultural and historical factors that contribute to this. Therefore evidence of identity formation will emerge from the 'voices' in the discussion forum posts. This understanding, together with other consistent themes drawn from the literature enable a definition of identity formation in asynchronous

discussions. Although listed under three broad headings, it is acknowledged that these concepts overlap and intercept with few clear-cut boundaries.

5.3.1 Identity is complex

Identity is a complex notion due to its dynamic state of formation and redefinition over time and space, its multi-faceted nature, and the complexities associated with what is occurring interpersonally and perceptually between others and self (Bucholtz and Hall, 2005). The sociocultural context of an online postgraduate TESOL education subject provides a social space in which students will be constructing multiple identities through their writing. These may be connected to their occupation and education, their status as becoming-TESOL-teachers, as well as related identities as traveller, as adventurous etc. It can also be expected that these identities will be in state of flux over the duration of their study.

5.3.2 Identity is socially formed and driven

Identity is socially constructed in dialogue and is shaped by self-perception, the perceptions of others, and the interpersonal power relations at play. Inherent in what students post on the discussion forums come assumptions, values, beliefs and expectations associated with postgraduate university study and their positioning in this. This, together with personal values and experiences, will contribute to what is valued (or not) as negotiated in the shared space of the forums (such as education or work background, aspirations and motives for teaching overseas etc). What students write provides valuable insight into the multi-dimensional and dynamic nature of identity due to the impact of self-perceptions of legitimacy coupled with their perceptions of others towards them. This may then impact the extent that trust and rapport can be established, in turn influencing the openness in discussion and willingness to contribute.

5.3.3 Identity is constructed through language

Language plays an integral role in the construction of identity. In other words, identity is constructed, maintained, understood, negotiated and interpreted through language. The discussion forums are the vehicle through which insights into feelings of belonging or isolation, legitimacy of self, or lack thereof, will become apparent. In the absence of physical presence and other meaning making cues readily available in face-to-face contexts, what students *mean* when they post to forum discussions becomes crucial in understanding how they construct their identity and to what extent this is made transparent to others.

5.4 The study

This study took a qualitative approach to understanding the role of interaction in online learning. As a case study close examination of the online subject¹⁷ within the clearly defined boundary of a 15 week intake allows for an in-depth description and interpretation of the subject as it exists (Stake, 1995; Lincoln and Guber, 1985).

The objectives of this research are:

- to focus on identity formation as part of a larger study investigating the role of interaction in online learning.
- to contribute to the literature on identity formation as an important consideration for asynchronous discussion forums
- to consider when identity matters, how it matters and why it matters in an online education context

While the qualitative data gathered (detailed in 4.2 below) enables a depth of understanding the online subject not achievable in a quantitative design, caution needs to be taken in drawing conclusions from such a small data set and the limitations that can arise from this. Hence it needs to be acknowledged that data from a small number of participants is not necessarily representative of online learners generally. As such the findings must be viewed as a 'snapshot' of this particular online subject at a particular point in time, with a group membership unique to this.

5.4.1 Participants and research site

The site of the study was an online postgraduate TESOL distance education subject, at an Australian regional university. The subject focused on researching an international teaching context as well as engagement in debate around teaching English internationally. Participants were the subject tutor, the subject designer and 5 of the 6 postgraduate students enrolled in the 15-week subject intake. The students were undertaking Graduate Certificate, Graduate Diploma or Masters awards in TESOL. They were at various stages of completion ranging from mid-way to near completion. Three of the students were practicing secondary or primary school teachers, with two of these indicating they had previously taught overseas. The other two students were not teacher trained, but had plans for a career move into TESOL teaching, one from an accounting background and the other a recent Arts graduate. It should be noted that prior teaching

¹⁷ Note: reference to 'subject' throughout this paper refers to the educational subject within a program of study, and *not* to participants

experience is not a requirement in TESOL postgraduate programs and that diversity in student backgrounds is not unusual. Only one of these students had completed distance studies prior to this subject. All participants indicated that English was their first language and were residing in Australia for the duration of the intake.

5.4.2 Data collection

Data collection used multiple sources to ensure triangulation of findings (Creswell, 2007). These included the posts from the asynchronous discussion forums, semi-structured interviews, and an online survey (students only). All participants in this study agreed to one 45-minute interview and were residing in Australia at the time of the study. Interviews were conducted by Skype or telephone and were transcribed and checked by each participant. All data was collected after students had completed the subject and final marks had been received, to minimise the impact of research participation on their study program. Pseudonyms were given to all participants.

5.4.3 Procedure

Students engaged in weekly discussion tasks on 11 topics over 15 weeks. The requirement was to complete all tasks as well as respond to others in the group. These contributed to 40% of the final mark. Perhaps due to the value placed on the discussion forums in this subject, a corpus of more than 75,000 words was produced.

5.4.4 Data analysis and analytical tools

The posts from the forums underwent a process of multiple readings to identify predominant themes. In preparation for this a system of numbering was devised to retain the order of posting and to ensure that the author and their posts remained intact (Appendix). After repeated reading and annotation, units of text (no smaller than a clause) making up the emergent themes were removed from the data for further review to enable refining of the theme categories and combining like units so that only the units of text relevant to the themes of identity remained. These thematic units became the focal points for detailed discourse analysis.

The tools used for discourse analysis were from the resources of systemic functional linguistics (SFL). SFL allows moments of language in use to be captured for *meaning* in the unfolding and development of the forum dialogue over the duration of the subject intake. Identity formation will be evident in the language used by students on the forums as they make sense of the subject content and of themselves, in the process of becoming TESOL teachers.

Firstly, the SFL model provides extensive functional and descriptive categories for fine-grained analysis which will allow insights into how students are construing the world as

this unfolds in the content of their discussion, as well as any attitudinal stances being taken. Secondly, as a multifunctional model, SFL recognises the simultaneous meaning making options available in the language choices made whenever we speak or write. This provides insight into the multiple levels of identity, also simultaneously operating in the interaction, as well as to the social meaning gained from the interaction (Bucholtz and Hall, 2005). Two systems in the SFL model will be drawn upon to achieve such a multi-level analysis. The first is TRANSITIVITY - *what* is being talked about by the students – people, things, places, qualities and the processes that are involved (Martin and Rose, 2007; Eggins, 2004). In other words how their construal of what is happening is represented through their language choices (Martin, Matthiessen and Painter, 2010). The second is APPRAISAL, which allows access to specific aspects of interpersonal meaning, such as how students adopt stances, construct their textual personas and manage interpersonal positionings and relationships. It is in the interpersonal meaning where moves to include or exclude, align with or disalign will become evident (Martin and White, 2005)¹⁸ and are important issues in the process of constructing identity.

5.4.5 Clarification of 'interaction' in the online context

Before moving onto findings, clarification of how 'interaction' will be interpreted in the discussion forums is necessary. Identity requires the recognition of others to exist according to Gee (2000). In the online forums this 'recognition' is most obvious when someone connects their comments to another as a direct response or when a separate thread contains specific reference to another. However, what these public forums will not capture are the reader's private interactions as they make sense of what they are reading to build their own knowledge, often without deeming it necessary to post this publically to the forum. It needs to be acknowledged then that students may respond in ways not always captureable on the shared space of the forums, and that this may be picked up in other data, such as interviews or questionnaires. Additionally, even if there is no immediately related answer, or 'interaction', posting to the forum (making your ideas public) can still have a powerful effect on self-identity (for example, see Chandler, 1998). Regardless, from a sociocultural perspective, some kind of shared learning or self-knowledge results from engaging with the same topics in the common space of the forums, whether this be conversation, writing or reading (Bakhtin, 1981; Cunliffe, 2003). It cannot be denied that this contributes to the process of constructing social realities and identities as learners and as becoming-TESOL-teachers. As such the forums will be viewed as a shared space where socially real identities are formed through discourse (Bucholtz and Hall, 2005), with varying degrees of captureable interaction. Each

¹⁸ For a more detailed explanation of SFL theory see Halliday & Matthiessen (2004), Martin & Rose (2007), Eggins (2004)

contributing post will thus provide insight into how construal of knowledge and of self is socially and cumulatively constructed over time.

5.5 Findings

5.5.1 The pedagogic significance of the introductory forums

The introductory forums are important pedagogically for establishing rapport and trust, setting the 'tone' for the group, and an opportunity for students to talk about themselves while establishing a social presence (Xie and Ke, 2011). Consequently this paper will focus on the data from the first three forums, with interview data used to cross-check discourse analyses, where appropriate. As is the nature of qualitative research, even though identity was not an explicit focus of the forum topics nor of the interview questioning, it became apparent even so (Ivanič, 1998; Burgess and Ivanič 2010). It could thus be argued that it emerged 'naturally' from the social context.

It became apparent in these initial forums that students' identities were being forged through a process of establishing and building up multiple identities. These emergent identities were as teachers (or not), as travellers, and as becoming-TESOL-teachers. This process was instigated by the tutor, inviting students onto the forum:

This is where you can introduce yourself to the group, and tell us a little about your teaching background, what teaching context(s) you're working in and interested in in the future, and anything else you'd like to share.

Having clear direction for discussion may help with the uncertainties of what to say, an issue found by Gilbert, Morton and Rowley (2007) in their study of student perceptions of e-learning. As such an introductory task such as this seems to provide students with a safe opening into the group through eliciting a personal response, and begins the process of shaping their identity and their perceived positioning in the group.

5.5.2 What my credentials say about me

Talking about credentials provides the first indications of which identity is valued, and of the initial positioning manoeuvres within the group. The teacher identity in this context is a highly positioned one, which was unintentionally 'set up' by default. This occurred through the specificity of the instruction "tell us a little about your teaching background" which is then coupled with the tutor's response, whose credentials are listed in terms of what the tutor has *done*. This provides a 'model' text, but even though the tutor has done much more than teach, the specificity of the instructions may account for the early entry onto the forum of those students with teaching credentials. Finding common ground provides an opportunity to align with the tutor as fellow teachers. These credentials tend to be expressed in terms of 'doing' as modelled in the tutor's introduction, with some examples given below (the processes of 'doing' shown in *italics*):

Tutor:

I *completed* my doctoral thesis ...
and just *finished up doing* lecturing at ...
I *taught* academic literacy at ...
I'm now *working* at ...
and *managing* the business English programs there

Students who are teachers:

I have been *working* at xx college
I have been *teaching* ... secondary school students
Last year I *taught* PDHPE at a local primary school
I'm *doing* casual teaching
I've been *teaching* both in Australia and Canada ... for quite a while now
I'm *working* part-time as a high school teacher
I've been *teaching* in ...

It is hardly surprising that being able to share in common ground creates an alignment together as 'teachers'. However, what if there are students who do not have a repertoire of teaching experiences to draw on? There are two students in this group who do not, and therefore cannot align with the others in the same way. By contrast these students choose to express this as a lack – as possessing no teaching credentials, rather than something they have not yet *done*, therefore cannot yet *have*:

I *don't have* an Education or Teaching background ... (Alice)

Unfortunately I *have no* teaching background ... (Vicky)

(see Appendices A and B for TRANSITIVITY analysis of teacher/non-teacher credentials)

This demonstrates firstly the low value Vicky and Alice placed on not being a teacher, and consequently the negative identity assigned to it. This is a perception which is taken on by Alice and Vicky and revealed in negative self-portrayal focused on this lack. At the same time the language choices they have made convey a (perhaps unwarranted) perception that this lack is a fault of their own, rather than simply credentials they cannot possibly yet possess, and in fact were not required by the TESOL program to possess. The self-deprecation can be picked up in their evaluative language choices as the high value of being a teacher by default is reflected in a deficit attitude towards 'not being a teacher'. Language choices which give insight into these attitudes are shown below.

(Note: from this point examples of student text will display evaluative language in **bold**, and language choices which raise/lower the force, or sharpen/blur the focus of the attitude or opinion will be underlined)

I **don't have** an Education or Teaching background ... **My lack** of teaching knowledge and experience certainly adds to the **challenge** of the course (Alice)

Unfortunately, I have no teaching background (am I the only one ???!) (Vicky)

(See Appendix C for APPRAISAL analysis)

It can be seen that Alice makes a negative judgment of her own capacity in attempting this subject ("my lack ... certainly adds to the challenge") while Vicky's emotional insecurity is emphasised by "(am I the only one ???!)" and was posted a day before Alice came onto the forum. For Vicky "(am I the only one ???!)" indicates a heightened consciousness of her own perceived inadequacies in light of the teacher group so far. The use of "???" in raising the force of the possibility of being the only non-teacher gives insight into the anxiety felt about her positioning in the group, but also the risk she has taken at this early stage in exposing this.

So far the analysis has been able to draw out the value placed on having some kind of teaching experience. This is manifested through the alignment of teachers together as 'do-ers', as well as the disalignment felt by the non-teachers as 'have-nots'. This lack is expressed using overt negative emotion and negative evaluations of themselves. These interpretations may be justified by Lave's claim (in Kanno and Stuart, 2011) as,

"who you are becoming shapes crucially and fundamentally what you 'know'. What you *know* may be better thought of as *doing* rather than *having* something" (*emphasis added*) (p 240)

with the implication then that lacking possession of teaching credentials (not to have) equates to a lack of knowledge (not to know) and could give insight into these self-deprecating attitudes.

Despite this, the (unintended) division created by teacher/non-teacher identities is bridged to some degree as students begin to share their experiences of or aspirations for travel, which allows the focus to shift to 'traveller' identities.

5.5.3 Traveller identity expressed through hopes and desires

Talking about travel creates an opportunity for the students to make visible a shared passion, as well as something of the cultural shaping of identity by sociocultural factors. As a shared passion, traveller identity is expressed through hopes and desires around travel, which is intensified by the anticipation of the travel opportunities that a TESOL qualification could provide. This reveals a romantic notion of the TESOL career combining teaching English with travel, which is possibly influenced by advertising such as "*Travel the World with a TESOL Qualification*" or "*If you have a passion for travel and teaching, why not combine the two and take a TESOL course? You'll earn money while seeing the world!*" (Seek Learning, n.d.). This highlights a strong Australian cultural identity associated with travel, which may not be of significance in another less geographically isolated context. Traveller identity is also perhaps 'encouraged' by the

content of the online subject, which requires each student to research an international teaching context in which they would like to teach.

As travellers, Alice and Vicky are able to participate as equally and enthusiastically as the others and would partly compensate for the negativity associated with not being teachers. Traveller identity is encouraged as the tutor opens up the dialogic space through: "tell us ... what teaching context/s you're ... interested in in the future". This topic elicits students' feelings towards travel which are expressed in emotive language indicating satisfaction:

I **love** to travel
 I **loved** Singapore, as a city ...
 ... the travel bug set in
 I **loved** the diversity (in Malaysia)
 I am **constantly** thinking of international contexts ...
 I think teaching English would be ... **a great way to cure the travel bug**

In explaining the function of emotive language (called AFFECT in the APPRAISAL system), White (2005) states that the writer is seeking to establish some kind of interpersonal bond with the reader who can relate to their emotional reaction. This would suggest then, that identifying a love for travel which is equally shared by others, indicates an alignment of like-minded travellers and signals the embryonic stages of community building in the group.

Other students are even more explicit in identifying themselves as travellers, showing a high level of self-assurance as they leave the reader in no doubt as to *who* they say they are:

I *am* a traveller ...
 I *am* a traveller at heart

As travellers, sharing in a spirit of adventure contributes to their identities, as they work towards their future overseas teaching career and towards unknown, but anticipated destinations:

I would **love** to teach in China at some point ...
 I **just like** the idea of experiencing cultures outside of my own ...
 The **best** way to experience a community and culture is to **become totally involved**, working and living in the community
 I am looking forward to a challenge¹⁹ and learning new things...what life's all about, right?
 ... that's why I'm here!

¹⁹ note here that 'challenge' is viewed as positive

As has been consistent so far with discussion about travel, emotions are positive and highly visible as students cumulatively contribute to shared feelings about travel and the 'journey' towards a TESOL teaching career. This alignment as travellers is an important stage in the process of identity formation as a positively received and culturally accepted identity, which should result in other benefits. One would be boosting confidence and motivation to contribute to a more lively or intellectually satisfying discussion (Gillen, 2003) which would also increase their perceived value of discussion (Xie and Ke, 2011).

This type of discussion occurs on the forum when students are directed towards exploring moral and ethical issues around stereotyping. This requires them to make value judgements that positions them as active forum participants as well as aligns them together as 'those who don't stereotype'.

5.5.4 Becoming a TESOL teacher: TESOL teachers don't stereotype

The discussion on stereotyping highlights the strongest united attitudinal stance made by the students so far. In this, the students make it clear that stereotyping is something that TESOL teachers should *not* do. Having to make value judgments such as this creates a kind of shared regulative behaviour, and thus contributes to their becoming-TESOL-teacher identities, by highlighting in this case, a non-desirable attribute.

The trigger for these responses is a reading by Kumaravadivelu on *Problematizing Cultural Stereotypes in TESOL* (2003). The author discusses (and rejects) three characteristics typically assigned to Asian students by, he claims, many in the TESOL profession. Without exception, students responded to the notion of stereotyping and its widespread practice by TESOL teachers with overt negative emotion which could also indicate a certain naivety stemming from idyllic notions of teaching in an international context (and are later challenged through critical engagement with readings such as Pennycook's (2004) and Widdowson's (1994)). The word 'stereotype' itself is negatively loaded. When analysed for attitude 'stereotype' as a thing indicates social harm, and 'to stereotype' as an action is to do with ethics and social norms. Some of the responses illustrating this are provided below:

In **all** these cases, views are **imposed from outside** of the culture being observed and the **nuances and plurality** of cultures are **neglected**

For example, he comments that the notion of 'Asian students' is an **obvious stereotype** that **fails to acknowledge** the **significant differences** between students across the range of different Asian cultures ... **Certain stereotypes** such as **obedience to authority**, **passivity** and **lack of critical thinking** are **not unique** to students from **particular** cultures **but** exist across cultures

To suggest an **entire** 'group' is obedient to authority and passive is ridiculous ... Stereotyping does no-one **any** favours ... it brings the **entire** process down and is not effective

When 'Asian students' are categorised in **such a way** it **destroys** the **cultural sensitivity** that is **fundamental** to TESOL

To **stereotype** is to have a **closed mind** that needs to put people into **their own little box** so they can be understood

(see Appendix D for APPRAISAL analysis)

These instances represent a united stance on stereotyping, indicating shared values on those attributes and practices deemed appropriate for a TESOL teacher. As value judgements these are closely connected to personally held values and ethics, indicating an aspect of their becoming-TESOL-teacher identity, as 'those who don't stereotype'.

As the discussion unfolds, the students' evolving professional identities as 'those who don't stereotype' are linked to their own experience or reality. The input of personal meaning into the discussion has the effect of adding a certain level of authority and authenticity to their voices, which is important when constructing identities (Bucholtz and Hall, 2005):

(In Singapore) ... as with **any** society, **such a hierarchy of ethnicity** has resulted in the creation of **social stereotypes**

The **three common stereotypes** are **by no means unique** to Asian students. In my experience there are **many 'Western' students** who show **all three** of these characteristics in the language learning classroom ...

I already know what its like to be the only blonde surrounded by millions of Chinese locals. I felt so out of place simply based on how I look

In my **limited experience** in ESL classrooms, I have been **fortunate** to work with **a number of** Asian students ... The classroom interaction of each of these students **appears much more** related to the student's **L2 ability** and **confidence** as well a their **level of comfort** and **familiarity** with the teacher and other students **rather than any 'culturally' predisposed passivity**

Finally, having to think critically on this topic provides the stimulus for some of the students to interact directly with each other, strengthening their collective identity as 'those who don't stereotype' (Gee, 2003). These are typically less reactive than their first responses to the paper. The interaction itself serves as a regulatory tool as the responses become relationally focused, shown through the use of interpersonal devices indicating agreement, through modality, or by using a more conversational tone. This type of interaction builds understanding through sharing personal meaning (Garrison, Anderson and Archer, 2000). Some examples of this are given, with interpersonal manoeuvres *italicised*:

... *I like how you* phrased it 'perceivable cultural patterns' and *I agree* that they do definitely help *us as teachers* to ... understand *our* students ... (Wendy to NP²⁰:SH)

I think also that teachers can observe certain characteristics about particular cultures but these observations must be flexible and constantly adapting with every new student met (Wendy to Vicky)

²⁰ "NP" = non-participant in this study, therefore these posts cannot be included

Yes, I wonder how TESOL professionals could possibly harbour such stereotypes of their students and this is something **I also found** quite shocking in Kumaravadivelu's article. (Vicky to S1)

I also find it hard to believe that such stereotyping is so prevalent, particularly in the TESOL profession ... but for teachers who so frequently deal with international students ... to have those presumptions is awful (Vicky)

I have similar ideas about this paper ... I really don't think that such strong ideas exist, particularly within this profession. **Who are these teachers that he's talking about anyway?** (Wendy to Vicky)

... **it's hard for me to imagine** anyone stereotyping to this degree (Vicky to Wendy)

These examples demonstrate a cumulative development of their ideas (Mercer, 2000), which can be seen as they move beyond the extremes reacted to in Kumaravadivelu's paper towards developing knowledge that is becoming their own but also drawn from their own experience or conceptions, making an important contribution to their evolving TESOL teacher identities.

The findings have focused on the 'introduce yourself' task as well as tasks that bring students together through shared interests and values, and the impact these have on establishing 'who they are' in the context of an online class. In this study the seemingly 'safer' task of introducing yourself inadvertently resulted in a disalignment between those who could identify as teachers and those who could not. This seemed to be somewhat rectified when given the opportunity to share a common interest, seen in their alignment as travellers. Interestingly, the 'riskier' task where moral and ethical issues were explored resulted in stronger evidence of alignment and provided a stimulus leading to further interaction, developing their identities as well as interpersonal relationships.

5.6 Discussion

This study has highlighted that diversity can exist, even amongst small cohorts. This is noted by Hughes (2007) as one of the paradoxes in online learning, namely that the inclusion of one identity can render the exclusion of another. It is fair to surmise that the disalignment may not have been visible if the class had not included teacher and non-teacher groups, nor indeed the alignment if they had not all self-identified as travellers. It is also fair to make an assumption that in any group there will be diversity of some kind. In postgraduate TESOL programs this can occur when teaching qualifications are not a prerequisite for enrolment, and also when a TESOL qualification is undertaken as a career shift, thus attracting a diverse student body. The disalignments / alignments that emerged from this study indicate the attachment of personal meaning to students' evolving professional identities as they position themselves in relation to attributes, habits or events described by others or perceived as socially valued, in this instance possessing prior teaching qualifications, having a desire to travel, and qualities that constitute the 'ideal' TESOL teacher. These are all aspects of the TESOL profession that contribute to their evolving identities (Beijaard et al., 2004). While in other professions personal identity

associations will manifest differently, the element of personal meaning attached to professional identity is an interesting one.

The attachment of personal meaning to a developing TESOL teacher identity in fact made some alignments and disalignments more visible. The visibility of negative identity associations, its impact on self-confidence, and the effect of aligned identities on cumulative knowledge construction and interpersonal relations, became apparent after discourse analysis of the discussion forums.

5.6.1 The impact of negative identity association

Perceptions of association with a negative identity, even fleetingly, can impact on levels of self-assurance and confidence. This concern is pointed out by Varghese and others (2005) who warn that one's level of self-esteem will be negatively impacted through being assigned to or identifying with a negatively valued group. The non-teacher identity taken on by Vicky and Alice in their very first posts was expressed using emotive and negatively loaded language directed towards themselves. Looking at a later forum similar negative attitudinal patterns were picked up:

Considering I do not have any practical teaching experience ...

Having no experience and no fixed teaching philosophy ...

(Vicky – Forum 5)

I have no experience at all as a teacher or language teacher ...

Because of my inexperience however ...

(Alice – Forum 5)

When cross-checked with interview data, the trajectory of negative identity as non-teachers can be seen to continue even after they had successfully finished the subject. The following are some of Vicky and Alice's reflections when asked how they felt about contributing to the forums:

... if the subject was about teaching and I don't really have that much experience ... when I have to give my opinion ... on something I'm not too familiar with, I guess I feel a bit reluctant ...

... your posts are public and published for everyone to see ... so you don't want to post something ... well, stupid, to be blunt!

(Vicky, 2010, interview)

It seemed very teacher based to me and I felt a bit left out of that ...

I felt ... a little anxious and a little inadequate because I don't have an education background

I was very aware that they were probably all teachers and I wasn't

(Alice, 2010, interview)

On the other hand Ben, who identified himself clearly and self-assuredly as a teacher in his introductory post ("I *am* a trained secondary English teacher ..."), responded to the same interview question quite differently:

I didn't mind sort of doing it, because a slight sense that your work's being published, even only temporarily ... It does make you ... well it made me spend more time trying to be very clear about what I was saying. So it was a little bit like writing an essay, at least that's how I was treating it – I was formally responding online rather than just making notes or something like that ... (2010)

This problematises the process of induction of students into forum participation. Pedagogically an introductory task is important in providing opportunities to 'meet', for modelling expectations and etiquette, and to begin the 'talk' around identity, an important aspect of developing professional identity (Varghese et al, 2005). However if student diversity is not obvious, some discussion tasks may be risky and can result in a threat to self-esteem and confidence. In this context the foregrounding of teaching credentials by default highlighted that teacher identity matters and consequently, a non-teacher identity is perceived to have lesser value. This was undoubtedly influenced by those who aligned as teachers posting first onto the forum, and occurred despite the tutor's intention that the forums be a place for fostering collegial relations that encourage a more interpersonal tone, firstly by:

... [establishing] that you're not this dusty old professor ... that you're someone who's doing what they're doing, done what they're doing ... (2010, interview),

and secondly, by

... develop[ing] some kind of interpersonal rapport. (2010, interview).

The central role of interactional forum participation in this subject's assessment is reflective of the importance placed on discussion.

It is suggested then that the entry point into establishing identity can be potentially more problematic in the online context than in a face-to-face situation. A number of factors contribute to this, such as:

- reduced opportunities for immediate clarification of something, leading to a higher risk of misinterpretation
- the time lag between messages may exacerbate uncertainties due to the asynchronous nature of the forums, also allowing time for negative impressions to build up
- reliance on written language to carry the meaning making load, with little control over how it is interpreted by the receiver

- the 'permanence' of the discussion texts, as opposed to a spoken instruction or response, in that even a 'casual' comment posted to the forum can become a 'model' text which can be referred back to many times (Gillen, 2003).

5.6.2 Valued identities in alignment

The contrast between disaligned teacher identities and aligned traveller identities has been clearly outlined in the findings, as indicated in the analysis of different meaning options chosen by the students' when writing their posts. Identity as travellers is expressed in emotive, positive, and sometimes unequivocal terms as students share in a love of travel. This is also indicative that identity matters when students form interpersonal bonds which can encourage a greater level of self-disclosure or investment in the discussion (Norton, 1997). This was seen during the discussion of travel experiences and aspirations which built up a common interest and, as the conversation unfolded and developed, traveller identities became "socially real" (Bucholz and Hall, 2005, p 591). Shared experiences, hopes and desires encourage alignment, in this case of like-minded travellers and, in the safety that this brings to the social space, traveller identity becomes collective and mutually acknowledged.

The alignment around travel demonstrates the attachment of overt personal meaning to professional identity. Their visibility as travellers indicates the influence of particular cultural and historical factors on students' developing professional identities. In this case the shared romantic notion of travel indicates a significant Australian cultural characteristic, which may be less so in another cultural context. The attraction to TESOL teaching evoked by combining teaching English with travel, also needs to be understood within the cultural and historical context of Australia, particularly as a largely mono-lingual English speaking nation and the embedded values and practices that come with that (see Pennycook, 1994). The cultural and personal factors alone ensure the dynamic state of forming and redefining identities, and it is without doubt that different identity associations will be illuminated by another group of online learners as they create a distinct social context.

The alignment as travellers perhaps sets the foundation for the next task which requires students to engage in critical discussion on stereotyping in response to one of the assigned readings. This task, which possibly is intended to challenge current 'romantic notions' about the TESOL profession, gives insight into their becoming-TESOL-teacher identities as students reflect critically on the issue of stereotyping. This is precisely the kind of engagement intended by the tutor, who said in the interview,

I wanted students to engage with the content but also wanted them engage with each other ... I wanted them to really engage with the issues, the debates around teaching English internationally (2010)

As shown in the findings, this seemingly 'riskier' task results in a willingness to self-disclose at a deeper level than discussing experience or aspirations. In order to contribute to deeper or more controversial issues the students are required to make value judgements, which seems to be an effective strategy for drawing out aspects of identity emanating from active, critical learning (Gee, 2003). A side benefit to this was the evidence of manoeuvring as the discussion on stereotyping became more interpersonally focused through direct interactions between some students, indicating some stronger alignments and extended discussion. In this united stance as 'those who don't stereotype', students engaged in the process of constructing their becoming-TESOL-teacher identities, which is an important part of developing a professional identity.

5.7 Conclusions

In summary, identity as a social construct is reliant on the forum discussions for its social reality in the context of online learning. As the findings have suggested, identity is closely connected to cognitive and socioemotional factors emanating from the discussions and the manoeuvring that occurs as they unfold (Kreijns, 2004). Even though the introductory task resulted in the unintended situation of dividing this group into teacher / non-teacher identities, it is still important pedagogically (Xie and Ke, 2011). As an opportunity for dialogue it begins the talk around identity, important for developing self-knowledge. It is suggested that it sets the foundation here for the later critical discussion on stereotyping. In addition the opportunity for students to talk about a shared interest, in this case travel, resulted in an incremental alignment together in their identities as travellers. As the success of the stereotyping discussion relied on self-disclosure of personally held values, it may not have been as successful without the icebreaker of the 'introduce yourself' task nor the coming together in the travel talk. As the 'riskier' task it required students to have a sense of 'who they are' in the group and some impression of their peers in order to create a social space that would encourage a higher level of self-disclosure.

Another consideration is that, if all of these students had a teaching background, the disalignment between teacher / non-teacher identities would not have occurred. This points to the presence of diversity within any online study group and suggests that assumptions made about our students can impact their identity formation positively or negatively, particularly if one identity seems to be privileged over others. The implication is that, by default, other identities can be perceived as less valued, and as demonstrated here, can have long term or underlying effects unless strategies are put in place swiftly to minimise any negative impact at the level of the individual as well as the group.

To further consider the impact of negative identity, the question arises about the effect on students like Vicky and Alice if the forums were not part of assessment and if participation was voluntary. Would Vicky and Alice have retreated to becoming "read-only participants"

(Mackness et al, 2010, p 270) lurking in the background with a higher risk of dropping out (Gillen, 2003)? As Gillen argues, identity evolves from shared endeavours and is at the heart of “all effective educational processes” (p 876). Even though identity is only one aspect of understanding non-participation and feelings of isolation, it is albeit an important one and worthy of ongoing research.

Of relevance to this paper is that TESOL teacher identity may not always be linked only to professional identity, but will also involve particular cultural and historical factors, such as the romantic notion of travelling, and of a TESOL qualification being one way to fulfil this. As the study by Beijaard and colleagues (2004) highlighted, the literature lacks an explicit definition of ‘professional identity’ and this points to the need to look beyond the professional component of self-identity of a TESOL educator. This needs to take into account the cultural and historical connotations to the profession, which might influence the identity of those who undertake a course to obtain a qualification in TESOL. While the findings of the study cannot be generalised to another profession and to different cultural and historical contexts, it can be assumed that any professional identity would include an intricate combination of professional and personal elements influenced by cultural and historical contexts. Awareness of these factors is critical for tertiary educators.

It is hoped that this paper will encourage further research into the role of identity in online contexts, particularly in light of its strong emergence despite not originally being a focus of this larger study. The emergent issues from the detailed discourse analysis, made possible through the extensive functional categories available in the SFL model, are drawn from one subject only. The intention here is not to make generalisations so much as to raise awareness of some of the myriad issues faced by educators and distance students in this relatively recent semiotic domain of education and communication, particularly as implementation of online learning is ever increasing. Finally, this paper has sought to provide some insight into when, how and why identity matters as put forward by Bucholtz and Hall (2008), and aptly pointed out by them as important considerations for expanding the analytic toolkit of research into identity.

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AFTERWORD TO CHAPTER 5

Identity, although not an original concern, emerged as a significant issue in this particular case. It is important to note that the nature of a thesis by compilation is that intentions are often established early, and that in the life of a research project priorities shift. As Bucholtz and Hall (2008) point out, understanding the complexity of identity occurs best when it emerges from “interactional moves ... and the stances that speakers take in order to accomplish their goals” (p 157). Taking such an approach shifts the research focus to the dynamic social construction of identity, rather than identity as the starting point. Indeed Bucholtz and Hall (2008) urge researchers to,

... start with what speakers are accomplishing interactionally and then build upward to identities that thereby emerge (p 154).

When identity is approached from its social and contextual embeddedness and the interaction with which these are constituted, a rich analysis can substantiate any claims made (Bucholtz & Hall, 2008). Indeed the findings reported in Chapter 5 emanated from a focus on interaction in the online learning context, with the theme of identity emerging strongly from the social environment. Interestingly identity issues were more prominent in this case than in the other two because of the movements in social disalignments and alignments. Hence this finding, as the first published paper, influenced retrospectively the literature reviewed (as published in Chapter 4), the theoretical framework and of course, later on, the discussion. Nevertheless this reflects the nature of qualitative research, in which the data should lead to those findings which extend to greater understandings.

APPENDICES

Appendix A. Transitivity analysis: Teacher credentials expressed as action

Actor (the doer)	Material processes (of action)	The Range (R) or Goal (G) of the action	Circumstance(s)	Category
I (I) (I) I	(ha)ve completed am now undertaking completed (ha)ve been teaching	the MEd (TESOL) (R) the Grad Cert (TESOL) (R) my practicum (R)	at the University of HK in both Australia and Canada for quite a while now	Place (institution) Place (geographical) Extent: time
I	(a)m completing	my Masters in Education TESOL (R)		
I I	have been working have been teaching	secondary school students (G)	at xx college	Place (institution)
I	taught	PDHPE (R)	last year at a local primary school for three terms	Location: time Place (institution) Extent: time
I	(a)m doing	casual teaching (R)	this year in between my studies part-time	Time Location: time Manner: degree/Time: frequency
I	(a)m working		as a high school teacher	Role

Appendix A: Transitivity analysis: teacher credentials

Appendix B. Transitivity analysis: language choices of non-teachers

	Carrier (of the attribute)	Attributive process: of possession	Attribute
Unfortunately	I	have	no teaching background (negative)
	I	don't have (negative)	an Education or Teaching background

Appendix B: Transitivity analysis: non-teachers

Appendix C. Appraisal analysis: non-teacher negative evaluations of self

What is being evaluated:	The language choices:	+ve/-ve	Appraisal system network choices
Vicky: her teaching credentials	Unfortunately <i>I have no teaching background</i>	negative	Attitude: Appreciation: social valuation
Vicky: herself	<i>(am I the only one???)</i>	negative	Attitude: Appreciation: social valuation
		negative	Attitude: Affect: insecurity
			Graduation: Focus: sharpened (the only)
			Graduation: Force: raised (???)
Alice: her teaching credentials	<i>I don't have an Education or Teaching background</i>	negative	Attitude: Appreciation: social valuation
Alice: herself	<i>My lack of teaching knowledge and experience</i>	negative	Attitude: Judgement: social esteem: capacity
	<i>certainly adds to the challenge of the course</i>	negative	Graduation: Force: raised (certainly)
			Attitude: Appreciation: social valuation

Appendix C: Appraisal analysis: non-teacher negative evaluations of self

Appendix D. Attitudes towards stereotyping















What/who is being evaluated	By whom?	Text examples (focus of Appraisal analysis shown in bold)	+ve/-ve	Appraisal system network choices
Stereotyping as an action; and indirectly those who are guilty of this	Ben	<i>In all these cases, views are imposed from outside of the culture being observed</i>	neg	Judgement: social sanction: propriety (ethics, social norms)
		<i>and the nuances and plurality of cultures are neglected (Text 1)</i>	neg	Judgement: social sanction: propriety
	Sharon	<i>... to suggest an entire 'group'... is ridiculous (Text 3)</i>	neg	Judgement: social sanction: propriety (social norms)
	Ben	<i>"certain stereotypes ... obedience to authority, passivity and lack of critical thinking ..." (Text 2)</i>	neg	Judgement: social sanction: propriety (ethics, social norms)
	Vicky	<i>When 'Asian students' are categorised in such a way it destroys the cultural sensitivity that is fundamental to TESOL (Text 4)</i>	neg	Judgement: social sanction: propriety (ethics, social norms)
Asian cultures	Ben	<i>... and the nuances and plurality of cultures are neglected (Text 1)</i>	pos	Appreciation: social value
Stereotyping (as a thing)	Sharon	<i>Stereotyping does no-one any favours ... (Text 3)</i>	neg	Appreciation: social validity (social harm)
		<i>... it brings the entire process down ... (Text 3)</i>	neg	Appreciation: social validity (social harm)
		<i>... (stereotyping) is not effective (Text 3)</i>	neg	Appreciation: social validity (social harm)
	Vicky	<i>... it destroys the cultural sensitivity that is fundamental to TESOL (Text 4)</i>	neg	Appreciation: social validity (social harm)
	Wendy	<i>Wendy makes a negative judgement on the character of people who stereotype in terms of ethics and social norms, in the whole of Text 5 to stereotype is to have a closed mind ... (Text 5)</i>	neg	Judgement: social sanction: propriety (ethics, social norms)
People who stereotype		<i>... a closed mind that needs to put people into their own little box ... (Text 5)</i>	neg	Judgement: social esteem: capacity (criticism)
	Ben	<i>... the notion of 'Asian students' is an obvious stereotype that fails to acknowledge ... (Text 1)</i>	neg	Judgement: social sanction: propriety
			neg	Judgement: social esteem: capacity (criticism)

Text extracts:

1. In his article ... in all these cases (i.e. Western representation of Orientalism), views are imposed from outside of the culture being observed and the nuances and plurality (+) of cultures are neglected. (Ben)
2. For example, he (Kumaravadivelu) comments that the notion of 'Asian students' is an obvious stereotype that fails to acknowledge the significant differences between students across the range of different Asian cultures ... educational factors are believed to influence student behaviour and attitudes possibly more than any inherent cultural qualities of the students. Certain stereotypes such as obedience to authority, passivity and lack of critical thinking are not unique to students from particular cultures but exist across cultures (Ben)
3. To suggest an entire 'group' is obedient to authority and passive is ridiculous ... Stereotyping does no-one any favours ... it brings the entire process down and is not effective (Sharon)
4. When 'Asian students' are categorised in such a way it destroys the cultural sensitivity that is fundamental to TESOL (Vicky)
5. To stereotype is to have a closed mind that needs to put people into their own little box so they can be understood (Wendy)

Appendix D: Appraisal analysis: attitudes towards stereotyping

Appendix E. Sample of discussion thread organisation

Thread / Interaction Cluster #	Resp Level	Resp. #	Thread Initiator (= Level 0)	Direct Response Level 1	Direct Response Level 2
8	0		 Hi from Allee- Alice, 5 Aug, 21:52		
IC 7	0		 International Context - China - Vicky - 5 Aug, 09:56		
IC 7	1	1		Re: International Context - China - NP:SH - 9 Aug, 16:23	
IC 7	2	2			Re: International Context - China - Vicky - 10 Aug, 11:29
IC 6	0		 Hello! - Vicky - 4 Aug, 09:42		
IC 6	1	2		Re: Hello! - Wendy - 7 Aug, 15:01	
IC 6	1	1		Re: Hello! - NP:RF - 6 Aug, 10:09	
IC 6	2	3			Re: Wendy & RF - Vicky - 10 Aug, 11:50
5	0		 Hi All!! - Sharon - 3 Aug, 13:10		
4	0		 Hello Everyone - Wendy - 3 Aug, 11:28		
3	0		 Hello - NP:RF - 2 Aug, 20:34		
IC 2	0		 HI Everyone - NP:SH, 2 Aug, 08:12		
IC 2	1	1		Re: HI Everyone - Wendy - 24 Aug, 12:25	
1	0		 Hi and Introduction from your tutor - Tutor A - 1 Aug, 21:53		

Appendix E: Managing the data: example of numbering system for interaction clusters

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CHAPTER 6

Movers and Shapers: teaching in
online environments

Journal Article Three

FOREWORD TO CHAPTER 6

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Chapter 6 is the third published paper in this thesis. The emphasis moves from issues of identity formation (evident in the previous papers) to the effect of instructor involvement in online discussions. Here I present the findings from the second case study (Case I) in which the instructor took an active role in mediating the online discussions, which were tutorial-like in their orchestration. The ‘presence’ of the instructor in the forums enabled a close look at her teaching moves. My role is lead author of this paper with my supervisors as co-authors. Their involvement was through substantial contributions to collaborative discussions and critical feedback, particularly due to the more linguistic-oriented analysis of this paper. Hence Dr Pauline Jones appears as second author.

An exploration of teaching is incomplete without an exploration on the impact for learners. Thus this chapter explores the online teaching-learning process as a reciprocal act, i.e. as dialogue between teachers and students. This required a more deliberate union of methodology and analysis of the two main theories underpinning this research project – Sociocultural and Systemic Functional Linguistic theories.

The findings presented in this paper address each of the research questions to some degree, although the main focus was on the influence of an active participating instructor on guiding students to co-construct and acquire new understandings, discursively. The deliberate teaching moves of the instructor shaped the interactions in terms of structure, student involvement and depth of discussion. Discussions are shown to unfold in predictable phases and stages, understood through the notion of genre. Predictability in knowing what is expected and hence, freeing up students’ attention to the content of their contributions are considered, as are the benefits of having examples of instructor-talk for modeling their interactions.

ABSTRACT

This paper reports a study-in-progress examining online instructor-student interactions in the asynchronous discussions of a postgraduate TESOL (Teaching English to Speakers of Other Languages) distance subject, focusing on the impact of scaffolding collaborative knowledge construction. Two complementary theories were used: sociocultural theory, which views interaction as essential to the process of building knowledge, in particular dialogically between expert-novice; and Systemic Functional Linguistics (SFL) which highlights language as a meaning-making resource deployed in social interactions and allows insight into the unfolding construal of knowledge and the interpersonal relationships being enacted. The results confirmed the significant role of the instructor in shaping dialogic opportunities that move learners towards new understandings. Close attention to the unfolding language choices of the participants provides a logogenesis of the online discussion texts, offers fresh insights into the nature of adult learning, and into the complex relationships between the intersubjective and experiential in virtual learning environments.

Keywords: asynchronous discussion, Knowledge construction Sociocultural theory, Systemic Functional Linguistics (SFL), Online pedagogy, Adult learners; mediation

6.1 Introduction: Online discussions: to co-construct knowledge?

The provision of communication technologies in e-learning packages should not be assumed will equate to productive use of discussion in the learning process. In other words, simply making technologies accessible is no guarantee of effective learning outcomes and problematises the extent to which discussion is facilitated for online pedagogic purposes (Liu et al., 2007). Although programs using a constructivist perspective seem to be better equipped for building a learning community (Liu et al., 2007), many instructors are not aware of the different pedagogical requirements for online teaching and learning. It may be that online instructors need to be *more* available to monitor discussions and answer questions, resolve misunderstandings, guide discussion consistently towards learning aims, as well as organise and facilitate a variety of ways to interact, such as real-time chat, asynchronous forums or blogs. This is in addition to ensuring individual and timely feedback crucial to online students (Bailey & Card, 2009; Koh & Hill, 2009) as well as modelling the skills and values of the particular learning community (Biggs & Tang, 2007). Modelling communicative skills also must involve taking into account the lack of usual face-to-face meaning-making cues, such as gesture, facial expression, voice variation, interactive immediacy for clarification and so on. Indeed, nurturing a positive and inclusive learning environment requires both communicative skills and interpersonal awareness to mitigate any potential for misunderstanding that may occur in the absence of usual meaning-making cues.

In our literature review (Delahunty, Verenikina & Jones, 2014) we found that readiness to embrace online education may be strong at the bureaucratic level, however this is not necessarily shared by those at the face of implementation. Adequate institutional support and preparation in times of shifting delivery modes are often felt by faculty staff to be lacking, affecting attitudes towards the change in practice that online pedagogy requires, particularly around the use of discussion, with the issue of risk-aversion towards implementing new technologies or new applications being a factor for consideration (Howard, 2013). Due to staff also often managing multiple roles or being employed on a part-time or casual basis, the use of discussion in online classes may present as an additional organisational and pedagogical bugbear. A contributing factor may be the uncertainties of what to do with tutorial-like discussion which, unlike the transience of verbal discussion, remains permanent as graphic representations. The pull towards some form of assessment (and flow-on to workload) may be understood as meaning being no longer fleeting, but rendered as an object (Martin, 1992, p 513), and hence discussions are able to be revisited at a later stage and evaluated. These issues allude to some of the challenges faced when adapting to a different pedagogic approach and the shift in mindset required, involving not just challenges on mental energies but also demands on available time.

On the other hand, we found that where the value of discussion for online groups is embedded into pedagogic practice, there is much debate around compulsory or voluntary use of discussion. Numerous decisions need to be made around how to incorporate discussion into the natural flow of the online class with consideration of the purpose of discussion, its integration into learning aims and activities, the dynamics and size of the group, the likelihood of diversity in languages, cultural values, time zones, as well as the role of the educator in managing, sustaining and supporting students through discussion, to name a few. Another salient point is that when interaction rests solely in one's 'performances' in the asynchronous communications, meanings then are totally committed to this modality, rather than distributed over a number of different forms of communicating. This is perhaps a paradox of online discussion, in that there is potential both to create knowledge, *and* misunderstanding.

6.2 Background and motivation for the study

In light of the above issues we were interested in the impact on online discussion when the instructor took an active role as mediator. This paper reports the findings from one of three online TESOL postgraduate subjects as part of an ongoing study. Each of the instructors chose varying degrees of involvement in the discussion forums – one was actively present, another was minimally involved but observing, and the third didn't 'go there'. During interviews the instructors indicated that they had continuing, and unresolved, concerns around the most effective use of discussion forums. Some were in regard to fostering discussion, particularly if students resisted, as one instructor pointed out, "... let's not use the word 'interact' for a minute - students who *post* comments on the forums, but *don't* interact with others". Another issue was a tendency for students to withdraw from the forums when the instructor became involved - "it causes a lot of students to just not join in at all when they think the tutor's there watching, looking". One instructor found student forum activity was moderately useful as "a definitive or hairsplitting" exercise, especially as a 'reward' for active students hovering between grades. Whether to assess discussion also raised the issue of simply counting the number of postings (less time consuming), versus consideration of the content. As one instructor commented this often took an inordinate amount of time because "some [students] would put reams on there ... not waffle, but ...". She lamented, "How [to assess]? ... *how many? how much? the quality?*".

The above concerns were instrumental in two of the instructors opting out of active involvement in the discussions, with one of these opting out altogether. For the purposes of this paper, the focus is on the third subject (hereafter referred to as 'Case I'). Case I instructor was actively guiding the discussion forums, which had a token assessment weighting of 5% given for participation. Looking across the different kinds of discussion

that evolved from the three cases, the role of the online instructor, as mediator, was the point of departure for Case I in terms of the productiveness of discussions, as well as the quality of the online experience (gleaned from student interviews and a survey).

The challenges and responsibilities for the online instructor are extensive. A significant challenge is to create as many opportunities for dialogue as possible (as occurs in face-to-face tutorials). To optimise student involvement asynchronous discussion needs to be guided in a way that leads to new collective understandings (of content, self and others). Another responsibility is to foster a social climate in which trust and cooperation develop good collaborative relations, which also contributes to effective use of discussion for learning. Indeed, meaningful engagement with learning content is important for boosting student confidence which is inspired also by teacher modelling, especially if great enthusiasm is displayed for their subject (Delahunty et al., 2014).

In education it is generally held that co-construction of knowledge is a necessary component of contemporary pedagogic practice (Gibbons, 2006; Scardamalia & Bereiter, 2006), therefore the online discussion forums become the focal point for how this is enacted, as these represent the main opportunity for learning as social activity. Being involved in discussions also reinstates some visibility rendered by the mode of delivery (i.e. the lack of physical presence). Hence, discussions become important opportunities for negotiating identities, crucial for adult learners (Knowles, 1980; Knowles et al., 2012; Delahunty et al., 2014). In other words, online participants become visible as they reveal something of who they are through what they write (Ivanič, 1998). Language use therefore, or making meaning through the interactions that occurred, provide insight into how new understandings can be both dialogically supported and co-constructed.

As the discussions generated in Case I were qualitatively different to those of the other two cases, the aim of this study was to examine what supported co-construction of knowledge in online discussions between the instructor, and the postgraduate students. To understand this, attention is given firstly to the moves of the instructor to foster meaningful interaction, and secondly on how this impacted on student participation in terms of involvement and conceptual development (i.e. new understanding or knowledge). To guide the analysis of the online discussions, the following research questions framed the core goals of the study:

1. What is the knowledge under construction in the forum dialogue, and what supported this?
2. How do participants' interpersonal contributions foster or inhibit forum interaction?
3. What is the role of the instructor's mediation in the online discussion?

Thus in examining Case I, this paper encompasses the effect of instructor mediation on the quality of online discussions and the level of student involvement as part of the learning process. This will contribute to understanding better some of the complexities of teaching and learning, and dialogue among adult learners in virtual classrooms. In a rapidly changing educational world, answers to these research questions will be useful for informing the design of online learning sites by making visible some effective mediating moves as well as linguistic features of interaction which indicate students have progressed towards new understandings.

A rationale for our approach to the analysis and interpretation of the discussion forum data follows, articulating the central concepts of this study namely, of teaching and learning. These are extended in the theoretical framework and the methodology of analysis.

6.3 Learning through joint dialogic activity: a learning *and* language perspective

Language is a tool for carrying out joint intellectual activity, a distinctive human inheritance designed to serve the practical and social needs of individuals and communities ... (Mercer, 2000, p 1)

A core assertion of sociocultural theory is that learning does not occur in social isolation and that language mediates social and psychological processes. As such language is more than a resource for information exchange; it is a tool that allows individual and collective thinking (Vygotsky, 1978; Mercer, 2000). Language, because of its role in mediating social and psychological processes is one of the most valuable resources in online learning particularly when “collective, communicative intelligence” (Mercer, 2000, p 6) results from engaging in group discussion. According to Vygotsky (1978), when each individual contributes from their own mental resources, a level of thinking beyond their own mental capacity then becomes possible. For this to occur however, an environment conducive to collaboration is necessary; that is, one in which interlocutors can jointly contribute under the guidance of expert other(s), which is best achieved in a climate of “uncritical acceptance” of the others’ stance (Mercer, 2000, p 33). In addition there is an interplay of prior utterances which provide background to the position a speaker/writer engages with, comprised of “contradictory opinions, points of view and value judgements” (Bakhtin, 1981, p 281). Thus during collaborative interactions the discussion forum texts represent ‘meaningful creations of the human mind’ as, in the process of making sense of the world, the authors “bring something new to the world, transforming that world and ... simultaneously transforming oneself” (Stetsenko, 2004, p 501). However, despite Vygotsky’s interest in language as central to the acquisition of knowledge, a theory of language remained undeveloped (Minick, 2005).

Halliday noted the tendency across many learning theories to approach learning “from outside the study of language” (1993, p 94) despite the integral role of language development and use in the educative process. To address this, Systemic Functional Linguistics (SFL) provides a theory of language as “an interactive event, a social exchange of meanings” (Halliday & Hasan, 1985, p 11). SFL takes a multifunctional approach to language use, which enables it to tackle the ‘ferocious’ complexity of language (Halliday, 2009) through its extensive range of analytical tools, including the construct of pedagogic genres (Christie, 2002). A core assertion of SFL is that the role of language is not only to get things done, but to assist individuals in making sense of the world, experientially and interpersonally, and how to deal with this in practical ways (Halliday 1978).

In this study of online interactions a Hallidayan perspective then is that language as an “act of meaning” is also learning, and that meaning is “at once both action and reflection” (Halliday 1993, p 101). Meaning is constituted always by the interpersonal and the experiential – that is, the relationships being set up between listener/speaker, writer/reader, and the aspect of experience being represented through what is being talked about. Interpersonal first, because meaning-making is quintessentially social, and later, the ability to reflect on experiential meaning enters through what Halliday describes as the ‘interpersonal gateway’ (1993, p 103) through which meaning becomes at once doing *and* understanding. This principle aligns with Vygotsky’s theorising that knowledge development occurs first within social relations (interpsychological) before it becomes internalised as new understanding (intrapsychological) (1978, p 57). It is these complementary principles of learning and language which inform the theoretical framework adopted by this study.

6.3.1 Dialogic inquiry: a theoretical framework

Following Wells’ (1994, 1999) discussion of the complementarity of Vygotsky’s sociocultural theory of learning development and Halliday’s SFL theory of language, this paper draws on the notion of ‘dialogic inquiry’ to understand the role of language in the learning process as it unfolds in online forums. As Wells (1999) points out, although Vygotsky and Halliday’s foci reflect their different perspectives, both theories posit language as central in mediating interactions between the individual and the group for generating new meanings (Wells & Arauz, 2009; see also Gibbons, 2006). The complementary roles of these two different approaches for examining online interactions lie in this central premise of language, or more specifically dialogue, as the crucial semiotic tool for learning. Together they form a robust framework for understanding the dialogic processes as learning is co-constructed amongst instructor(s) and students over the lifetime of the learning relationship. With language as the mediating tool used for

social interaction, for thinking and reflection, as well as for sharing our perceptions, it can be fittingly described as the “tool of tools” (by Dewey, 1925/1958 in Elkjaer, 1999, p 86).

The interconnectedness of sociocultural theory and SFL has been exploited in face-to-face contexts by researchers such as Wells (1999), Gibbons (2006), Hammond & Gibbons (2005), Williams (1999) and Chappell (2010) and do not need to be rehearsed here. However this combined framework is yet to be applied to online adult learning environments. The central position of language in the sociocultural and SFL approaches offers insight into some of the characteristics of knowledge construction in online discussions through dialogic inquiry, and into the nature of mediating discussions for adult learners.

6.4 Methodology

The study used a qualitative case study approach because it is well suited to the clearly defined boundary of the online subject which runs for 15 weeks, as well as a range of data sources enabling thick description in interpretation of the data (Lincoln & Guba, 1985; Stake, 1995).

6.5 The site and participants

The site of the study was a postgraduate TESOL distance education subject with full online delivery at an Australian regional university. The overarching distance program consisted of core subjects for each of the different postgraduate awards (i.e. Graduate Certificate, Graduate Diploma and Masters) as well as elective subjects which were available to students regardless of which award they were enrolled in. Case I was an elective subject which focused on second language literacy. The participants recruited were the subject instructor and five of the nine enrolled students, located in Australia, Japan, Dubai and Germany. Four of the student participants were halfway or near completion of the Masters of Education (TESOL) course while also employed full-time (one student had two full-time jobs). The fifth student was undertaking a Graduate Diploma and working part-time. All except one had studied by distance prior to this subject, all identified themselves as teachers and indicated English as their first language. Neither the students nor the instructor had ‘met’ prior to this subject in previous online classes. The instructor had facilitated this subject for five years and had also been involved in teacher training in ‘traditional’ distance education for many years prior to full online delivery. She also had a number of years of experience in a variety of face-to-face teaching contexts. Students in this subject were encouraged by the instructor to engage in discussion, and to support this, a 5% assessment value was placed on one online contribution of the student’s choosing, which could be either a discussion post or a

contribution to a class blog. Only one student chose the 'blog' option. Apart from this, the researchers were not privy to which posts were submitted for assessment.

6.6 Methods of data collection

Data was collected from multiple sources to enable a deep understanding of the context of this particular online group. Overall data included the texts from the discussion forums²¹, a semi-structured interview (by Skype or telephone) with four of the five students, the instructor and subject designer, an online survey (students only) and collection of the pedagogic artifacts of the subject, such as subject outlines, instructions, tasks, study guides, announcements, etc. This paper mainly presents analysis of the texts of the online discussions and includes only some quotes from the instructor and student interviews to add their voices to the text analysis. Interview transcripts were checked by each participant and pseudonyms allocated.

Research met human ethics requirements, which included de-identifying the data and the researchers maintaining an arm's-length distance. Arm's-length distance was achieved by delaying data collection until after students had completed the subject and received final marks. This provided a clear demarcation between students' role in the research and their academic standing in the subject. In addition this minimised any influence that research participation might have had on the 'natural' dynamics of the class discussions (Halliday, 1993), as well alleviated any intrusion into students' study time.

6.7 Data organisation

The main source of data for this paper is the discussion forum texts. These comprise individual 'posts' that either initiate a new topic or attach to an existing one as a response. In total there were 18 threaded discussions (or *interaction clusters*) over a period of 82 days.

An initiated post becomes an *interaction cluster* when the 'reply' function is used, creating a cluster of responses in various arrangements around the initiated topic. After reading each of the interaction clusters, only those which displayed dialogic progression of a topic (i.e. where multiple contributions were made to discussing a topic) were chosen for analysis. Data were collected from five interaction clusters which met this criteria. The remaining thirteen clusters were deemed not appropriate for this study focusing on

²¹ Note: At times it was necessary to consider the contributions of non-consenting participants to this study during analysis, particularly when these made a significant contribution to the collaborative discussion. Therefore on the rare occasion that these are included in the paper the non-participants have been de-identified (e.g. 'Student6') and the texts have been edited to retain original meaning, but are not exact replicas

dialogue for building knowledge, as we considered them ‘non-dialogic’ clusters. This means that they did not contain dialogue *per se*, which can occur when the forums are used as a repository to upload files, resources or links, but will appear on the forum as a ‘discussion topic’ would. However, because their purpose was to share resources rather than generate discussion, any responses to them were found to be minimally negotiary, such as *You’re a star!* or *Thanks for the link*, and thus, were not relevant to this paper.

Of the five interaction clusters, four were instructor-initiated and the other student-initiated. To capture the teaching and learning relationship only the instructor-initiated discussions were considered for closer analysis. These provided a glimpse into the common knowledge which contributed to the ‘long conversation’ that characterised the teaching-learning relationship (Mercer, 1995). The term *teaching-learning* used here as inclusive of content and the way the instructor works intersubjectively to help students understand the content.

6.8 Data analysis

Data analysis involved combining methods from sociocultural and SFL approaches to analyse dialogue in the learning process. This study adopted a systematic approach through the significantly different lenses of sociocultural and SFL theories which created a clear focus. This focus underpins all the steps of data gathering and interpretation. Such approach provided a clear and transparent focus for the data collection and analysis both to the researchers and to the participants.

Sociocultural analysis focuses on learning as a developmental process, while the various tools of SFL enable more detailed analysis of the language in use during the learning process. This combination contributes to a richness and robustness in data analysis as it allows for the complexities involved in dealing with language use in the context of online teaching and learning to be understood from the points of alignment between both theoretical approaches. Coding, using categories based on sound sociocultural theoretical principles, provides insight from an educational perspective into the online learning context through support strategies employed by the instructor as expert and the impact this had on learners’ developing understandings. All researchers were involved in the iterative process of coding. SFL provides a more nuanced understanding of the functions of language as meaning-making choices, namely the linguistic resources being used to co-construct knowledge simultaneously with enacting social relations - from broad generic moves to instances of texts in the process of teaching and learning.

Sociocultural approaches are a commonly used and cited learning theory in the domain of online design and instruction (for example, Jonassen & Land, 2000; Palinscar, 2005;

Swan, Garrison & Richardson, 2009; Chen, Maton & Bennett, 2011; Oztok, 2012). When framed within educational theory, SFL with its capacity for robust analysis of language in use, is made more meaningful for educators. It was felt that this combination would retain the richness of analysis that draws on the strength of both theories, that is, a theory of language combined with a theory of learning. The complementarity of the theories in practice through the 'meeting' points of alignment will also contribute to triangulation in the findings and validity to the results. This necessarily involved employing different approaches to organising and analysing the data, firstly for coding the learning process (using sociocultural methods) and secondly, applying SFL analysis to the coded texts. The data analysis process will now be outlined.

6.8.1 Determining the unit of meaning for analysis

Before proceeding, there were some issues around what constituted a unit of meaning for analysis prior to coding. Approaching the online forum discussion as discourse, we consider the forums in the subject as a text. The following reflects how some of the idiosyncrasies of online discussion texts were resolved in preparation for coding and analysis. In determining a 'unit of meaning' the individual posts were not considered an appropriate unit because several different topics or ideas could be offered in a single post. In addition, negotiations around an idea in online discussion could extend over several posts or different interactants. We therefore needed an approach from a discourse, or text, level of analysis (Martin & Rose, 2007).

6.8.1.1 Forum-chat and forum-chunk units of meaning

After several readings of each interaction cluster it became apparent that the units of meaning for analysis resembled broadly two kinds of 'talk' - defined as *chat* and *chunks* in face-to-face conversational analysis, where these indicate when interactants 'take the floor' for "extended turns at talk" (Eggin & Slade, 1997, p 227). This was not an entirely unproblematic approach to online interactions, as essentially each post to an asynchronous discussion *is* taking the floor, and as noted by Blanchette, there are different 'rules' in online environments because "one participant can neither interrupt nor prevent another from making a comment" (2012, p 78) as is possible in face-to-face talk. However, the kinds of distinctions offered by *chat* and *chunk* segments can be adapted to online interaction, providing the basis for determining a unit of meaning for analytical purposes. To reflect this we renamed them *forum-chat* and *forum-chunks*.

In the online discussion texts forum-chat could categorise social exchanges such as greetings and signing off (*Hi Will, Hello everyone, glad to see hear some news; Cheers, warmest regards*), or acknowledgement and thanking (*You've made some valid points Mary; thank you for these comments*). In other words, these formed important

interpersonal links used by both instructor and students, even if not contributing directly to the topic of discussion. However, their regularity was noted as often occurring before a participant 'took the floor' or 'left the floor'. Forum-chat was a useful way of distinguishing the predominantly interpersonal meanings, and unlike face-to-face chat, it emerged as part of the structure in the discourse functioning as a bridging element, which would not be as frequent, as necessary or as linguistically visible in an ongoing face-to-face conversation. This could be characteristic of the asynchronous mode as even though each text is managed by the individual author in isolation from their target audience (both spatial and experiential isolation), there is an expectation that it will be read and responded to (Martin 1992), hence the interpersonal emphasis.

In contrast forum-chunk segments involve the speaker holding the floor to tell 'their story', or as in this study, to add their perspectives to the discussion. Extended talk such as this usually entails the speaker's representations of the world (experiential) in relation to the topic being discussed, and their reactions to it (attitudinal response) (Eggin & Slade, 1997). A shift in meaning flags the beginning or end of a forum-chunk segment which could also be understood as one or more messages²². As we shall see these segments unfolded as predictable stages, allowing the reader to become attuned to what was likely to follow. However, while forum-chunk segments could be identified in both the instructor and student contributions, the results showed that these were performing quite different functions: the instructor was clearly 'mediating' and the students were clearly responding to being 'mediated'.

The forum-chat/chunk segmenting provided distinctions which were useful in focusing on the different but important structures in dialogue which incorporated the predominantly interpersonal (but nonetheless important) elements, with those of teaching-learning (detailed in Table 9). This enabled the unit of analysis to be determined in preparation for the different coding that would reflect the particular character of the online teaching-learning environment constituted by the instructor's dialogic teaching moves and students' responses.

²² -'message' being defined by Martin & Rose (2008) as a unit of discourse realized by a clause, or by a projecting clause and its projected clauses. Example of projecting/projected clause *Labbo states* [projecting] // *that whenever new technologies appear ...* [projected]

Table 9: Forum-chat / chunk segmenting to determine the unit of analysis

FORUM CHAT segments (interpersonal)	Examples from the forum data determining the unit of analysis
before 'taking the floor'	<i>Hello Everyone ... Great to hear from you ... Hi everyone, sorry for the late start ...</i>
'leaving the floor'	<i>... Once I've worked out what time EST will be here in Dubai, I'll see if I'll be awake to chat! Regards ... I'm glad you found the information useful but hope that you never have to put it to use! Good luck ... and thanks for your comment!</i>
social exchanges	<i>... I am a primary school teacher I'm very much looking forward to this subject I've been a bit slow this week, mainly due to my laptop having a major heart attack and the hard drive dying a quick and unexpected death ...</i>
FORUM CHUNK segments	
Task oriented (students)	<i>My thoughts about reflection are that it's a necessary part of my learning ... I'm still coming to terms with 'literacy' ... I do not fully agree with this concept, as many of my students do not have access to technology at home ...</i>
Teaching-learning oriented (instructor)	<i>Perhaps the specific cultural associations of different languages with the word 'literacy' are also important here when teaching second language students ... We could discuss how best to support our students in developing their writing and whether technology can help or hinder us with this ...</i>

6.8.2 Sociocultural coding schemes

The initial data coding which was concerned with understanding the pedagogic context broadly, drew heavily on approaches informed by sociocultural theories. Coding was applied to forum-chat/chunk segments, with categories checked and rechecked against the data, the descriptors and the co-text from which the texts were lifted. Firstly, coding categories which captured the dialogic support provided by the instructor were established to reflect the broad perspective of teaching goals and purposes for learning. Support strategies were identified as those in which the instructor required students to act purposefully, according to the socially meaningful goals of the discussion (Stetsenko, 2004, p 504). The categories which emerged were *prompting*, *focusing*, *questioning*, *directing* and *organising*, adapted from the concept of scaffolding as found in Gibbons (2006), Hammond and Gibbons (2001) and Mercer (1995). When the instructor steered discussion three elements 'worked' together. These were *prompting* which is a way of encouraging broader thinking of a topic through offering various stimuli; *focusing* is a trajectory for discussion towards teaching-learning aims; and *questioning* is to propose, or stimulate thinking about, alternatives and can arise from ideas presented in the interaction(s). When instructing, *directing* and *organising* enacted elements of the instructor role, i.e. *directing* enables the instructor to provide guidelines for discussion tasks, protocols etc, while *organising* reflects the how the instructor arranges the teaching-learning space.

Secondly, to understand the effect of the instructor's support on students' learning regarding how (or whether) they co-constructed knowledge in the discussions, an instrument was used which already demonstrated it could capture the social construction

of knowledge (following Hendriks and Maor, 2004, see Appendix F). As Hendriks and Maor's study also sought to track the social progression of knowledge in online interactions, it suited our purposes, and for this reason it was valid to apply the instrument to our study. In doing so, the iterative process helped ensure the validity of the instrument for capturing the progression of knowledge. This resulted in student contributions being coded according to five levels of knowledge progression: the lowest indicator was *sharing and comparing information*, which then moved to indications of *experiencing cognitive conflict*, *negotiating meaning*, *testing/modifying the new meaning*, with the highest indicator being *applying newly constructed knowledge*. Table 10 provides a summary of this process which resulted in a total of 181 forum-chunk units of analysis, 34 being instructor-oriented support, and 147 learner-oriented:

Table 10: Coding results for instructor-oriented and learner-oriented messages

Teaching: Coded occurrences of scaffolding:	TOTAL 34
Prompting	15
Focusing	4
Questioning	4
Directing	6
Organising	5

Learning: 5 levels of social construction of knowledge:	TOTAL 147
1. Sharing / comparing information	124
2. Experiencing cognitive conflict	12
3. Negotiating meaning	8
4. Testing and modifying the new proposal	1
5. Agreeing and applying newly constructed knowledge	2

Importantly, this coding occurred before any linguistic analysis commenced. To establish validity between methods we needed to code the discussion texts using theoretically informed sociocultural methodologies, before applying the appropriate SFL tools to determine linguistic indicators for what characterised and contributed to effective online discussion.

6.8.3 SFL: linguistic analytical tools

Once coding of the texts was completed through the iterative process as described, linguistic analysis could commence. We were interested in seeing the cumulative nature of knowledge construction that occurred as the discussions moved through the teaching-learning stages, identified by Hendriks and Maor (2004). SFL as both linguistic theory and descriptive analytical tools, allows close attention to simultaneous meaning-making of construing knowledge and enacting interpersonal relations in the unfolding language choices, and enables a visibility and level of detail which adds richness to understanding the online teaching-learning relationship.

The process of linguistic analysis was firstly from the broad concept of Genre which explains how teaching-learning as social process was dialogically executed through the scaffolded support given by the instructor. To analyse knowledge construction in the interactions we drew on the SFL resources of expansion relations (or logicosemantic relations) which provide descriptive categories for the conceptual links made by learners that indicate progression in their understanding. To analyse the interpersonal efforts to align and engage with others, which occurs simultaneously with construing knowledge, we drew on the resources of Appraisal. These analytical tools will now be explained in more detail.

6.8.3.1 Genre

Genre enables an overview of the moves made in particular contexts for configuring meaning, in this case how the social purposes of teaching and learning through discussion were dialogically ‘assembled’ – achieved through recurring stages and phases of support given by the instructor, and subsequently as students respond in appropriate and predictable ways, as would be expected when participating in discussion of this kind. Genre is described by Martin (2009) as,

how a given culture organizes ... meaning potential into recurrent configurations of meaning, and phases meaning through stages in each genre we cannot achieve our social purposes all at once, but have to move in steps, assembling meaning as we go, so that by the end of a text ... we have ended up more or less where we wanted to go (p 12).

Elements in the structure of a genre can be identified as language patterns occurring as shifts in meaning choices - choices made to reflect particular semiotic purposes. In this study the expected semiotic patterns would be those which reflected the purposes of teaching and learning. To reflect this descriptive labels were given to the instructor and student moves according to two functions: *Mediation* (to reflect the teaching moves of the instructor) and *Topic Discussion* (to reflect the learning moves of the students). These shape a possible structure of the online discussions representing configurations of meaning (Martin & Rose, 2007) in the online teaching-learning process. (See Appendix G for the statements which characterised the functions of the stages and phases).

6.8.3.2 Appraisal and intersubjectivity in discussions

Appraisal is a resource from the interpersonal metafunction of the SFL model which identifies evaluative language use. Appraisal allows insights into how participants convey attitudes, adopt stances, construct their textual personas, or manage social positionings and relationships. Attitudes can be positive (+ve) or negative (-ve) *affect* (feelings), *judgment* (of moral / ethical behaviour), or *appreciation* (aesthetic assessment of things / ideas). Appraisal can also identify the extent of *engagement* with others such as whether

or not a participant opens the dialogic space to others' positions (*heteroglossic engagement*) or the extent to which it is narrowed or closed down (*contract* or *monoglossic*). In addition *graduation* resources provide more meaning potential through upscaling (↑) or downscaling (↓) the intensity of attitudinal positionings (e.g. *somewhat* upset vs *very* upset; a *few* problems vs a *multitude* of problems), or when focus is sharpened or blurred (e.g. a *true* apology vs an apology *of sorts*) (Martin & White, 2005). In online environments interpersonal meaning embedded into interactions has the potential to build rapport and create an atmosphere conducive to learning *as well as* to isolate or exclude. When the interpersonal is not attended to or less practiced in an online environment, opportunities for open discussion and, potentially, for learning are reduced.

6.8.3.3 Knowledge expansion and logicosemantic relations

The conceptual links being made in interactions show where relations between additional information and related fields are made, and indicate prior knowledge has been expanded. These relations reveal much about unfolding and evolving understandings. This is analysed through the SFL system known as logicosemantic (or expansion) relations. Logicosemantic relations can be described as restatement or clarification when a contribution adds more (*elaboration* [=]), for example, *So, what I meant by this was*; of addition or variation when adding new information (*extension* [+]), for example, *I too had a similar experience when learning an L2*; or relations of semantic development when adding extra information (*enhancement* [x]), for example *It wasn't until after I started teaching that I realised how to put all that theory into practice!* (Eggins, 2004; Martin, 1992). These relations can provide understanding of knowledge progression operating both at the broader level of an entire forum jointly constructed by individual contributors, as well as within individual texts to identify a particular learner's conceptual development.

6.9 Findings and discussion

6.9.1 The role of the instructor

... I see my role as an online tutor as teaching my subject, in being a support for my students so that they know how to progress through a course in a staged manner without feeling overwhelmed by the content, and looking at how they're learning as well as what they're learning and being able to facilitate their ability to reflect on those aspects (Instructor I interview, 2011)

The first discussion topic was initiated by the instructor, with nine of the ten enrolled students responding. The interaction cluster was comprised of 14 posts and extended over 24 days. All students (except for one) responded directly to the instructor, who in turn responded to all students, but not necessarily as individual posts (such as combined replies: *Great to hear from you Beth, Paula and MD; Welcome Mary and Will!*).

The interview comment which begins this section provides a glimpse into the agency of the instructor to provide a supportive teaching-learning environment. Students were encouraged to contribute to forum discussion, with a 5% assessment weighting as added incentive. Given the token assessment value, a positive social space was nurtured which entailed balancing instructor ‘duties’ with developing positive interpersonal connections. This began with a lengthy initial post in which the instructor enacted various aspects of teacher support. These included setting out expectations for forum participation, making connections between her credentials, interests and the subject content, providing explicit instructions on how the forums should be organised, and introducing the first task with stimulus to kick-start the first discussion. The scaffolding moves became evident from the outset and were coded as *instructing* through *directing* and *organising*, and *steering* discussion through *prompting*, *focusing* and *questioning*. These, together with examples from the dataset are shown in the table below (and which we will revisit in Section 6.9.1.3):

Table 11: Scaffolding moves by the instructor

Instructing:	Directing	I ask that you reflect on what you understand and mean when you use this word and suggest articulating your thoughts in writing by posting your response(s) here by way of an introduction
	Organising	Please click on ‘Reply’ so that we can conveniently group our responses within topics
Steering:	Prompting	My research interests and experience ... relate directly to my interpretation of what it means to be a fully “literate” person in the 21 st century
	Focusing	Another interesting point mentioned in your course notes reads ...
	Questioning	Do any members of this group speak another language and wish to share ‘equivalents’ for the term “literacy” in this other language?

Of note, the instructor’s message foregrounds the interpersonal, which has the effect of softening the impact of necessary ‘housekeeping’ tasks. Although these are ‘duties’ expected of the instructor as leader and facilitator, a more abrupt message would have quite a different impact on the social atmosphere. In order to draw students into discussion the instructor uses various strategies to open dialogic space to help create a sense of cooperative learning so students feel free to contribute. Firstly, language choices such as *we*, *us*, *our*, promote a sense of inclusivity,

Although *we* are ‘chatting’ *we* are doing so in writing. Yet, *our* online chat writing is usually quite different from *our* letters, essays and traditional written texts ...

The process of developing social connections and identities also involved modelling by the instructor, when sharing some personal (even if credential-related) information. Such opportunities are important to allow online students a glimpse into the identities of their virtual instructor,

At the same time as tutoring online, I work as a Head Teacher ... at my local TAFE ...

My research interests and experiences in the area of language acquisition, relate to teacher education multimodality and communication in the new media ...

In addition the instructor reinforces what is valued, at both the interpersonal and content levels. Such validations come from positive acknowledgement and comment on some of personal experiences shared by students in relation to the topic being discussed²³,

Thank you for sharing your changing ideas on literacy ... and also for the relevant and personal anecdote concerning your son ...

Thank you so much for your detailed and informative account of achieving functional literacy in a second language, Will ...

And thank you also for this valuable contribution to our discussion, Paula! Lack of fluency and/or literacy in the lingua franca is definitely not helpful for one's self-esteem ...

The instructor's attentiveness to nurturing an atmosphere conducive for open discussion was important for kick-starting the interactive process, particularly given that students were unknown to her and to each other. In addition her contributions would create a protocol for online communication skills, which as permanent texts, could be referred to, evaluated, and modelled.

6.9.1.1 Cultivating an interpersonal climate for learning

Foregrounding interpersonal relations from the outset, helped the instructor to create a non-threatening atmosphere, simultaneously with establishing her role as mediator to support discussion through instructing and steering. Any issues that may have arisen from lack of physical presence in online interactions were countered by the instructor. Firstly she steers students' attention to the benefits of participation through giving a positive evaluation of forum discussion. The resources of Appraisal²⁴ enable us to analyse some of the key attitudinal meanings in the evaluations she makes and the interpersonal 'softening' she employs. The following table details the analysis (with an interpretation following),

Table 12: Evaluative meanings in instructor's introductory post

Evaluative meanings:	Interpersonal effect:	Instructor text examples:
interpersonal metaphor	Expands meaning potential; less direct	I have found
Graduation force ↑ quantification		that <u>one</u> of
Graduation force ↑ intensification	upscaled	the <u>most</u>
Attitude, appreciation: social value	positive evaluation	<u>valuable</u> introductory activities to this subject
Graduation force ↑ intensification	upscaled / accruing in strength	is not only but also ...
Engagement: <u>heterogloss</u>	Inclusive language	... <i>one</i> where <u>we</u> meet <u>each other</u> ...
Graduation force ↑ intensification	upscaled through repetition	... <i>one</i> where <u>we</u> comment on <u>our</u> present understanding of the word 'literacy'

²³ Note: these are very similar to a feedback move in triadic dialogue

²⁴ For a more detailed explanation of Appraisal see Martin and White, 2005

Interpersonal metaphor expands the meaning potential, if we understand *I have found* as an implicit recommendation grounded in the instructor's expertise (of which we are assuming at this point – only later does she disclose her credentials). The meaning implied could be *take my word for it*, and there is an assumption that students will do just that, particularly when emanating from the 'expert' (consider the different interpersonal effect if this was posted by a student). The invoking of this recommendation is reinforced through upscaling the social value of discussion (*one of the most valuable ...*). Emphasis on the benefits accrues through upscaling intensity (*not only ... but also ... one where we meet ... one where we comment*) to engender in students similar positive feelings towards participating, but at the same time, avoiding saying so directly.

Creating a positive interpersonal climate also involved the instructor paying close attention to how she used language intersubjectively, in order to facilitate discussion. This was particularly evident when she gave directions, which not only provided clarity but were softened by their indirectness. The following excerpts show how the instructor achieved this, often using modality to reduce the obviousness to these adult learners that they were being told what to do (contrast the directive, *Post your responses to the forum*),

Table 13: Instructor's intersubjectivity when giving directions

Giving directives: interpersonal metaphor	Interpersonal effect: less direct	Instructor text examples: <u>I ask</u> that you reflect on what you understand when you use this word and then
Modality	less direct	<u>suggest</u> articulating your thoughts in writing by posting your responses here ...
Interpersonal metaphor	less direct	<u>I thought</u> therefore
Modality	less direct	that this <u>would be</u> a timely topic that <u>may well be</u> helpful for you ...
Modality	less direct	<u>We could</u> discuss how best to support
Engagement: heterogloss	inclusive language question opens dialogic space	<u>our students</u> in developing their writing and whether technology can help or hinder <u>us</u> with this ?

The purpose of the forums is clearly for dialogue - discussion as a reciprocal experience. The dialogic space was opened through developing interpersonal instructor-student and student-student relations as well as the instructor positioning herself as involved in these activities (through inclusive language as mentioned). The examples given are typical of her agency to teach. Given the token assessment value, this would seem an appropriate way to negotiate relations with her adult learners (Knowles, 1980), preferring to entice them into involvement interpersonally, rather than compelling them by being more direct.

The interpersonal strategies preferred by the instructor, as highlighted through Appraisal analysis, renders her teaching efforts interpersonally agreeable, and indicates the expert-novice relations *and* collegiality on offer, perhaps as an inducement for adult students to become involved in discussions they perceive as potentially beneficial. The instructor's

strategy of encouraging participation acknowledges the adult's self-concept as an independent decision maker (Knowles et al., 2012), important for developing intrinsic motivation which will facilitate learning, and foster deeper engagement. It is significant therefore that all but one of the students contribute to the first discussion, significant because as postgraduate learners, theirs was the choice to participate. This establishes a good foundation in the preliminary shaping of the learning environment. Such interpersonal 'work' can determine how dialogue progresses, and for setting a climate in which sustained opportunities are created for students to be inducted into new ways of talking and thinking (Mercer, 1995).

6.9.1.2 Shaping interaction towards the goal of learning

Shaping interaction to achieve the goals of the subject requires scaffolding to guide the discussion as well as to induct students into discussion as a collective undertaking. As already discussed, such shaping requires careful linguistic choices by the instructor to frame the interaction firmly without appearing to do so too obviously. This is best exemplified again, from the introductory discussion, where we revisit the support strategies employed by the instructor, but for the purpose of seeing how experiential content is introduced for negotiation. Here the instructor confidently and expertly steers the discussion through problematising the concept of 'literacy' in a series of knowledge giving statements to elicit open-ended responses. She does this via a number of interpersonally oriented language choices (underlined),

We [inclusive] can perhaps [modality] explore our [inclusive] digital literacy with an online Chat session – any takers [informal] for Feb 22nd? (organising)

... not even [concessive conjunction] among European languages that are close to English are there equivalents for the word, 'literacy' ... (focusing – through problematising the concept)

presenting a range of notions around 'literacy' to stimulate exploration of its meaning

These interests relate directly to my interpretation [personal pronoun] of what it means to be a fully "literate" person in the 21st century [open-ended]... (prompting)

One interesting and relevant [opinion adjective] definition in your topic notes ... another interesting [opinion adjective] point is ... (focusing)

and providing entry points into the discussion, while simultaneously steering its direction

... see Anna Wierzbicka and her work [command] (prompting)

I ask [interpersonal metaphor] that you reflect on what you understand and mean when you use this word (directing)

Do any members of this group speak another language and wish to share equivalents ...? [question opens up the discussion] (questioning)

It can be seen from the above examples that the support strategies of *directing*, *organising*, *prompting*, *focusing* and *questioning* (as introduced in section 6.1) are for

different teaching purposes, with particular emphasis on encouraging students to contribute to the discussion. These can be understood as teaching phases of *Mediation*, or how teaching is carried out in the online discussions, which effectively shaped the discussions. How the instructor employed these is illustrated in Figure 21 below, which provided students a variety of 'entry points' into the discussion, and thus a range of discussable options from which to choose.

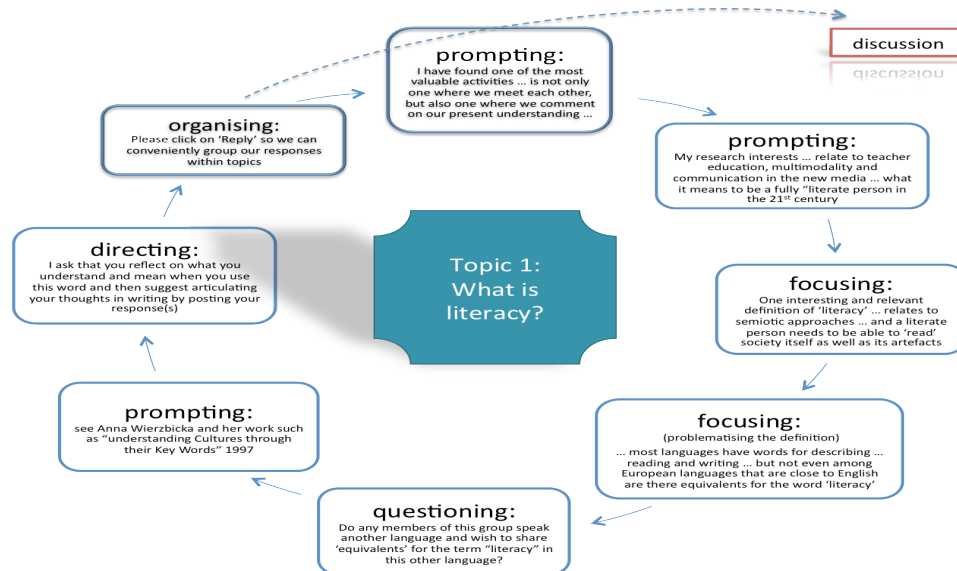


Figure 21: Mediation of the first topic showing phases of instructor support as entry points into discussion

In later forums, the need for instruction lessened indicated by decreasing instances of directing and organising moves, with steering discussion being the main activity of the instructor. Here the agency taken up by the instructor becomes evident as she takes advantage of each opportunity to guide students into productive discussion. This occurred when setting a new task or when incorporating a whole-class steering move into an individual response to a student, as set out in Table 14.

Table 14: Instructor agency of whole-class steering incorporated into individual responses to students

Steering in responses:	Instructor agency effect:	Instructor text examples:
prompting	<p>Dialogic space opened through</p> <ul style="list-style-type: none"> Affect: satisfaction Engagement: heterogloss <p>Whole class-oriented prompting to stimulate broader thinking through problematising and drawing attention to</p> <ul style="list-style-type: none"> Engagement: counter Engagement: heterogloss Contrasting through relational process 	<p>I'm pleased you are interested in our Chat session since this is one of the ways in which we can see how literacy is changing</p> <p>Although we are chatting we are doing so in writing. Yet our online chat writing is usually quite different from our letters, essays and traditional written texts ...</p>

Steering in responses:	Instructor agency effect:	Instructor text examples:
focusing	<p>Extending on student ideas i.e. providing additional information and directing towards a relevant resource by adding new 'voices' into the mix</p> <ul style="list-style-type: none"> • Graduation: quantification • Engagement: <i>attribute</i> 	<p>Another perspective on reflection is the idea of adding a ninth intelligence to the traditional eight of <i>Gardner</i>!</p> <p>... <i>Hatton and Smith</i> (1995) discuss the higher cognitive levels of reflection ...</p>

The instructor builds an element of expectancy for the students by providing consistent support. Building clarity through steering and instructing moves, which provide unambiguous directions and various stimuli, is shown to be important for equipping students to contribute productively to discussion. The findings show that instructor mediation is crucial for effective shaping of the interactions for learning purposes. At the same time provision of this support confirms the instructor's role as 'expert other' as she facilitates the forum discussion.

The high level of support shown in the first forum has the effect of producing a lively discussion in which eight of the nine students involve themselves. Shunting between *prompting* and *focusing* as described above, cultivates 'reasons' for students to interact – interaction, as we shall see, is crucial to the process of co-constructing knowledge. This also has the effect of maintaining student interest as well as gathering a momentum in discussion which becomes foundational to joint dialogic activity over the following weeks. The effect of instructor mediation on students' motivation to be involved was mentioned during student interviews, for example,

I find it an extremely beneficial part of the learning process ... the discussion forum worked as well as having a real live person ...

The lecturer was responsive ... I would say just about everyone got a response of some kind ... the other thing about that class was the setting out of what was expected of you was *very clear* ...

I felt that she was always there guiding the conversation which was really good ...

6.9.1.3 Facilitating the potential for developing new understandings

We have seen from the instructor's mediation that 'social order' was created through the forum discussion. In this role the instructor fostered a safe space for dialogue and shaped interactions towards productive discussion of various topics. In addition another phase emerged from the discussion data, which could neither be described as teaching nor learning moves, rather as interpersonally-focused moves we called *bridging*. Bridging moves usually marked moving into or out of a different phase, and appeared in these forums with such regularity that they formed part of the generic structure of the online texts. These interpersonal moves were firstly modeled by the instructor and then replicated in student responses when 'taking' or 'leaving the floor', as an interpersonal

way to ease in or out of some aspect of the discussion. The examples in Table 15 show how *bridging* occurred in both instructor and student posts,

Table 15: Interpersonal bridging moves in teaching and learning facilitating rapport in online discussion

Instructor moves:	Bridging:	Phase immediately following bridging:
bridging leading into steering phase	Thank you so much for your detailed and informative account of achieving functional literacy in a second language, Will!	[steering] All the more valuable to share with us since that language uses a different script :) (Forum 2 'Literacy in L1, L2, L3')
bridging leading into directing / steering	Thank you for this valuable contribution to our discussion, Paula!	[directing] I'm wondering whether you attempted the activities as well; e.g Activity 2? [steering] I think these levels of reflection involve delicate analysis? (Forum 7 'Reflective Practice')
Bridging leading to organising and directing	Thanks for your input AH	[organising] Maybe others might like to transfer discussion regarding technology and literacy to Forum Topic Four: Teaching writing. [directing] We could discuss how best to support our students ... (Forum 10 'The changing nature of literacy')
Student moves:	Bridging:	Phase immediately following bridging:
bridging leading to abstract phase	Hi everyone. I've been a bit slow this week mainly due to my laptop having a major heart attack and the hard drive dying a quick and unexpected death!	[abstract] My thoughts on about reflection are that it's a necessary part of my learning especially in the classroom ... (Forum 7 'Reflective Practice')
bridging (personal anecdote) embedded into issue phase	It seemed that because I couldn't speak/write very well in Thai then that was the basis for everything else I could do.	[issue] I felt as though no-one knew me because I couldn't express myself adequately ... (Forum 2 'Literacy in L1, L2, L3')
bridging leading to issue phase	I like how Amanda used the term 'process of discovery'	[issue] At the school I used to work at our staff was working towards using this discovery process in our classrooms ... (Forum 7 'Reflective Practice')
bridging leading to evaluation	I found it interesting that in Canada they removed handwriting from the syllabus.	[evaluation] I do not fully agree with this concept as many of my students do not have access to a computer at home ... (Forum 10 'The changing nature of literacy')
Bridging to leave the floor	I look forward to working and studying with you all ... I wish you all a very successful time studying ... Sorry, I've rambled too much ...	[leaving the floor] (Forum 1 'Introductions and Literacy')

Bridging seems to function here as a substitute for what often occurs paralinguistically in face-to-face interactions (such as meaning-making through gesture, body language, voice tone etc) softening the impact of exchanges when moving from one phase to the next. This reiterates the importance of emotional support in the process of teaching - a social element which plays a crucial role in the internalisation of knowledge (Vygotsky, 1978; Halliday 1978; Holzman, 2009), and essential for the adult learner (Bonk & Kim, 1998). The indirectness of the instructor, coupled with attention to fostering interpersonal alignments were instrumental in building the interpersonal relations necessary for students and instructor to become collaborators in the community. This contributed to more meaningful involvement in the online discussions.

Through the consistency of instructor support there becomes greater potential for new understandings to emerge from the online discussions. According to Alexander (2008) effective facilitation of learning requires teaching methods to have structure, form, organisation and purpose, which reflects a degree of expectancy, or predictable ways of doing things. These are especially important in an online environment where there are reduced opportunities for immediate clarification, and increased potential for misunderstanding.

As we have seen so far, the agency of the instructor to teach through mediating the discussions and its momentum, forms the teaching part of an online discussion genre we have called *Mediation*. We can now say that mediating discussion was achieved through three broad stages: *instructing*, *steering* and *bridging*. The focus of *bridging* was interpersonal, while *instructing* and *steering* were teaching-focused. *Instructing* was operationalised through phases of *directing* (to provide clarity in discussion), and *organising* (to manage and coordinate), and *steering* stage through phases of *prompting* (to stimulate thinking), *focusing* (on the task and topic), *questioning* (to open up other aspects to the discussion), as shown in the diagram below:

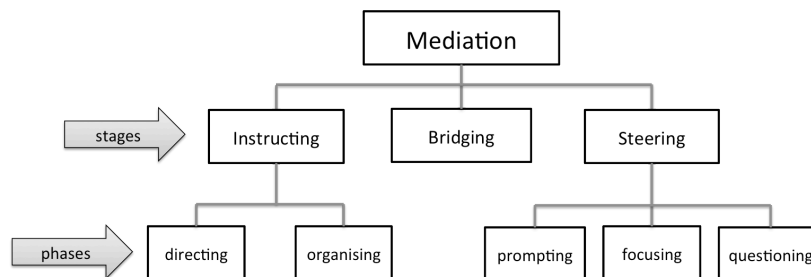


Figure 22: Mediation: stages and phases of teaching support in online discussions

We now consider the effect of the instructor's mediation on patterns of student participation in the forums, or more specifically how the social purpose of learning is impacted by participating in discussions. The focus for analysis shifted to students' responses to instructor support. Emerging from the student data were patterns showing student agency to learn, realized as a genre we called *Topic Discussion*. This will be explored in the section following.

6.9.2 Student contributions to discussion

This section focuses on student contributions to discussions as a result of the instructor's mediation. The agency of the students to learn is reflected by their readiness to share perspectives from personal experiences related to the topic being discussed.

To understand the kind of knowledge being constructed, the forum-chunk segments were described using sociocultural categories (refer to columns 1 and 2 in Table 16 below). In

a separate analysis, patterns in the generic structure emerged showing students' contributions as predictable and teleological in nature. As already mentioned, we generalised student agency to learn as *Topic Discussion*. Fulfilling the 'task' of topic discussion involved students moving through stages (already identified) of fulfilling the task (task fulfilment stage) and aligning interpersonally (bridging stage) (see column 4). Fulfilling a task comprised phased moves through *abstract*, *issue*, *coda*, *evaluation*, and *new understanding* (see column 5 and explained in more detail below). These phases reflected the nature of the knowledge being shared with a progression towards individual understanding. The sociocultural coding and the generic structure informed by SFL have been mapped together in Table 16 with examples from student data to illustrate also included:

Table 16: Social construction of knowledge: coding categories mapped to generic stages and phases of Topic

SOCIOCULTURAL CATEGORIES			GENERIC CHOICES (SFL)	
Social construction of knowledge:	Descriptors:	Forum-chunk segments – student texts	Stages of topic discussion	Phases of task fulfillment
1. Sharing/ comparing information; pooling resources	exchanging ideas, experiences	Anyway, it's only one day per week so I have time to think about it plus continue my studies ...	bridging	
	stating opinions (incl. social exchanges)	My thoughts on reflection are that it's a necessary part of my learning ... I think developing literacy is the 'hard part' of communication ...	task fulfillment	abstract
	presenting arguments	I personally think these technological advances are so influential they have changed our role as teachers ...	bridging	
	seeking opinions, suggesting	I'm wondering if it will ever get to the point when writing by hand will become a lost art, and people will look to their grandparents to see 'how it was done' ...	task fulfillment	issue
2. Experiencing cognitive conflict	agreeing	I'd agree with Paula's comment that a closer analysis of the fourth stage would be necessary to go beyond evaluation ...	task fulfillment	coda
	posing questions	I wonder if people will be considered literate because they can sign their name rather than just printing it?	bridging	
	counteracting	I'm not sure I agree with this quote ... if their were fewer constraints on teachers more would take the time to become reflective practitioners	task fulfillment	evaluation
	critiquing	I haven't been very successful in taking my students to the level of 'dialogic reflection' ...	task fulfillment	evaluation
	disagreeing	I do not fully agree with this concept as many of students do not have access to a computer at home	task fulfillment	evaluation
	restating an argument	Another point ... he talked about was that it doesn't matter how much you know ... but how well you can pass that information on to others ...	task fulfillment	evaluation

SOCIOCULTURAL CATEGORIES			GENERIC CHOICES (SFL)	
Social construction of knowledge:	Descriptors:	Forum-chunk segments – student texts	Stages of topic discussion	Phases of task fulfillment
3. Negotiating meaning	to show compromise, propose and negotiate a new understanding	I somehow assumed that this ... would be happening in many schools and once I left I remember being surprised to discover ...	task fulfillment	new understanding
4. Testing and modifying the new proposal	testing against cognitive schema	I can think about different things that might help in my own teaching/learning but until I start to experiment and take the new knowledge on board, then I haven't really progressed much ...	task fulfillment	new understanding
5. Agreeing and applying the newly constructed knowledge	having a new and deeper understanding; synthesising	I find now when I approach a ... topic, I am alert to the perspective students bring to the situation ...	task fulfillment	new understanding

Abstract refers to phases in the discourse where students gave an overview of their post, *orientation* ‘announces’ to their audience what they were going to present, the *issue* phase proposes a matter related to the topic, while the occasionally used *coda*²⁵ is a summarising point made of the whole post. *Evaluation* refers to a phase in the discourse at which information was negotiated – sometimes simply shared, while at other times new knowledge was constructed (discussed further in section 6.9.2.2). The higher levels indicating knowledge construction (level 3 and above) were found in the phase of *new understanding*, which will also be explored later in the paper. The frequency of stages and phases observed during *Topic discussion* across the whole data set was comprised of 51 occurrences of *bridging* stage and 102 of *task fulfillment*. The *Task fulfillment* stage comprised *abstract* (13 occurrences), *orientation* (11), *issue* (32), *coda* (8), *evaluation* (27) and *new understanding* (11) (see Appendix H for a summary table). The hierarchical generic structure of student responses can now be identified, shown in Figure 23.

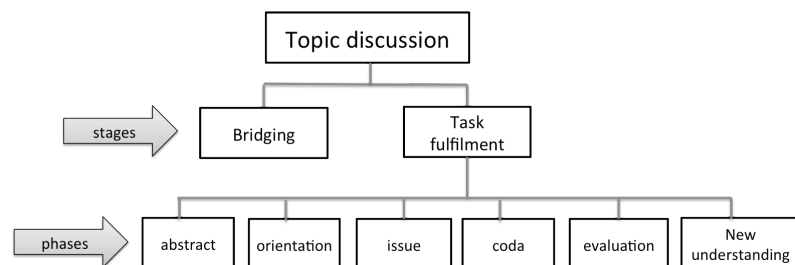


Figure 23: Topic Discussion: stages and phases of learning enacted in online discussions

²⁵ Although Coda emerged it was an infrequently used phase in these discussions, and will not be discussed at length

6.9.2.1 Sharing information: pooling individual resources

Sharing information was the most prevalent contribution made to the forums and occurred as students included their perspectives in the discussions, but did so uncritically. This was an important part of gathering a range of different perspectives which added incrementally to the body of shared knowledge. This occurred in the phases of *abstract*, *orientation*, *issue* and specific kinds of *evaluation*.

The *abstract* and *orientation* phases gave some insight into the communicative proficiency of the learners, both in their audience awareness and in the logical structure which signposted the phases of meaning. For example, *abstract* encapsulated the point of the post which helped establish predictability in its direction such as,

My understanding of the term 'Literacy' at the moment involves ...

The pieces of technology that could be used to replace each of these items [i.e. pens, paper, books] are now available ...

This phase often led to an *orientation* phase. *Orientation* functions as a way of students flagging to the audience that they have commenced 'taking the floor' to share a personal experience or idea, which is not unlike telling a story embedded into relevance of the topic. When students moved into the phase of *issue* this tended to emanate from sharing personal experience, or if not from personal experience, from relating the experience of another. This enables personal connections to the discussion topic and functions as another important way of collectively pooling resources. *Issue* allowed students to present an array of different concerns relevant to the TESOL profession.

These phases are important for ongoing collaborative construction of subject content, understood as one idea expanding upon another. As mentioned earlier, in SFL terms these are known as expansion relations of *extension* (addition/variation [+], or *elaboration* [=]²⁶). Expansion relations can occur both within individual student responses as well as at the broader perspective of the whole forum, in which each contribution adds to the collective knowledge. Table 17 provides some analysis to explain how collective knowledge was built, while Table 18 shows how issues were presented, sometimes through a process of problematising (i.e. proposing variations) which could be a catalyst leading to new understandings.

²⁶ Refer to Section 6.8.3.3: Logicosemantic relations of elaboration and extension are: elaboration of concepts through relationships of restatement - clarification, such as when adding *more* information (represented as [=]; and extension which are relationships of addition or variation, when adding *new* information (represented as [+])

Table 17: Expansion relations of addition and elaboration to build collective knowledge

Expansion relations:	Co-text	Examples of expansion relations
addition [+]	As a multicultural society, Canada has become home to thousands of new Canadians every year	and [+] those of us born in Canada are often unaware or take for granted the complexities of our own language and the struggle many go through ... (Forum 2 Literacy in L1, L2 or L3 ...)
variation [+] and elaboration [=]	My experiences in Oman and Dubai	have been slightly different [+] in that English is widely used, seen, heard on the radio and TV, and taught in schools and at university [=] (Forum 2 Literacy in L1, L2 or L3)
addition [+]	I know this response is late but I found this topic interesting and wanted to respond ...	I was lucky enough to recently work at a primary school that valued teacher reflection [+] (Forum 7 Reflective practice)
addition [+]	I am currently teaching a Year 1 class in a new school this year	and [+] it is very surprising to see the range of technology that my children have access to ... (Forum 10 The changing nature of literacy)

Table 18: Expanding collective knowledge through highlighting issues

Expansion relations:	Co-text	Examples of expansion relations and <u>issue</u>
variation [+]	For instance, some time ago when we lived in Thailand, I decided that I could manage learning the spoken language	but [+] <u>I found the written form very daunting</u> ... (Forum 1 Literacy (on learning an L2))
variation [+]	Those in the international business program tend to have higher level than those in other, more general courses,	but [+] none of my students could be classified as more than an intermediate level when it comes to language ability ... (Forum 1 Literacy)
addition [+] and elaboration [=]	I remember my first day in Japan ... it was up to me to make my way to the supermarket to buy food for that evening's dinner.... I was shocked by what I found ...	<u>I was not able to read the labels of any of the food products nor was I able to read the signs in the aisle ... I ended up eating pasta for about 3 months before some of my students taught me some basic characters ... Japanese is an extremely complex language ... In addition</u> [+] <u>to reading and writing it took me a very long time to adjust to what I might call 'community literacy', or being able to function within Japanese society</u> [=] ... (Forum 2 Literacy in L1, L2, L3)
elaboration [=]	There are some interesting aspects about learning a second language that I have gauged from studies and talking to learners. There is a complex mental process going on.	For instance [=] a friend who was doing a TAFE hospitality course explained how <u>she had to read the text, convert that information to Russian, then back to English</u> ... (Forum 2 Literacy in L1, L2, L3)

Collaborative discussion involved adding new [+] or more [=] information which contributed to the collective of knowledge (Mercer 2000). Indeed, it is worth to note that students felt confident enough to disclose personal aspects they felt related to the topics (as shown in some of the above examples), given that none had met prior to this online subject. However, while engaging in these kinds of discussions help build a sense of belonging to the learning community, for teaching-learning to be effective students must move beyond this level of discourse. The online forums need to be used to critically

engage with ideas that students are encountering through readings and the topic guides, under the guidance of the instructor.

6.9.2.2 Making evaluations and transforming perspectives

The impact of the instructor's mediation became most visible at the *evaluation* phase in the discussions. Those contributions identified as evaluations, when mapped onto the social construction of knowledge (refer to Table 16), indicate a movement away from additive and contrastive relations discussed in the preceding section, towards forging new understandings. When students made evaluations this indicated the point at which they were seen to be grappling with new concepts (or beginning to). In other words, when they were experiencing some kind of dissonance in their current thinking, their language choices shifted to a more critical stance than that used when simply sharing information. However not all evaluations were indicative of knowledge progression as some still fell into the sharing/comparing information descriptor (e.g., *I think the semiotic approach sounds far more likely, as in our search for meaning, we need to be able to read far more than just words ...*), while others were identified at the higher level of experiencing cognitive conflict (e.g., *I could recognise them in the samples but I wonder if I could recognise the same characteristics in my own reflective writing ...*).

Linguistic analysis enabled distinctions between both types of evaluations, more explicit in terms of how they indicated a progression in knowledge. Firstly we noted that evaluations at the level of sharing information functioned to express an opinion, in order to justify, concur or extend an idea. The analysis showed that evaluation at this level was often through attributive²⁷ relational clauses which give a quality to something, or someone, as shown in the examples below:

Table 19: Evaluation of qualities: sharing opinions

What is being evaluated	The quality being attributed
I think developing literacy	is the ' hard ' part of communication ... (Forum 1 Literacy)
There's no doubt that the process [i.e. of learning a second language with a different script]	is enormously complex , and I feel I'm only just beginning to scratch the surface of these complexities... (Forum 2 Literacy in L1, L2, L3)
I have created a blog for my children ... this is new to them and spelling has created a bit of an issue, but they cannot stop talking about it ... <u>The enthusiasm</u> I have seen over the past two weeks	is amazing ... (Forum 10 Changing nature of literacy)
... considering the number of people that are saved every	were fortunate enough to have been found in a

²⁷ In SFL these are understood through the system of Transitivity (from the Experiential/Ideational metafunction) called relational attributive processes – where a quality is attributed to (i.e. related to) something/someone (called the 'carrier' of the attribute), usually through (but not limited to) linking processes such as *to be*, *to have* (for more detailed explanation of Transitivity see Eggins, 2004; Halliday & Matthiessen, 2004; Martin, Matthiessen & Painter, 2010)

What is being evaluated	The quality being attributed
year because they	'triangle of life' that allowed them to survive ... (Forum 18 Health and welfare literacy)

However, when students questioned the status quo, their language choices shifted to some kind of discord in their thinking. This was most evident in a discussion on reflective practice, in which negotiating a new perspective was often as a critique either of self or of their own practices in conjunction with the topic. These kinds of evaluations indicate a consciousness of the need for self-improvement, with internal perceptual changes potentially leading to transformed practices. Changes in perspective were understood through a variety of linguistic resources operating simultaneously, e.g. resources for expanding knowledge *and* expressing attitudinal stances. Linguistic analyses therefore involved expansion relations and Appraisal (i.e. of attitudes, graduation and engagement), with some examples given in Table 20:

Table 20: Evaluation indicating transforming perspectives

Appraisal analysis:	Expansion relations	Explanation of linguistic resources	Examples
Judgement: <i>capacity</i> +ve and -ve Graduation: <i>force</i> (↑) Engagement: <i>contract</i>	variation [+]	Self-critique: evaluations of own capabilities Force: intensity upscaled through repetition Counter-expectant through concessive conjunction 'but'	<i>I could recognise</i> (+ve) them in the samples but [+] <i>I wonder if I could recognise</i> (-ve ↑) the same characteristics in my own reflective writing
Graduation: <i>force</i> (↑)	addition [+] elaboration [=]	Adding new information Intensity upscaled through repetition Re-stating an argument – connecting literature to own reality	Another important point [+] ... was that it doesn't matter <i>how much</i> you know ... but <i>how well</i> (↑) you can pass that on ... [=] So I'm sort of relating that to the mentor that I mentioned in the previous posting ...
Judgement: <i>capacity</i> -ve Graduation: <i>force</i> (↓)		Self-critique: -ve evaluation of own capabilities Force of self-critique downscaled / softened	<i>I haven't been very</i> (↓) <i>successful</i> in taking my students to the level of 'dialogic' reflection ...
Interpersonal metaphor Engagement: <i>entertain</i>		Attitudinal stance is less committed i.e. more open to other opinions (If ... then) opens up the dialogic space for negotiation	<i>I think if</i> there were fewer constraints on teachers then more would take the time to become reflective practitioners ...
Judgement: <i>capacity</i> +ve and -ve Engagement: <i>contract</i>		Self-critique: evaluations of own capabilities Counter-expectant through concessive conjunction 'however'	Having lived here for as long as I have, <i>I would consider myself</i> to be functionally literate ... however I am reminded on a daily basis of how far that I have left to go before I attain a level even approaching that of a native speaker ...

The analysis highlighted that as students were given the opportunity to critically evaluate their current situation, they were able also to consider negotiating a different perspective.

In the context of TESOL teacher education, time for discussion on reflective practice seemed relevant for these students, and particularly helpful in progressing their knowledge beyond uncritical pooling of information. This involves an element of risk-taking but the willingness to disclose their changing perspectives could be interpreted as students' increased agency. This was indicated by their contributions, which show increasing confidence in self and in the dynamics of the group. These contributions also showed that conceptual links were being made between related ideas - a progression in knowledge development, which will be discussed further in Section 6.9.2.4. Grappling with new concepts publicly also indicates the place of the forums in negotiating formerly unresolved ideas from which the whole group may benefit. This became visible at the point where exchanging information moved towards understanding something new, through evaluations which are described as *transforming perspectives* (to distinguish these from *opinion* evaluations).

6.9.2.3 Co-constructing new understandings

Evidence that students have constructed new understandings is a highly desirable outcome of online discussion. As described in the previous section we argue that forum-chunks coded as evaluation are important indicators of the changes in perspective necessary for growth in student understanding. We have also seen from Table 16 that the forum-chunks coded as *negotiating meaning* (level 3) and higher, also mapped onto the *new understanding* phase and also needed to meet the following descriptor:

“presenting new/changed/developed understanding arising from the issue/evaluation being discussed, which is indicated as different to previous understanding” (refer to Appendix)

Of the 147 (student) messages, 11 were categorised as new understandings according to the above descriptor and 12 were evaluations indicating transforming perspective (i.e. coded as *experiencing cognitive conflict*). These can be considered the knowledge construction phases of discussion and represented around 15% of the total contributions. This indicated that discussions had facilitated construction of new meaning, or at least that they provided a reflective space for students to articulate current understandings at various junctures in the process (i.e. being jointly negotiated, tested or modified). A discussion which exemplified joint construction of new meaning is provided in Table 21. The excerpts focus on the relevant messages within this particular discussion, showing the effect of cumulative contributions which broaden students' thinking about literacy. There are 15 turns taken, six are the instructor mediating and nine are student responses. The stimulus from the learning site was a reading, which summarised twelve approaches to literacy. The evidence of knowledge progression could be tracked over several moves and across different participants.

Table 21: Excerpt of a discussion showing collaborative construction of a definition of 'literacy'

Msg #	Turn-taker	Teaching-Learning moves	[Stages] and Phases *[TF]=Task fulfilment stage = phase boundaries	Excerpts from the interaction cluster	Sociocultural Coding categories
9	Instructor	Mediation	[Bridging] ... [Instruction]:directing	... I ask that you reflect on what you mean when you use this word ['literacy'] and then suggest articulating your thoughts ... by posting your response(s) ...	directing
15-18	Paula	Topic	[Bridging] ... [TF]:Abstract Issue Evaluation	... At this stage, I understand 'literacy' as a very broad term that is the next step from speaking and listening I imagine some cultures ... who have not had a need for literacy because of their nomadic and hand-on culture I think developing literacy is the 'hard' part of communication for instance some time ago when we lived in Thailand ...	1. Sharing information
24-25	Beth	Topic	[Bridging] ... [TF]:Abstract Issue	... My understanding of the term 'Literacy' at the moment involves being able to read, write and communicate effectively I have noticed that children with English as a second language who have difficulty in communicating ... also experience difficulty when writing ...	1. Sharing information
29-31	Student6	Topic	[Bridging] ... [TF]:Abstract Issue Evaluation	... I understand literacy as being an overarching term for reading, writing, listening, speaking and understanding different cultures have different ways of making meaning so to me, expressions and gesture are incorporated into literacy as well ...	1. Sharing information
33-34	Instructor	Mediation	[Bridging] ... [Steering]:prompting	... It's interesting most of you regard literacy as more than simply reading and writing – a reflection perhaps of our changing times and the term 'multiliteracies'? ...	Prompting
39-40	Mary	Topic	[Bridging] ... [TF]:Abstract Issue	... To me, literacy is also more than just reading and writing too. It's a system of communication that's constantly evolving I'm particularly interested in the latest developments in tools and technology ... and the impact these will have on literacy as we know it ...	1. Sharing information
43-49	Will	Topic	[Bridging] ... [TF]:Issue Abstract Evaluation New understanding New understanding Issue	... none of my students could be classified as more than an intermediate level when it comes to language ability To me, the simple definition of 'literacy' is to read and write in a language Since coming to Japan however, I can see that literacy is somewhat more complex than that ... one's ability to read and write a language is much more valued than one's ability to speak Therefore I can see how literacy would mean something different depending on the culture of the country in which you lived Furthermore, I believe that a definition for the word 'literacy' depends heavily on the context in which it is used To be functionally literate or able to carry out the essential activities of daily adult life differs a great deal from being literate in a professional, academic or technical sense ...	1. Sharing information 2. Experiencing cognitive conflict 3. Negotiating meaning 3. Negotiating meaning 1. Sharing information
52-54	Instructor	Mediation	[Bridging] ... [Steering]:prompting	... I'm pleased you're interested in our Chat session, especially since this is one of the ways in which we can see how literacy is	Prompting

Msg #	Turn-taker	Teaching-Learning moves	[Stages] and Phases *[TF]=Task fulfilment stage = phase boundaries	Excerpts from the interaction cluster	Sociocultural Coding categories
				changing ... although we are 'chatting' we are doing so in writing. Yet our online chat writing is usually quite different from our letters, essays and traditional written texts ...	
58-60	Student7	Topic	[Bridging] ... [TF]:Abstract Issue	... I'm still coming to terms with 'literacy' and a narrow definition of reading and writing is rather inadequate I have some ESL students who know grammar well and can read and write at high levels – yet their spoken English is very basic ...	1. Sharing information
62	Instructor	Mediation	[Bridging] thank you for changing ideas on literacy SH, and for the relevant and personal anecdote ...	
66-69	Amanda	Topic	[Bridging] ... [TF]:Abstract	... My response to the word 'literacy' a few years ago would have been 'the ability to read and write' ...	1. Sharing information
			New understanding	... I have realised how limited the definition is, particularly in my current teaching position ...	3. negotiating meaning
			New understanding	... I think the semiotic approach sounds far more likely ... we need to be able to read far more than just words ...	3. negotiating meaning
			New understanding	... I've become aware of the different schema that students bring with them ... to decode and interpret, and the role played by signs, sounds, faces and the environment ...	4. Testing and modifying the new proposal
72	Instructor	Mediation	[Bridging] ... [Steering]:prompting	... good to read how so many of us have moved on from a very literal and basic definition for 'literacy' ...	Prompting
76	Student8	Topic	[Bridging] ... [TF]:Abstract	... to me, literacy is about communicating effectively ... simply reading and writing does not make one literate ...	1. Sharing information
80	Instructor	Mediation	[Bridging][Steering]:questioning	... hoping we can discuss literacy a little further in our chat; for instance, to what level do we need to be literate in these various domains?	Questioning
83-84	Student9	Topic	[Bridging] ... [TF]:Abstract	... I've always thought of 'literacy' as the ability to read and write also ... but over time I've amended this to include communicating in different contexts ...	1. Sharing information
			Issue	... however, the concept of semiotic systems highlights my narrow definition of 'literacy' as well as the difficulty in pinning it down to reading and writing ...	1. Sharing information

The *sociocultural coding categories* column shows that most of the interactions are sharing information as students build a collective understanding of the term 'literacy'. It is not until Turn 7 that Will indicates he is tackling the complexity of defining 'literacy' as a result of personal experience working in Japan, where he noted the higher value placed on reading and writing as "much more valued" than speaking. The recognition of this culturally influenced notion of literacy as different to his own caused him to rethink his current understanding, thus he re-negotiates a new meaning for literacy due to "coming to Japan" and seeing first-hand how "literacy is somewhat more complex than that [i.e. reading/writing] ...". For Will, the discussion triggered consideration of the difference in

value systems, that is, the influence of context when defining literacy. In light of his own experience such consciousness can bring about changes in perspective (Msg # 43-49), which was also confirmed in the interview. Will is also the first to broach the concept of being 'functionally literate' (Msg # 49) as synonymous with that of 'semiotic approaches', which he elaborates as *being able to carry out the essential activities of daily adult life*. This was a term introduced by the instructor earlier (not included in this table), and was also included in the reading. At Turn 10 Amanda discloses her own emergent understanding (*I have realised*) as she too expresses a shift in her understanding of literacy, particularly when applied to her current teaching situation. The concept of 'semiotic approach' seems to be a challenge Amanda takes up as she attempts to make the term personally meaningful by unpacking it as, *needing to read 'far more than just words'*. This indicates her understanding is as yet, incomplete. However she relates the concept to her classroom of students, and by doing so, 'tests' her current knowledge against the strategies she has noticed her students using when communicating and meaning-making (Msg # 69). Her persistence indicates a motivation for greater understanding which as yet is beyond her. 'Semiotic approach' is also mentioned in the final turn of this discussion, in which the student indicates this as an issue which *highlights my narrow definition* [i.e. of literacy] (Msg # 84).

The oscillation between uptake and (perhaps) avoidance of the term 'semiotic approaches' suggests that although it was an idea of interest, it was one which challenged existing understandings. It could be understood as the beginning of appropriation, argued by Vygotsky as occurring when a new concept is deliberately introduced, and its introduction charts new paths for spontaneous development (1986). Indeed careful mediation of discussion can trigger connections between what is already known and new ideas or circumstances. In this particular excerpt providing something which was appropriately challenging fostered productive discussion in terms of collaboratively constructing a working definition; a progression acknowledged by the instructor as moving away from *a very literal and basic definition* (Msg # 72). Common knowledge was accumulated as students either added more information [+] or contributed to a deeper understanding, made visible giving *extra* information [x], shown in Figure 24:

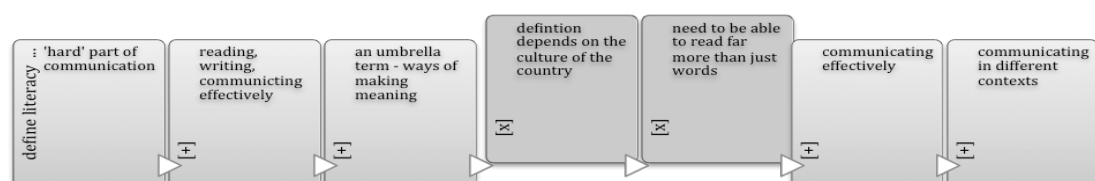


Figure 24: Cumulative contributions to literacy definition

New understandings are certainly the goal in the teaching-learning process, and it is encouraging that the findings so far indicate the effect of deliberate mediation for moving online learners towards this phase. However, these findings would come as a surprise to the instructor who, when asked if the forums have been a place where developing knowledge could be seen, replied, “I would like them to be ... but I don’t think they have been” (Interview, 2011).

That this was not obvious to an involved and experienced instructor may seem curious. However it points to the need for an understanding of the finer points of meaning-making in how language mediated learners’ mental processes while they engaged in discussion. Focus now turns to evidence of new understandings through the linguistic resources learners used. This draws primarily on the SFL resource of expansion relations (or logicosemantic relations). Expansion relations show how conceptual development progresses from additive and uncritical sharing of information towards new understandings, through the linguistic links made between ideas, attitudes or perceptions.

6.9.2.4 Conceptual development and progression in understandings

To capture linguistic evidence for conceptual development in the forum discussion, the spotlight for logicosemantic analysis fell on the 23 forum-chunks which were coded as progression in knowledge. Knowledge progression ranged from *experiencing cognitive conflict* (Level 2) to *agreeing / applying newly constructed knowledge* (Level 5). The first and second columns of Table 22 below show the alignment between the sociocultural coding for knowledge construction (Column 2) with the generic phases of the learning process (Column 1) i.e. of *evaluation (transforming perspective)* and *new understanding* phases. For example, linguistic patterns in the forum-chunks coded as *experiencing cognitive conflict*, enabled categorization of these as evaluations students made which indicated their current perspectives were in a state of transformation. Logicosemantic (or expansion) relations were present in each of these instances. Table 22 shows the distribution of expansion relations in the forum-chunks. Notably, the most frequent of the three relation types (i.e. elaboration, extension, enhancement) were those of *enhancement* (35 instances), that is, relations in which one idea is qualified by another. The significance of enhancing relations is discussed in more detail in the following paragraphs. The lesser-used relations of extension arose when additional information was being provided (often through additives such as *however*, *but*, *yet*, *and*) while *elaboration* was used when clarifying concepts, but occurred infrequently in these forums.

Table 22: Knowledge progression: frequency of expansion relations across the discussions

Phases: Knowledge construction	Coding: Social construction of knowledge levels	coded forum-chunks	Expansion relations within coded forum-chunks		
			Elaboration	Extension	Enhancement
evaluation – transforming perspective	2. Experiencing cognitive conflict	12	4	9	17
new understanding	3. Negotiating meaning	8	-	5	9
	4. Testing / modifying the new proposal	1	-	1	1
	5. Agreeing / applying newly constructed knowledge	2	-	1	8
	Totals:	23	4	16	35

Due to the high representation of *enhancement*, discussion will now focus on this as indicative of students' progression in knowledge development as evolving understandings were made visible through discussion. Relations of enhancement are important linguistic indicators of conceptual development, which identify progression in understandings. This is because expansion of meaning is evident when qualifying concepts in some way through circumstantial relations such as by reference to *time*, *place*, *manner* or *cause* (Eggins, 2004). The following table focuses on the distribution of circumstantial relations across the 23 forum-chunks. This summary shows that students' increasing understanding was most often realized through enhancing relations of *manner* (14 instances) or *cause* (11),

Table 23: Enhancing relations occurring in phases of knowledge construction

Phases: Knowledge construction	Coding: Social construction of knowledge levels	Enhancement relation types				
		cause	manner	time	place	total
evaluation – transforming perspective	2. Experiencing cognitive conflict	8	5	2	2	17
new understanding:	3. Negotiating meaning	3	2	2	2	9
	4. Testing / modifying the new proposal	-	-	1	-	1
	5. Agreeing / applying newly constructed knowledge	-	7	1	-	8
	Totals:	11	14	6	4	35

Progression in understanding was often evident through relations of *cause*, as different concepts were being linked during students' reasoning processes. These can often (but not always) be flagged by conjunctions such as 'therefore' and 'because' etc. Reasoning was most evident when students' changing perspectives were realized through critical evaluations, and demonstrates evolving internal mental development. Factors relating to cause often contributed to students' growing understandings, as shown in the following examples:

Table 24: Enhancing relations of *cause*: agent of knowledge construction

Knowledge construction phase	Student texts: examples	Causal factors
evaluation – transforming perspective:	<p>I believe that a definition for the word 'literacy' depends heavily on the context in which it is used ...</p> <p>'dialogic reflection' and terms like 'stepping back' 'mulling over' gave me a focus in terms of my own reflective role ...</p> <p>I don't fully agree with this concept because many of my students do not have access to a computer at home ...</p> <p>the reading about Media Literacy too gave me much food for thought ...</p> <p>what made me mull over this was ... the majority of schools simply do not have access to the kind of technology we are reading about ...</p>	<p>context/culture as causal factor</p> <p>external cause</p> <p>concept VS reality / personal experience</p> <p>external cause</p> <p>external cause</p>
new understanding:	<p>many of the hardships that I have encountered have given me new respect for the students that I teach and the complexities of literacy itself ...</p> <p>I realise now that it was a very good learning curve because I know as native speakers it is very easy to forget that some students ... have been professionals ... in their own country ...</p>	<p>external cause</p> <p>personal experience contributing to new understanding</p>

Evolving understandings were also exemplified through making some kind of comparison, or when making visible a process of internal logic. This was often achieved through enhancing relations of *manner*. These provide answers to *how? in what way? by what means?* or *like what?* (Eggs, 2004), with examples given in the table below,

Table 25: Enhancing relations of *manner*: processes of internal logic revealed

Knowledge construction phase	Student texts: examples	Comments (↑ = upscaled intensity)
evaluation - transforming perspective:	<p>... living here in Japan ... I am never expected to know or function as other Japanese are ...</p> <p>... I often feel as if I am being judged by a different standard than other native speakers</p> <p>Another important point I noticed was ... it doesn't matter how much you know ... but how well you can pass that on to others ...</p> <p>Cordes' comment ... however true made me wonder whether we are set on a path of inevitable, irreversible polarisation globally ...</p>	<p>Comparison</p> <p>like what? comparison</p> <p>internal logic (repetition - ↑)</p> <p>internal logic</p>
New understanding:	<p>I realised how limited the definition is particularly in my current teaching situation</p> <p>I realise how much more I do this the further into my studies I go ...</p> <p>I find now ... I reflect more deeply on how best to maximise existing knowledge and how best to include myself in the process of discovery ...</p> <p>... it is our responsibility to teach our children how to read images, how to search the internet, how to gather relevant information and how to use different modes of technology ...</p>	<p>Internal logic</p> <p>Internal logic (repetition - ↑)</p> <p>(repetition - ↑)</p>

An important aspect of making conceptual links to new understanding was bringing in relevant prior experience to help make sense of new concepts. This was most often expressed through circumstantial relations of time and place, as the following examples show,

Table 26: Enhancing relations: situating understandings through time and place

Knowledge construction phase	Student texts: examples	Comments
Evaluation:transforming perspective:	Since coming to Japan however, I can see that literacy is somewhat more complex than that ...	Time, Place
	Having lived here for as long as I have I would consider myself to be functionally literate ...	Place, Extent in time (as long as I have)
	Living here in Japan I am never expected to know or function as other Japanese are However I often feel I am being judged by a different standard than other native speakers ...	Place
New understandings:	That's where I realised that my own reflections might sit somewhere between a descriptive and dialogic reflection ...	Place
	I have realised how much more I do that in my classes the further into my studies I go ...	Place
	It wasn't until I came to Japan 13 years ago that I became aware of the complexity of becoming functionally literate in society	Time x 2 (until and 13 years ago) Place
	Furthermore, I can think about different things that might help ... but until I start to experiment and take the new knowledge on board then I haven't really progressed much ...	Time
	I find now when I approach a text/listening task, I am alert to the perspective students bring to the situation and reflect more deeply on how best to bridge the gap	Time

Enhancing relations show moments in knowledge construction where there was a surge in understanding. These moments are also important indicators for the instructor that students are ready to be moved (or return) to more difficult or more abstract concepts. Other indicators of new knowledge came from the students themselves, as self-recognition of newfound understandings, realized through mental processes, such as,

I realised ... / I didn't realise ... / I can see ... / I find now ... / I am alert to ... / I've become aware of ... / I can see.

At this point insight into the effectiveness of collaborative discussion for developing new understandings is drawn from student interview data. Student perspectives help clarify the findings and provide assurances that our analyses and interpretations of the interactions reflected the reality of these discussions. In particular it was important to understand the benefits to learners of mediated discussions. Thus this section finishes with the voices the four interviewed students in their responses to the interview question, *Do you feel you learnt from participating in the discussions?*

Absolutely! There is no doubt that it's an extremely beneficial part of distance learning because I think if this weren't a component we would be working completely in isolation ... and I feel I can sort of add to what they've commented and then, you know, my responses I feel are more comprehensive. So yes, I have learnt a lot (Amanda)

... I'd never really thought about literacy in the broader sense ... how it relates to the second language context ... the interaction really got me thinking about the broader sense of literacy rather than the quite narrow definition of it so the interaction really brought forward, in a sense what it would have done in face-to-face interaction in an actual

classroom ... it made you think about the greater context, which I think is the point, isn't it? (Will)

Yes! ... oh yes! absolutely! Sometimes it can be as clear as anything written down ... I read everyone's ... I think "yeah yeah, I understood that" and then someone else will come and say it a different way and I thought "oh God I missed that point completely" ... its like a classroom ... someone within the group makes a comment and it adds to the conversation and it clarifies, not just for yourself but others. (Paula)

I think its [i.e. interacting on the forums] pretty important, yeah ... like if we didn't have that online forum and the chat session it would have been all the more difficult just wondering if you're on the right track and everything (Mary).

6.10 Conclusion

This study has described in detail the logogenesis of the unfolding texts in the online discussions of a postgraduate TESOL class. This was achieved in a principled and theoretically sound manner, using a combination of two approaches – sociocultural and SFL theories, which enabled the study to identify key teaching and learning moves in online discussion forums and shed light on the complex nature of the mode of asynchronous communications for teaching and learning.

Key to making explicit the effective orchestration of online teaching and learning was through the notion of genre. The genre under focus here realizes the broad cultural purposes of teaching and learning through collaborative discussion, evolving as the pedagogic function of teaching adapts to different circumstances, such as to online contexts. Thus over time, like all genres, online discussion texts have evolved through serving particular social functions in the given culture. As this study has shown, mediated forum discussion contained predictable stages and language features (Martin, 2009; Christie, 2002). In online education, these purposes are shaped by shared understandings motivated by a desire to teach on the part of the teacher, and a desire to learn on the part of the student. Thus if the instructor's teaching moves do not unfold as expected, the students may feel a sense of frustration or incompleteness, and vice versa (Martin, 2009). This study confirms that the social construction of knowledge for online learners will be optimised when support is consistently provided and modelled by a 'present' instructor.

This study has also demonstrated clearly the effectiveness of instructor mediation for facilitating purposeful discussion, and of the importance of this being tempered with interpersonally-focused instruction. Nurturing a positive social space was effective in enticing adult learners to interact, rather than compelling them (Knowles, 1980; Knowles et al., 2012). Mediation of the content through instructing and steering (in conjunction with providing resources) facilitated content-focused discussion, simultaneously with social support which also acknowledged the value of experience, which for adult learners forms an intrinsic link to identity (Knowles et al., 2012). Social support was embedded in the

interpersonal linguistic choices made by the instructor, which fostered mutual understanding at the same time as endorsing the social dimension as a valued component of learning, and was crucial for boosting willingness to contribute (Holzman, 2009). Development of their own communicative skills was assisted by the fact that students had at their disposal the instructor's texts as models, which were influential in nurturing a positive social space through interpersonally focused language (Liu et al., 2007). The effect on discussion was that talk was inclusive and productive, which allowed students a deeper exploration of topics that may not have occurred if interpersonal relations were fragile.

Although the instructor added new information when steering to stimulate broader thinking in the discussion, interestingly she did not enter into discussion of the topic content but relinquished a certain amount of control over the 'end product'. We can only surmise that she saw her role as providing an adequate level of support to engage students in discussion, and that once there, students would have a certain freedom (even if under her watchful guidance). This demarcation highlighted quite clearly defined roles, the instructor functioning in a role of support to foster open-ended discussion, and students in a role of responding to this, very much as learners (albeit, experienced ones), with teaching-learning reflected in distinct generic stages and phases. Clear expectancies are invaluable especially for busy adult learners who are more likely than younger learners to want to know the purpose and potential benefits to learning before undertaking a task (Knowles et al., 2012). Thus clarity helps reduce time and energy 'wasted' over uncertainties, which would be far better channelled into the discussion itself.

This study demonstrated that students responded appropriately as collaborative contributors to group-focused learning with knowledge being socially constructed in the online discussions. Students were intrinsically motivated and their levels of engagement became evident as they felt confident to disclose personal views and opinions (Knowles et al., 2012), with positive interpersonal relations allowing the discussion to move to more critical stances, particularly when reflecting and speculating on one's own behaviour (or others'). This shift opened up the potential for discussion to negotiate transformed perspectives or practices (Wells & Arauz, 2006). Extended discussion of different topics also triggered different connections between already understood concepts - connections which perhaps had not been considered previously. These represented moments of new understandings where collective knowledge contributed to acquisition of individual knowledge.

Finally, the significance of this paper is its holistic approach to examining online teaching *and* learning. Insight has been gained into the impact of instructor mediation on student discussion in which students effectively contributed to building new understandings. Sociocultural perspectives provided a lens for interpreting the teaching-learning process, with Mercer and Howe (2012) arguing that,

one of the distinctive strengths of sociocultural theory is that it explains not only how individuals learn from interaction with others, but how collective understanding is created from interactions amongst individuals (p 13).

When combined with the strength of Systemic Functional Linguistics (SFL) for systematic description of language choices in the process of learning, the potential power of this 'marriage' is the ability to change orientation between meta- and micro-analysis of the teaching-learning relationship – from the broad perspective of teaching *and* learning, to close attention to the unfolding language choices. As learning and interaction are inseparable from their social, historical and cultural contexts, this theoretical combination provided considerable insight into the impact of support provided by the instructor in moving and shaping interactions. The value of 'thinking together' was reflected, as well as insight into knowledge co-constructed in a social space where learning happened in the 'talking aloud'. It is anticipated that these findings will contribute to further work in developing online communicative strategies and guides for instructors and learners to support productive online discussion.

APPENDICES

Communicative Strategies codes	Explanation
Level 1: Sharing/comparing information	
Exchanging ideas, experiences/poling resources, stating opinions	Includes social exchanges, professional, personal, and propositional knowledge and experience, information and web-sites
presenting arguments	to justify an opinion with sources
elaborating	to extend an opinion or argument to give further emphasis
seeking opinions, suggestion	to give and receive support
agreeing	to concur with a statement
posing questions	to ask questions in order to clarify details of statements
Level 2: Experiencing Cognitive Conflict	
counteracting	to have a different perspective
critiquing	to provide a critical assessment of the readings or students' contributions
disagreeing	to object to a statement
clarifying, interpreting meaning	to clarify the source and extent of disagreement
re-stating an argument	to re-state a position, advancing literature or other forms of data to illustrate a point of view
posing challenging questions	to ask questions in order to arrive at an argument
Level 3: Negotiating meaning	
proposing and negotiating new meaning	to show compromise, propose, and negotiate a new understanding
Level 4: Testing and modifying the new proposal	
testing against cognitive schema	to use data in order to test against existing understanding
Level 5: Agreeing and applying the newly constructed knowledge	
having a new and deeper understanding	to undergo a change in one's existing understanding
synthesizing	to summarise the newly constructed knowledge

Appendix F: Social construction of knowledge codes and descriptors (from Hendriks & Maor, 2004)

Agency of instructor to teach through:		Function
Mediation (Instructor)	Instructing: (directing – organising)	to specify (implicitly or explicitly) action(s) expected from the recipient(s)
	Steering: (prompting – focusing – questioning)	to guide/encourage the recipient(s) to engage in the discussion

Bridging	to ease into (or out of) the discussions - an interpersonal way of 'taking/leaving the floor'; social exchanges
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Agency of learners to learn through:

Topic Discussion (Students)	Abstract:	to provide a summary of the post in such a way that encapsulates the point of the post
	Orientation:	to orient the listener / reader in respect to place, time and situation
	Coda:	to make a point about the text as a whole, or a particular aspect – it may be a functional device for returning the verbal perspective to the present moment
	Issue/s:	to present an event/experience in order to make an evaluative point or resolution
	Evaluation:	to reveal the attitude of the contributor to the issue / event / experience
	New understanding	to present new/changed/developed understanding arising from the issue/evaluation being discussed, which is indicated as different to previous understanding

Appendix G: Generic structure of online discussion - functional descriptions of stages and phases
(informed by Gibbons 2006; Hammond & Gibbons, 2001; Mercer, 1995; Eggins & Slade, 1997)

Topic discussion: stages and phases		Frequency
Stages:		
Bridging		51
Task fulfilment		102
Phases in task fulfilment		
Abstract	13	12.7%
Orientation	11	10.8%
Issue	32	31.4%
Coda	8	7.8%
Evaluation	27	26.5%
New understanding	11	10.8%

Appendix H: Frequency of stages and phases during Topic Discussion

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CHAPTER 7

Learning to connect, connecting to
learn: thinking together as an online
learning community

Journal Article Four

FOREWORD TO CHAPTER 7

Chapter 7 is the last of the chapters presented in the format of a journal article, and is a paper in preparation.

The paper integrates the findings from all three case studies as the diversity across the discussion forums is examined. It also foregrounds the interdisciplinary nature of my study. A sociocultural framework of *talk types* (Mercer, 1995; 2000) is used to explore the kinds of interactions that existed in each case, which is reframed to reflect the *online talk types* emerging from my data sets. The contribution of SFL theory to the project is evident in the detailed description of the language choices through which the interactions are enacted. The focus of the paper is on the concept of connectedness in online communications, or reciprocity between participants, as crucial for the online learning experience, in particular for creating a learning community. The interpersonal notion of *attending to* others by responding (the online equivalent of face-to-face ‘listening and responding’) emerged as a significant variation between the cases. With this as the point of departure, the paper investigates the development of mutual understanding and interpersonal connectedness as a precursor for effective online discussion. Where there is a lack of interpersonal connection, discussion can become *non-dialogic*, which has implications for harnessing the benefits of discussion for developing collaborative learning relationships.

ABSTRACT

Learning communities in higher education are a valuable learning medium, offering opportunities for new perspectives to be developed through dialogue, with the ability to transform our identities (who we are and what we do) through changed behaviours and practices (Wenger, 1998). However while dialogue is essential to building a learning community the kind of talk that actually occurs in online discussion can affect engagement in discussion, thus presenting some very real challenges to the successful development of a learning community. To understand what characterises the online environment that supports community building and co-construction of knowledge, this study investigates three online postgraduate TESOL subjects through the asynchronous discussion forums, interviews and a student survey. The study takes an interdisciplinary approach to understanding how interactants engaged in discussion and the types of online talk that occurred, using a combined framework of a sociocultural model of classroom talk with a 'linguistically oriented' model for describing key features of the talk. The *Thinking Together* approach describing a three-part typology of talk: disputational, cumulative, and exploratory (Mercer, 1995; Mercer, 2000; Mercer & Littleton, 2007), was reframed to reflect different 'online talks' that occurred in the adult online learning sites of this study: *non-dialogic online talk*, *online cumulative talk*, and *online exploratory talk*. The findings show that online talk-types are closely connected to how interpersonal relations are fostered through *attending to* others (the online equivalent for 'listening and responding'), in which 'dialogic space' can be opened (or not). The extent to which this occurs is largely dependent on the role played by the instructor. As exploratory-like talk is most conducive to building a community of learners, the usefulness of this study is in providing explicit linguistic knowledge alongside the talk types, which could be used as an instructional tool - readily adapted, and implemented in both design and practice, to adult online learning.

Keywords: online learning community; asynchronous discussion; adult learning; identity; Thinking Together; online talk types; dialogic space; co-construction of knowledge

7.1 Introduction

The exponential growth of e-learning options has largely been driven by the demand for convenience, choice and personalisation of learning, with its relative cost effectiveness also a considerable factor. A Google search for 'online university courses' which produced 92 million results less than three years ago, now exceeds 788 million²⁸. A significant draw card is the flexibility online learning provides, allowing students to manage study around other commitments, as well as providing opportunities as never before, for people to learn alongside a diverse range of others, drawn potentially from around the world. However, the change from physical contexts to virtual has not seen an equivalent change in pedagogical practices, which raises the question of what is appropriate for e-learning (Salmon, 2005). This also highlights one of the paradoxes of online learning, that flexibility also provides as many opportunities *not* to engage with others, as to engage (Hughes, 2007, p 709), and that flexibility has created what has been termed 'read-only participants' or 'lurkers' (Mackness et al., 2010; Rodriguez, 2012). This behaviour does problematise the quality of learning as a transformative process both for the individual as well as for the learning group as lack of active involvement in the group discussion space might have a "profound effect on both collective thinking and individual thinking" (Mercer & Howe, 2012, p 13). In online learning this is most effective when learners participate in mediated discussion of meaningful activities, from which a collective of knowledge is built with greater potential to transform into new understandings. Consequently building a learning community must signal an improvement in the quality of the learning experience.

Dialogue is at the heart of creating and sustaining an online learning community. When effectively mediated, interaction can help reduce feelings of isolation (Rovai, 2002a; Rovai, 2002c), promote an atmosphere of inquiry leading to application of new understandings (Garrison et al., 2000; Garrison & Cleveland-Innes, 2005; Garrison, 2007), and provide opportunities for online participants to negotiate identities which would otherwise remain obscured without some avenue for expression (Ivanič, 1998; Hughes, 2007; Kwon et al., 2010; Delahunty, 2012). These all reflect important aspects of online education, which can impact student motivation (Vonderwell & Zachariah, 2005), student confidence (Herrera et al., 2009), satisfaction levels (Palmer & Holt, 2012), as well as the rate of attrition (Tyler-Smith, 2006).

The perspective of this paper is a sociocultural one, positing language as crucial in the process of learning through interacting with others - that collective understanding

²⁸ as at January 2014

emerges from these interactions (Mercer & Howe, 2012), as they make sense of the world and how to deal with it in practical ways (Halliday & Matthiessen, 1999; Mercer, 2000; Stetsenko, 2004). As a collective activity, pooling individual mental resources allows a level of thinking beyond any individual. Indeed it is only in collective thinking, or “joint intellectual activity” (Mercer, 2000, p 106), that community building in online contexts can be facilitated.

7.1.1 The power of ‘talk’

The formation of a class group for the purpose of learning is in many respects a contrived community. Establishing a community involves a shift that entails more than a group of people joining together around shared learning goals or interests. Mercer (2000) discusses the role of joint intellectual activity in relation to community building and identifies four essential features. Firstly community constructs for itself a history that is embodied in shared experience, as well as in the collective identity that forms when knowledge and community aims become a shared resource. In this climate of cooperation is a responsibility for reciprocal sharing of relevant knowledge and of negotiating appropriate behaviour, which is lastly revealed in the discourse, or ways of meaning that a community assembles over time. These particular ways of talking often signify membership in a community as well as the uniqueness of it. In addition interaction dynamically creates the context (Halliday & Hasan, 1985) with successful communication cultivating a community in which joint understanding can be negotiated and maintained through the mutual effort and commitment of those involved (Mercer, 2000). In this way, the learning community and interaction can be seen in an iterative relationship.

The learning community then is a valuable site for facilitating knowledge building beyond individual capacity. If it is through dialogue (particularly between more- and less-experienced members) that a learning community is created, non-participation in discussions puts the development of community at risk. While ‘read-only’ behaviours may transpire from competing demands on time that adult learners (and instructors) often experience, this paper argues that the benefits of time spent contributing to discussion outweigh any inconvenience. Indeed the richness of diversity in life experiences that adult learners have, assures a range of ‘expertise’ types from which the community may benefit. When these interactions are mediated through instructor-student(s) dialogue in meaningful activities, a transformation of identity (who we are and what we do) is made possible through changed behaviours and practices (Wenger, 1998). This is certainly an important mandate of higher education.

7.2 Adult online learning communities – pie in the sky?

The learning community model is compatible with important aspects of adult learning with opportunities to project ‘whole person’ identities being a crucial consideration (Knowles, 1980; Lave & Wenger, 2005; Knowles et al., 2012). The learning experience can be greatly enhanced for adults when perspectives, personally held values and aspirations gained from accumulated life experience, are acknowledged and valued (Knowles, 1980; Knowles et al., 2012), and when the intrinsic and cultural knowledge adults have acquired, together with the influence of community, religious and social relationships (Bonk & Kim, 1998) are appreciated. A ‘whole person’ approach encompasses all of these influences with the process of collectively working towards academic goals. From a sociocultural perspective learning is intrinsically social requiring the active involvement of both expert and novice in grappling with new concepts. However the reality often is, that because adults are juggling other commitments besides study, involvement in discussion can be an extra ‘burden’ that students may not have the time nor energy to sustain, nor indeed the inclination (Exter et al., 2009). Notwithstanding efforts by educators, the kind of dialogue that fosters learning *and* interpersonal relationships in an online learning group can be elusive, either through inappropriate subject design (Kreijns et al., 2003), requirements for mandatory participation (Arend, 2009), as well as teacher attitudes and an aversion to risk when weighing up perceived benefits of implementing new technologies (Howard, 2013; Kreijns et al., 2013). In addition the *kind* of talk which unfolds in discussions can affect participation, thus presenting some very real challenges to the successful development of a learning community in the online environment.

7.2.1 Implications for developing an online learning community

The learning experience can be greatly enhanced in an environment cultivated by purposeful interactions, which provide the best possible conditions in which new understandings can be mutually negotiated. The inherent diversity brought to the group as a result of adult learners having an array of experience and competence to draw from, is an important part of the engagement practices of learners. Diversity is seen by Wenger as advantageous in working together with homogeneous aspects that render “engagement in practice possible and productive” (1998, p 75). Within this is the “experience of identity” in learning as a transformative process – “a process of becoming ... a certain person, or ... avoid[ing] becoming a certain person” (Wenger, 1998, p 215). That learning has the ability to transform our understanding *and* our being, social, cognitive and personal goals can be achieved in an experience which is community oriented, rather than an individual intellectual exercise. For adult learners this is precisely the kind of orientation needed – one in which identity, as a dynamic social construction, and the diversity which consequently is brought to the community (as also in real-life),

contribute to the range of perspectives that can be negotiated as new understandings. Learning (and identity) becomes visible in the transformation of collective knowledge into new attitudes, values and practices.

While this kind of experience may not ring true for many educators, it is perhaps even less so in online learning situations, where the whole-person approach is made more challenging by the absence of a body in any discussions, and that one's 'performances' are solely dependent on written forms of communicating either in synchronous or asynchronous modalities. Online discussion has the potential therefore to "create knowledge *and* misunderstanding" (Delahunty et al., 2014) largely because of the psychological distance created by physical separation and the lack of immediate clarification and reassurance that usually accompanies face-to-face interaction (Moore, 1993). In a virtual classroom the psychological and communications distance which needs to be traversed can be minimised through discussion, therefore the opportunity to lurk needs to be outweighed by opportunities to engage, although motivation to participate is often driven by individual-focused learning goals (Owens et al., 2009, Lander 2013), assessment weightings (Pelz, 2010), or high visibility of the instructor (Lapadat, 2007).

In response to what seems to be largely 'hit and miss' dialogic experiences in adult online learning, the aim of this paper is understand what characterises the online environment that supports community building and co-construction of knowledge. The study focuses on three online postgraduate TESOL subjects to understand the extent that a learning community developed via online dialogue within the 15-week timeframe of the academic session. As a multi-perspectival approach this involved different sources of data collection, such as discussion forum texts, interviews (instructors and students) and a survey (students).

A useful framework for understanding the kinds of knowledge building talk, which could be used across different data sets, was drawn from the principles of *Thinking Together* (Mercer, 1995; Mercer, 2000; Mercer & Littleton, 2007). This framework and how it was adapted it to reflect the talk types that emerged from our data sets is discussed below.

7.3 Thinking Together (TT) framework

Dialogue is at the core of the *Thinking Together* approach (Mercer, 1995; 2000; Mercer & Littleton, 2007; Mercer & Dawes, 2012). The *TT* approach provides explicit instructions to school students focusing on the development of reasoning skills as a tool for thinking, learning and communicating, with 'ground rules' to nurture a cooperative environment. These skills are then applied in small group problem-solving activities. The effectiveness

of the *77* framework has been widespread, successfully implemented in many different classroom contexts (Wegerif, 2013). From a sociocultural theoretical assumption of cognitive development as inherently social, involving dialogue in the learning process does not foreground “individual discovery and growth” (Mercer, 2000, p 165), but rather dialogue as a resource for thinking together. The transformative role of language in learning is that it serves a social function before it becomes internalised as individual knowledge, skill or understanding. However effective communication is often difficult to achieve, in part because of the assumption that interactants already have adequate skills for reasoning and negotiating. The extensive research done in school classrooms by Mercer, his colleagues and others, was based on a three-part typology of talk (Mercer & Littleton, 2007). These are *disputational* talk, *cumulative* talk and *exploratory* talk. Disputational talk describes the tendency for unproductive disagreement (i.e. *yes it is – not it’s not*) and individual decision making in collaborative activities; cumulative talk describes uncritically building on others’ ideas to avoid “anything disruptive” (Wegerif, 2008, p 356); while exploratory talk describes “a joint form of co-reasoning in language” (Mercer & Littleton, 2007, p 62) and is ideal for maximising the joint construction of new understandings. Exploratory talk is defined as,

... dialogic space - in which ideas can be publicly considered, examined, tested and employed in a way that avoids individualistic and competitive qualities ... it is talk designed for the pursuit of common tasks, the sharing of relevant knowledge, the joint construction of new knowledge and the improvement of understanding (Mercer & Littleton, 2007, p 136).

Because exploratory talk has been shown to lead to “educationally desired outcomes” (Wegerif, 2008, p 357), but is less easily achieved, guidelines for negotiating ground rules for effective communication in small group activities were integral to the process of building these skills (Mercer & Littleton, 2007). These are negotiated around mutual goal-setting, sharing knowledge, challenging ideas, evaluating evidence, considering options and presenting ideas clearly. Exploratory talk is then operationalised around carefully designed group activities in which the explicitly taught skills are practised. It is claimed that explicit skill-teaching will help children achieve better educational outcomes in later years of schooling, with a growing body of research data confirming the effectiveness of this approach in face to face school classrooms (see Pifarré & Klein Staarman, 2011; Wild, 2011). To our knowledge studies so far have focused on school-aged children working in face-to-face group situations or in peer collaborations mediated through CMCs (Soong et al., 2010), with none applying these principles to higher education online learning environments.

7.4 The study

The purpose of this study was to explore the kinds of ‘talk’ that occur in online discussion forums. Close examination of the unfolding interactions would contribute to a better understanding into what might foster or inhibit student engagement in forum interaction, and the effect on building a learning community. To achieve this the study used a qualitative multiple case study design, focusing on the discussion texts. This enabled an in-depth description and interpretation of the each of the cases as the discussions unfolded in an authentic online classroom environment over a timeframe of one academic semester (Lincoln & Guba, 1985; Stake, 2006).

7.4.1 The case studies: the online learning sites

Three online learning sites from a postgraduate TESOL distance education program of an Australian regional university, were the cases in this study. Each has full online delivery with no face-to-face component. As it was important to understand a range of diversity in online learning sites, even within the same institution or program, criteria were developed for choosing cases which reflected different functions for discussion forums in online learning. The essential criteria was that discussion needed to be structured by either the content or the instructor, with additional variables such as high assessment value, high instructor involvement, and low instructor involvement providing scope for suitably diverse cases. The three cases chosen from hereon in will be referred to: Case A (Assessment-driven discussions), Case I (Instructor-driven), and Case S (Student-driven).

7.4.2 The participants and data collection

The participants included the instructors and the students and the study met all ethics requirements. The larger study also included the module designers however this paper draws on data only from the instructors and students. At the time of data collection, student participants were residing in various parts of Australia and around the world, such as Japan, South Africa, Dubai, and Germany. There were a total of five student participants from Case A, five from Case I, and six from Case S, as well as the three instructors for each of these. As most students were also working either fulltime or part-time, different levels of participation were offered in recognition of their time constraints. Full participation for students involved permission to analyse their posts on the discussion forums, an online survey and a 30-45 minute semi-structured interview, with lesser levels of participation to opt out of either the interview and/or the survey. This was to ensure that collection of the discussion forum data, as the main source for this study, was maximised. Each of the instructors consented to discussion forum data being analysed and a 45-60 minute interview. The data collection is summarised in the table below:

Table 27: Data collection summary

Case A: Assessment-driven		Case I: Instructor-driven		Case S: Student-driven	
Pseudonym	Participation level	Pseudonym	Participation level	Pseudonym	Participation level
Instructor A	Full	Instructor I	Full	Instructor S	Full
Ben	Full	Mary	Full	Cathy	Full
Alice	Full	Amanda	Full	Jenny	Full
Vicky	Full	Will	Full	Levi	Full
Wendy	Discussion posts only	Paula	Full	Susan	Discussion posts only
Sharon	Discussion posts + Survey	Beth	Discussion posts + Survey	Rachel	Discussion posts + Survey
				Maralyn	Discussion posts + Survey

Complete data sets for at least four participants from each case yielded considerable data to describe the trajectory of participation patterns. The other sets of partial data each included the discussion texts, which augmented the description of forum interactions. The survey data was supplementary and added to overall student perceptions of their online subject in terms of learning and community, which contributed to understanding the impact of the different factors driving discussion, i.e. assessment, the instructor, or students.

7.4.3 Approach to analysis of the data

In keeping with the purposes of the *Thinking Together (TT)* typology as a frame of reference rather than as an analytical tool (Mercer & Littleton, 2007), the data in this study were approached also from a linguistic theoretical perspective to better understand how meaning-making choices in the language characterised the kinds of talk that occurred. As asynchronous discussions in postgraduate learning are qualitatively different to face-to-face interactions of the classroom, some reframing of the talk types as a lens to understand the online nature of 'talk' was necessary. Some of the differences in discussion dynamics include: varying degrees of knowledge and expertise that adults bring to learning; learners often being time-poor having to juggle multiple responsibilities; discussion momentum being impacted by communicating asynchronously; lacking extra-linguistic meaning making cues for negotiation of ideas; a range of goals for discussion (i.e. agreement is not always the aim); and 'listening' occurring differently in online contexts. Thus to reflect these variables, the talk types were reframed to: *non-dialogic online talk*, *online cumulative talk*, and *online exploratory talk*.

The three-part typology of talk (i.e. *disputational*, *cumulative*, *exploratory*) was used initially to characterise the online environment as created through the discussions before being reframed to reflect the data sets of this study. Reframing involved several readings of all the discussion forum texts, which ranged from a corpus size of around 12,000

words (Cases I and S) to over 73,000 words (Case A). The process was firstly to identify where interaction was occurring, either as a threaded discussion where responses were attached and became clustered together ('interaction clusters' or ICs), or when connections to others were made through referring to them or their idea(s). Part of the process included managing the data through a system of numbering, particularly to ensure that interaction clusters remained intact, and in chronological order to preserve the interactions as they unfolded. Once this was achieved, Mercer's indicators for each kind of talk (see Thinking Together website, 2013) were used as a basic guide during readings, with sections of discussion forum text categorised and checked against the guide for accuracy. This process involved several iterations.

The next phase of analysis was guided by the following procedure to investigate what characterised the online environment that supports community building and co-construction of knowledge. Once discussion texts were identified as representative of particular types of online talk, the next step was to apply systematic linguistic analysis using various resources of SFL. SFL can contribute to understanding the complexities of online discussion through the range of descriptive categories available in the model. As discussion unfolds SFL can identify how learners are construing their experience while simultaneously enacting interpersonal relations (discussed further in 7.4.4). These analyses then drew on supplementary data sources (interviews and survey) for more in-depth understandings. The survey²⁹ was likert-style with space for qualitative comments, and was administered online through SurveyMonkey®. It focused on two important aspects of online learning: community and learning. The interview questions were designed for deeper exploration of community and learning. The procedure of phases in analysis is shown in the diagram below,

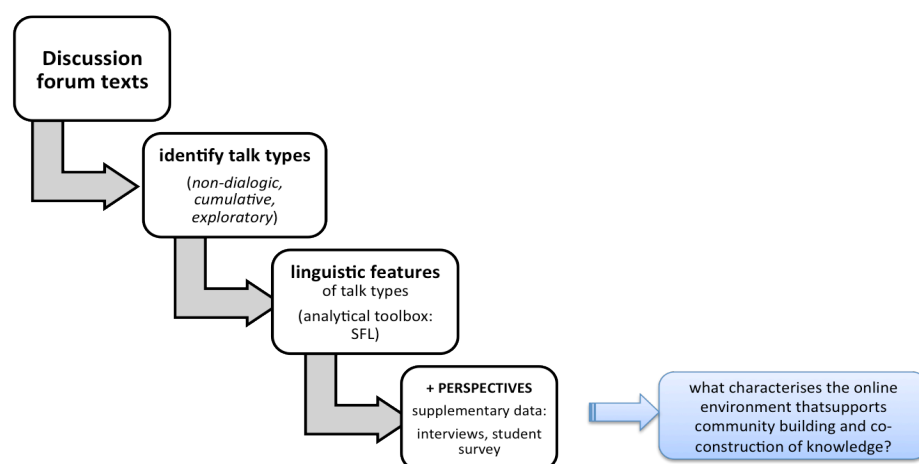


Figure 25: Methodology of data analysis

²⁹ Survey was based on Rovai's 'Classroom Community Scale' (2002b)

As an iterative process, the indicators of online talk types representative across each case were refined to reflect our data sets. This process was guided firstly by the broad descriptions provided by Mercer and Littleton (2007, pp 58-59): disputational talk – in which participants work to keep their identities separate; cumulative talk – in which individual differences of judgement or perception are minimised through building uncritical, non-competitive and constructive relationships; and exploratory talk – in which participants are interested in jointly and rationally making sense. These were then refined to reflect our data sets (such as, due to the absence of disagreement, and to conceptualising what constituted ‘listening’ in online discussions). The re-framed talk types thus became: *non-dialogic online talk* (disengaged, non/under-cooperative, individualistic contributions); *online cumulative talk* (building uncritically on others’ ideas with an emphasis on interpersonal relations to maintain the status quo); and *online exploratory talk* (grappling with new concepts / unsettling of ideas, reasoning, self-critiquing and challenging).

7.4.4 Data analysis using the resources of SFL

The following analytical resources from Systemic Functional Linguistics (Halliday & Matthiessen, 2004; Martin & White, 2005) were used in the analysis.

7.4.4.1 Appraisal: enacting intersubjectivity, identity and community

Appraisal is an interpersonal resource in the SFL model, which is concerned with how participants enact their sociocultural roles, and of particular interest for this study, how this is managed over several moves in an online discussion. Appraisal analysis is concerned with how participants use language to make evaluations, adopt stances, construct textual personas and manage interpersonal and positionings and relationships (White, 2005).

There are three domains within Appraisal – attitude, engagement and graduation. Attitude identifies language choices which express affect (feelings, emotional states), judgements (of moral, ethical behaviours and social values) or appreciation (evaluation and reaction to things). Engagement involves the extent to which other voices are included or excluded, and how solidarity and social positionings are negotiated in dialogue. As a basic premise of SFL that language is a system of choices, of particular interest for this study are Engagement resources which also encompass *disengagement*, enabling the nature of ‘dialogic space’ to be better understood especially as this is an aspect crucial for co-constructing knowledge. Finally Graduation, or the strength of what is being said can be turned up or toned down, or the focus sharpened or blurred. In the absence of usual face-to-face cues graduation resources become more important in online meaning-making as a way of projecting a sense of self and of values (Eggins & Slade, 1997;

Martin & White, 2005; Martin & Rose, 2007). All three domains involve language choices through which individuals enact their roles as learners, professionals and teachers-in-preparation, and in doing so construct a learning community.

7.4.4.2 Building knowledge through dialogue: lexical and logical relations

Lexical relations describe the level of cohesion across ideas and topics, that is, how ideas unfolding in a text can be tracked, in order to see how meanings are co-constructed. Co-constructing knowledge in an online discussion in which a number of participants contribute, requires a good level of cohesion to be effective. This includes language choices indicating joint focus within a topic, and that learners are making sense of ideas or considering alternatives in the process of building common understandings. Analysis of lexical relations, or *chains* of linked ideas, involves tracking the frequency of lexical items unfolding in discussion and the relations built up between them, known as relations of repetition (indicating joint focus), relations of contrast (for considering alternatives), and relations of synonymy in which ideas are recast in order to make sense of them. Cohesion in online discussions through these various relations help create continuity in the flow of ideas, and improve the potential for discussion to move towards constructing new understandings (see Chapter 6 - Delahunty, Jones & Verenikina, 2014).

Logicosemantic relations, on the other hand, are able to identify language which is knowledge constructing, that is, when conceptual links are made across related topics through expanding the meaning (expansion). These relations occur as elaboration (relations of restating or clarifying), extension (relations of adding or varying), or enhancement (relations of semantic development). Language indicating ideas are being elaborated or extended upon is typical in discussions accumulating common knowledge. Enhancing relations are important linguistic indicators of conceptual development and are evidence of new understandings being made, and will be found in exploratory talk. This is because relations of enhancement are used when expanding meaning by qualifying it in some way such as by reference to changing perspectives over time, place, manner or cause.

Lexical relations are concerned with tracking ideas, appearing across the discussion texts like chains of words; related because they are repeated, or because they have similar or contrasting meanings. On the other hand, logicosemantic relations are resources for describing relations *between* ideas, indicating how understandings are expanded and hence how new knowledge is developing (or has developed). These relations occur when ideas are *linked* through adding more information (or varying it), adding new information, or providing extra information.

7.5 The findings and discussion

The interest of this study is on cultivating knowledge constructing talk within a community of learners, which was piqued by Mercer and Littleton's (2007) notion of 'dialogic space' where 'everybody listens actively'. The findings will first explore the nature of *attending to* others across the three cases which is proposed here as one of the factors having a significant impact on whether knowledge constructing talk occurs. The characteristics of knowledge building in online talk are then discussed with some insight given into the linguistic features differentiating online cumulative and online exploratory talk. Perspectives from interview and survey data on salient aspects of participating in discussion provide further insights and are closely linked to the role of the instructor, interpersonal connections among participants and the purpose of discussion.

7.5.1 'Listening' to others in online interactions

In online discussions 'listening' takes on a different, but no less important, role in how discussion progresses towards developing interpersonal relations in a climate which facilitates knowledge building. In a face-to-face situation discussion necessarily involves *both* talking and listening to others so that ideas can be integrated and remain relevant to the topic being discussed (Wise et al., 2013). The following excerpt illustrates how listening occurs in online discussion. This is a short interaction between a student and two others (Case I). This discussion topic entitled 'Health & Welfare literacy' was initiated by Will, who was living in Japan at the time of the earthquake and tsunami disaster in 2011. The interpersonal tone is set through naming (**bolded**) or informal language (**bolded**). The connectedness that occurs as acknowledgement of ideas taken up by respondents (**bold italicised**) are shown by arrows. This paper argues that if dialogic space is needed for discussion, then 'evidence' of listening is a key element in encouraging learners to become involved in the kind of talk that has most potential to lead to new understandings.

Will 'Health & Welfare Literacy'	Response 1: from Instructor I	Response 2: from Paula	Will responds to Paula
Here are a few things that I came across ... Here in Japan, people are encouraged by public disaster preparedness drills ... please have a look at the <u>Time magazine article</u> : ... as well as the <u>YouTube video on the site</u> ...	Thank you so much, Will, for sharing <u>this appropriately named concept of 'disaster literacy'</u> although it is so unfortunate that so many of us may well need it!	Hi Will, Glad to hear some news of you. <u>I was wondering if you would be directly or indirectly affected by everything that's happened in Japan.</u>	Thanks Paula, I think that <u>everyone here in Japan will be affected</u> in one way or another. <u>I'm glad that you found the information</u>
This topic may not pertain directly to some of the literacy issues we have discussed in this course but considering the catastrophic loss of life that has just occurred here in Japan due to the earthquake and ensuing tsunami, I think that we all would be well informed to take a <u>second look at our concept of 'disaster literacy' and how it relates to us and our context.</u>	After looking at <u>the links</u> you have provided, <u>I think the topic does relate to directly to second language literacy issues</u> : clearly readers need to be aware of which method of response is the life-saving one depending on where they are in the world, and in which language this information is provided	That's <u>interesting and useful information you've posted.</u> I hope people there will soon get their lives back.	<u>useful</u> but hope that you never have to put it to use. Good luck with the remainder of the course and thanks for your comment! Cheers, Will

Excerpt 1: 'Listening' demonstrated through responding (Case I)

As Excerpt 1 shows, 'talking' in asynchronous discussion has characteristics of both spoken *and* written language and often bears characteristics of informality typical of tutorial discussion but the written format can dictate a more measured and drafted response (Halliday 1985). *Attending to* others in online discussion then, involves reading *and* writing which are indicators assuming both listening and responding stances and a willingness to continue interacting. *Attending to* can be indicated by naming (specific: *Hi Paula*; or general: *Hello everyone*), referring to others or others' ideas, attaching a response directly to another's post, which can then lead to building on what has already been contributed. Further discussion of the concept of *attending to* is found in 7.5.3.

7.5.2 'Let me introduce myself' – establishing interpersonal relations

For a learning community to develop, group members need to have a sense of working towards common goals, as well as a sense of being engaged with others and their ideas. Attention to interpersonal relations can enhance the development of solidarity through alignments among participants. Introduction activities in an online learning environment are an important pedagogic tool as these dialogically create a 'history' on which to base future interactions (Mercer & Littleton, 2007; Xie & Ke, 2011). The introductions in each of the three cases provided the opportunity for students to express a keenness to work together towards common goals of learning, often expressed as anticipation³⁰ such as 'I'm looking forward to ...'. When eagerness is emphasized the illocutionary force of this was raised through the resource of Graduation³¹, indicated by underlining in the examples below (and indicated thus throughout the paper). The role that others would

³⁰ From the Appraisal system of Attitude (**Affect** - emotions)

³¹ From the Appraisal system of Graduation (raising / lowering the force)

play (*you, you all*) as part of this experience was also often acknowledged, and suggests a willingness for dialogue (i.e. of creating a dialogic space³²), as shown in examples below,

Attitude expressed through emotion of anticipation / inclination [Affect / Graduation]	Anticipating sociality - opening up dialogic space [Engagement / Graduation]
Looking forward to getting to know you all
I'm <u>very much</u> looking forward to <u>chatting</u> with you all
	... <u>communicating</u> with you
	... <u>learning a lot</u> with you and from you !

Excerpt 2: Anticipating sociality: introductory posts³³

It was also noted that in early communications, students frequently made self-evaluations as they constructed their professional identities and negotiated their social positionings. These evaluations were more often positive of their own capabilities or determination in persevering with something. However evoking a sense of modesty was also common, done so through negative self-evaluation. Some examples illustrating how students negotiated this space were:

To evaluate one's capabilities indirectly through positive judgement³⁴ of self in terms of capabilities:

This year I **have a job that's a little unusual**. I'll be homeschooling a Year 4 boy ...
I was expected to assist teachers in improving the speaking and listening skills ...
 ... and I **have only had** my children for **three days**, **however it is easy to see** in class discussions and writing tasks that there is a range of abilities within my classroom.

and through negative judgement of capabilities:

I **stumbled upon** this forum while **trying to** navigate my way around the Janison site
 I am a **late starter** and so I don't have a lot of teaching experience
 I'm just **getting my head around** this subject **so am a bit slow** to get this posted

To evaluate one's own persistence or determination positively is also often indirect, evoking some kind of alignment with others through evoking admiration³⁵, which is often expressed together with the sense of satisfaction this brings³⁶:

I ... will **enjoy** [satisfaction] **studying from my bed** (i.e. after an injury)

³² From the Appraisal system of **Engagement** (engaging with other voices)

³³ Legend for colour coding used in Appraisal analysis can be found in Appendix I

³⁴ From the Appraisal system of Attitude (**Judgement** – of character / behaviour)

³⁵ From the Appraisal system of Attitude (**Judgement** of character / behaviour)

³⁶ From the Appraisal system of Attitude (**Affect** – emotions)

I absolutely love [satisfaction] my job even though I sort of stumbled into it [-ve] without much thought. Now I would like to [+ve] make a career of it ...³⁷

and through negative evaluation of one's determination:

... the necessity for me to learn Arabic was not urgent (even though it would have been really beneficial and respectful to have done so). The smattering of spoken Arabic that I have learned [indirect] is always appreciated by Arabic speakers, but in no way am I functionally literate in the language [direct]

I have only learnt to speak another language that has a different script (Thai) and that was hard enough. I didn't even attempt to learn the alphabet even though we lived there for two years [indirect]

Downplaying expertise or experience, as the above examples show, may be interpreted as interpersonal manoeuvres for the purpose of creating some kind of social alignment with others. Such interpretation relies on recipients to 'read between the lines', particularly when self-evaluations are indirectly stated. In other words, meaning is indirect for the purpose of evoking similar attitudinal reactions from their readers .

The introductory forums in each of the three online cases were all very similar to the above examples, in that students revealed feelings of anticipation towards the learning experience (Affect), and that self-evaluations, both positive and negative (Judgement), were a strategy participants used to negotiate social positionings and interpersonal alignments. As the previous examples show, attempts to align were often indirect and relied on their readers to understand the invoked meaning, that is the tacit nature of 'rules' for interaction. After this point however, the similarities between the three cases dispersed as other variables came into play for forum involvement (over and above study workload and other demands on time). The variables included assessment value on participation, discussion purposes and instructor involvement in the discussions. The table below summarises these variables:

Table 28: Variables impacting online discussion forums

Variables	Case A (Assessment-driven)	Case I (Instructor-driven)	Case S (Student-only zone)
Assessment Weighting ³⁸	40%	5%	0%
Discussion design	3-4 tasks driving each discussion	Instructor driving and mediating discussion	Directives to post incorporated as tasks in topic guides
Discussion purposes ³⁹	facilitating learning and developing understandings around set tasks	tutorial-like discussion around tutor-initiated topics	'student-only' zone
Instructor forum 'presence' ⁴⁰	minimal but 'watching' due to high assessment value	Actively present	minimal

³⁷ negative judgement of capacity (*sort of stumbled into it*) gives extra weight to the positive spin on determination (*Now I would like to ...*)

³⁸ Taken from Subject Guides

³⁹ Taken from instructor interviews (Instructor A 2010, Instructors I and S, 2011)

Taking into consideration how assessment value, discussion purposes and instructor involvement varied in each of the three cases, the findings now turn to how (and the extent to which) interactants developed solidarity as a group through the notion of *attending to*.

7.5.3 *Attending to* others: 'listening' and responding

Fostering interpersonal relations requires a degree of reciprocity in interaction. In this study the notion of *attending to* others became apparent as acknowledgements between interactants. This was often through naming such as vocatives and pronominal reference. Naming occurred as greetings such as, *Hi Sharon* or *Hey guys*. Brief exclamatory responses also contributed to fostering sociality, such as positive judgement of capabilities, such as *Brava Vicky!*, or *You're a star!*. However these rarely invited further responses and as such were "minimally negotiatory as they simply agree[d] to the negotiation going ahead" (Eggins & Slade, 1997, p 204).

When naming was integrated into the meaning of the text this may have encouraged reciprocity which was more than simply a 'nod' of acknowledgement,. As a communicative strategy, it can show that each individual's contribution is valued, and that group identity is being negotiated (Martin & White, 2005). Responding inclusively is more likely to "provide supportive encouragement for the speaker to take another turn" (Eggins & Slade, 1997, p 204, and opens the dialogic space⁴¹. Inclusive language used by Instructor I was often modeled by the students, as shown in the following examples,

Great to hear from **you, Vera, Paula and Michelle**. It's interesting that **most of you** regard literacy as more than simply reading and writing ... (Instructor I)

I was interested in both **Will and Paula's** accounts. Fascinating insights (Amanda, student)

Your experience was very interesting, **Will**. Hats off to **you** for being so persistent! (Paula, student)

Where *attending to* others was atypical the opportunities for fostering interpersonal relations were also reduced. In the student-driven forums of Case S there was only one instance of *attending to*, by one student who was impressed by what another had shared and expressed her admiration thus:,,

Hi Susan , I just wanted to send you a quick email to say that I really enjoyed reading the description of your ESL students I really admire you for making the effort to learn more about your students' needs ... thanks again, Cathy	Engagement Emotion indicating satisfaction emphasised ⁴² Admiration for Susan's resolve emphasised ⁴³
--	--

⁴⁰ Taken from instructor interviews and discussion forum data

⁴¹ i.e. from the Appraisal system of **Engagement**

⁴² Appraisal resource of Attitude: **Affect**: satisfaction; Graduation: Force **raised**

⁴³ Appraisal resource of **Judgement**: **social esteem**: tenacity; Graduation: Force **raised**

Excerpt 3: Attempt to establish interpersonal relations – from Case S

Despite the effort towards some interpersonal alignment with Susan, Cathy's effusive response was not reciprocated. In other words she was not *attended to* by Susan, nor by anyone else. Although the instructor did respond to Susan, it was less to open space for dialogue and more to direct her to some resources. In the instructor's response there was no acknowledgement of Cathy's input. Thus Cathy's efforts were left 'hanging' due to the response of 'silence', a move which removed any possibility of further discussion. Thus silence rendered Cathy's contribution as 'disengaged' (Eggins & Slade, 1997). This affected Cathy's attitude towards the discussions and in the interview she expressed disappointment at the lack of reciprocity, as well as being critical of herself for a lack of determination:

I posted a comment saying ... 'oh that's fantastic, I really admire that' ... and then didn't hear anything. And I just thought 'OK' ... yeah, there didn't seem to be interaction *between* students. So ... you know, I didn't *really* bother *too much more after that*⁴⁴.

The development of solidarity and group identity also contributes to fostering sociality (Martin & White, 2005). This was often indicated in the discussions by pronouns such as *we*, *us*, *our* (and conversely exclusivity, in *they*, *them*, *their*). In Case A pronomial use by one student, Wendy, seemed to serve her role as affirming teacher identities, for example:

... and I agree that they do definitely help *us as teachers* to at least partially understand *our students*. *We* must be aware of all the factors that impact on their learning

It makes me wonder though, when *we* are actually teaching overseas and *we* are the 'other' how are *we* going to feel? Do you think *our students* will generalise *us*?

In Case I pronouns were used predominantly by the instructor. As the following examples show, this allowed her to align herself as a group member, and to help foster a collegial group-focused environment for discussion,

We can perhaps explore *our* digital literacy with an online Chat session ... this is one of the ways in which *we* can see how literacy is changing ...

... maybe *others* might like to transfer discussion regarding technology and literacy to Forum Topic Four: Teaching writing. *We* could discuss how best to support *our* students in developing their writing and whether technology can help or hinder *us* with this?

Unlike the other two cases, Case S rarely used inclusive language. In the single instance where 'we' was used, this was quasi-inclusive, as the student referred to teacher identity generally ('*we* want the best for all students') rather than alluding to some kind of solidarity within the group.

⁴⁴ As above, but negative *self-judgement* of her resolve to persevere (i.e. tenacity)

Opening up dialogic space can also be encouraged by thanking, complimenting or by agreeing with a proposal. An interactant can attribute or acknowledge⁴⁵ another's idea through agreement, which signifies a categoric alignment with a given position and "thereby bid[s] to align [others] with this point of view" (Martin & White, 2005, p 116). Interpersonal moves to align by agreement were strengthened by the addition of complimenting and thanking. The following examples show how ideas were acknowledged,

Agreeing with other students' ideas gave recognition to them as well as an interpersonal move towards social alignment:

I agree with your reaction about how the content is highly Westernised

To me, literacy is also more than just reading and writing too

Complimenting other students was through showing appreciation⁴⁶ of their idea or experience, or through making a positive judgement⁴⁷ of their character or behaviour:

I think [interpersonal metaphor] your idea of studying the literature of a particular language is a great way to learn about their culture ...

I was so impressed with the table you created. It must have taken you some time to develop this criteria ...

Thanking was an interpersonal resource for acknowledging a contribution made to the discussion, which can align people socially and encourage reciprocal interactions. Thanking was most often done by the instructor in Case I (but rarely in Cases A and S). Thanking was often in conjunction with positive evaluation, such as in the following example where Instructor I comments on the usefulness of a student's experience,

Thank you for this valuable contribution to our discussion, Paula⁴⁸ ! Lack of fluency and/or literacy in the lingua franca is definitely not helpful for one's self-esteem.

In Case A responding to others was part of the assessment criteria, however not all students referred to others and their ideas. Often, and especially in the first four forum discussions, referring to others' ideas was usually as explicit agreement ('I agree') with some instances of complimenting, but rarely as thanking. On the other hand complimenting and thanking were more often represented in Case I interactions and were largely modeled by the instructor. While agreeing with others did occur, it was rarely as explicit 'I agree' posts, but rather more often found in longer exchanges. In these exchanges there was implicit linking to what others had contributed which demonstrated the interface of interpersonal and experiential meanings, as in the following excerpt. This

⁴⁵ From the Appraisal resource of Engagement

⁴⁶ From the Appraisal system of Appreciation which evaluates the qualities of 'things'

⁴⁷ i.e. from the Appraisal system of Judgement

⁴⁸ From the Appraisal system of Engagement

excerpt is taken from an interaction cluster between three students where one learner contrasts her own experience to the struggles experienced by the other two (the main points being responded to in **bold**, with Appraisal analysis colour coding also included):

<p>... I remember my first day in Japan; after being deposited in my flat by my new boss, it was up to me to make my way to the supermarket to buy food ... I was shocked by what I found. I was not able to read the labels of packing of any of the food products ... nor was I able to read the signs ... Needless to say I ended up eating pasta for about 3 months ..." (Will)</p> <p>I have only learnt to speak another language that has a different script (Thai) and that was hard enough. I didn't even attempt to learn the alphabet even though we lived there for two years ... Regarding being judged on literacy competence; I remember losing quite a bit of confidence and self-esteem while living in Thailand ..." (Paula)</p>	→	<p>I was really interested in both Will's and Paula's accounts. Fascinating insights. I admire you both for your efforts to learn ... My experiences in Oman and Dubai have been slightly different [to Will's and Paula's] in that English is widely used, seen, heard on the radio and TV and taught in schools and at university. As a result the necessity for me to learn Arabic was not urgent ..." (Amanda)</p>
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Excerpt 4: Acknowledging others in a longer interaction exchange – from Case I

In Case S, apart from the attempt by Cathy to connect with Susan, there was no uptake of others' ideas nor interaction between group members, and therefore no indication that others' ideas had been attended to. Thus notion of *attending to* and its alternative – *not attending to* - are worthy of closer consideration in understanding the potential of reciprocity in online teaching and learning.

7.5.4 *Not attending to others*

In keeping with SFL theory that meaning-making is a system of choices, the choice made *not to attend to* others or their ideas can help to explain how the discussion forums unfolded differently in each of the three cases. The table following summarises the patterns of *attending to* / *not attending to*:

Table 29: Summary of *attending to* / *not attending to* patterns: all cases

Case	No. of initiated discussion posts	No. of posts attended to	No. of posts not attended to
Case A	157	67 (43%)	90 (57%)
Case I	18	17 (94%)	1 (6%)
Case S	31	3 (10%)	28 (90%)

For students in Case A the high assessment factor was driving the discussion. This generated a high volume of posting in each forum with a total of 157 discussion posts initiated. Of these, 67 posts were *attended to* and 90 *not attended to*, in other words, 57% of the contributions made were left 'hanging' or disengaged. This could be attributable to time constraints often beleaguering adult learners who did not have time to respond to every post. The sheer volume of posts could also contribute to cognitive or information

overload making it difficult to respond in depth (Vonderwell & Zachariah, 2005). In addition there was an imbalance between some highly active participants⁴⁹ and less or minimally active others. This contributed to a moderate pattern of disengagement across the life of Case A forums. Case I forums differed in that only one post was *not attended to* and reflects minimal patterns of disengagement. The instructor had an active presence in the forums which may have also encouraged students to participate. In Case S where the discussion forums were a 'student-only zone' there was overwhelming 'silence' as 90% of contributions were *not attended to*. Case S forum discussion was thus characterised by a high level of disengagement.

Disengagement can also occur if a response is misunderstood or if perceived as inappropriate. This occurred in a later discussion forum of Case A where students were perhaps becoming more confident to make evaluations or to challenge what someone else had posted. The excerpt below shows the response Alice received from Wendy which she perceived as personal criticism:

Forum 8 Alice: ... the classroom has no audio visual resources so the teacher introduces the topics, reads the transcript of the story then the students complete the exercises individually ... and the correct answers are written up for the students to self-check ...	→	Wendy response to Alice: Hi Alice, Surely the teacher could organise a means by which to obtain the technology in the classroom to show the BTN segments. Back in the old days, before interactive whiteboards and laptops, teachers used to wheel big old televisions from classroom to classroom ... In saying that though [+], as a teacher you often just have to make do with what you've got as there is no other option
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Excerpt 5: A misdirected/misinterpreted challenge

In the interview Alice reflected on her feelings towards this as unfair criticism of a recount of an experience which was beyond her control. This was despite Wendy's attempt to mitigate (*in saying that though ...*) and had a lingering effect on Alice,

.. at one point I related something that happens in the AMEP classroom that I observe, and ... the comment that someone else put on was almost critical and, I mean I can't criticise another teacher – hey I'm not even a teacher myself anyway – and certainly from a distance I don't know how you can do that. So that disappointed me a little bit.

This highlights some of the difficulties that can arise in asynchronous communications where the permanency of the text, a lack of effective communicative strategies (particularly when critiquing/challenging) and the lack of immediacy for clarification may result in misunderstandings, which can lead to a level of community disengagement. Disengagement has the effect of reducing opportunities for dialogue which in turn, has implications for identity formation, for nurturing a community in which mutual

⁴⁹ In Case A: 78% of the response activity came from two students,

understandings can be freely exchanged, and hence for learning as social activity. The distinctions of choice made between each of the three cases in regard to *attending to* patterns of engagement are important if we are to understand what strategies are effective for opening dialogic space most conducive to developing a learning community.

7.5.5 Non-dialogic online talk: 'Clayton's' discussion

A consequence of disengaged participation in discussion was a phenomena we describe as non-dialogic online talk, or what we could lightheartedly refer to as a 'Clayton's'⁵⁰ discussion'. Non-dialogic online talk was coined in place of disputational talk. Disputational talk is explained in the typology of talk types as when a proposition is at stake and is resolved by focus on rightness or wrongness (such as *yes-it-is!* / *no-it-isn't!* exchanges), described as "a single self-position to be defended against others" (Wegerif, 2008, p 356). In this study there was no evidence of students engaging in the exchanges characteristic of disputational talk. In fact, there was little evidence that students were overtly unwilling to take on another person's point of view nor that they were making reassertions of their own opinions (Mercer, 2000, p 97). Also the likelihood is that adult learners will not 'waste' time in unproductive short assertion-challenge exchanges, typical of classroom disputational talk.

However non-dialogic online talk serves to describe individual-oriented behaviours which were evident on the discussion forums, that is, that participants seemed to be working individually, perhaps "to keep their identities separate and to protect their individuality" (Mercer, 2000, p 102). This was most evident in Cases S and A which showed a higher incidence of *not attending to* with contributions focused on fulfilling task requirements rather than opening up discussion. Individual-oriented activity was most evident in Case S, in which the discussion space was used to post individual tasks, rather than to *discuss*. While there was no interaction evident between students, some of those interviewed commented that the those tasks posted by others were useful for checking they were on the 'right track', an oft-mentioned concern in the student interviews, ,

Sometimes if someone had posted their reflections or their responses to certain readings, you could see 'OK I'm on the right track', or 'my opinion is not the same as that person's – I'd better go back check and see if I am on the right track'

While the usefulness of this cannot be denied, this 'read-only' practice created what could be best described as a paradox because Case S online forum was actually functioning as a non-dialogic discussion space. A practice which emphasised this was that many

⁵⁰ This is derived from marketing for Claytons, a non-alcoholic drink resembling whisky, promoted as 'the drink you have when you're not having a drink'. In the context of this paper this meaning is played with to highlight the paradox of the 'non-dialogic talk' – 'the discussion you have when you're not having a discussion'

students uploaded task responses as attachments to the forums (rather making them available in the discussion space) which required extra effort of opening, and/or saving for viewing. These individual stand-alone contributions did not encourage active engagement in further discussion.

Some of these 'non-dialogic' features were also evident in Case A, particularly as there was a wide range of activity levels (see Appendix J for a summary of Case A response patterns). As already mentioned, Case A discussions were driven by assessment, potentially adding an element of competitiveness to the atmosphere. One student in this case completed all the set tasks but responded to no-one, while another tended to combine all tasks for the particular forum topic into one post. This meant that each of his contributions were often 1,000+ words each and were written in an academic style more attune to a written assignment⁵¹ with extensive use of technical terms, quotes and in-text citations. For this student the audience was the instructor rather than his peers,

I was probably thinking ultimately it's the tutor who's the intended audience and in the back of mind, it's being assessed and being evaluated. (Ben, Case A)

This could be best explained as misunderstanding the functional variation needed (or register) for an online discussion (Halliday, 1985). If the intended social purpose is to impress the instructor, the language choices will be different to that of peer interactions, as it foregrounds assessment over the social purposes of discussion. The register of a discussion text reflects the changing nature of how we communicate, or the *genre* of online discussion (Martin & Rose, 2008). Ben's posts attracted very few responses, indicating that a mismatch in genre of online discussion will be counter-productive to group discussion.

The high level of engagement in the forums of Case I negated non-dialogic online talk as all contributions (except one) were attended to. Acknowledgement given by others effectively encouraged discussion and helped create a cooperative environment. The role of the instructor as an active participant was integral, to the positive atmosphere through modeling inclusivity in her own texts.

7.5.6 Bridging: interpersonal lead-in to knowledge constructing talk

As already discussed, *attending to* others can be an influential precursor for fostering the interactions necessary for developing a learning community. It is important to note that in this study launching into talk which was knowledge constructing rarely occurred in isolation from an interpersonal 'lead in' or bridging stage. Bridging tended to occur in the

language as agreeing with or complimenting *before* adding one's own perspective, which moved beyond 'giving a nod' to others or their ideas. In the online discussions positive but uncritical building on others' ideas was often flagged by attention to fostering positive interpersonal relations in a way which opens dialogic space⁵². As previously mentioned agreeing with was either explicitly stated (*I agree*) or , or implied such as,

This is something I **also** found quite shocking ...

I **think** [interpersonal metaphor] I **would have felt the same** in your position!

Giving compliments was another interpersonal manoeuvre which often functioned as a bridging stage. This was either through giving a positive value to the other person's idea (appreciation of its social value⁵³), or expressed as admiration for the person (judgement of their capabilities or tenacity⁵⁴), such as,

Complimenting [evaluating another students' capabilities]:	... leading to expansion of their idea(s)
I think your idea of studying the literature of a particular language is a great way to learn about their culture ...	I know when I studied foreign languages ...
I like how you phrased it 'perceivable cultural patterns' ...	We must be aware of all the factors that impact on their learning
I think your interest in Indian culture and respect for cultural differences will help you out a lot ...	Have you done any research on what to expect, or anything that you might find particularly confronting? This is always a useful step to take ...
You <u>certainly</u> do a very thorough analysis. Good for you!	I always look at materials as a whole - perhaps this is not correct ...
You <u>certainly</u> leave me for dead ...	
Complimenting [evaluating another student's resolve]:	
Hats off to you for being <u>so</u> persistent. ...	These are my thoughts on the subject ...
I admire you <u>both</u> for your efforts to learn ...	My experiences in Oman and Dubai have been slightly different ...

Excerpt 6: Giving compliments: interpersonal lead-in to discussion

Agreeing with others was the more frequent interpersonal bridging strategy used by students in Case A online cumulative talk, while expressing admiration for others or their ideas was the interpersonal manoeuvre of choice in Case I.

The following sections focus on the online talk which was knowledge constructing. Working within sociocultural tradition, Mercer has offered different ways of looking at knowledge constructing talk, known as cumulative talk and exploratory talk, which provide a way of understanding nuances in the different kinds of knowledge being dialogically constructed in these online learning environments.

⁵² Appraisal system of Engagement: dialogic expansion: **attribute**

⁵³ Appraisal system of **Appreciation**

⁵⁴ Appraisal system of **Judgement**: social esteem

7.5.7 Online cumulative talk

Cumulative talk indicates the accumulation of ideas that occurs as interactants build uncritically on each others' ideas (Mercer & Littleton, 2007; Wegerif, 2008). In online environments building uncritically on other's ideas is also important for creating positive interpersonal relations. Engaging in online cumulative talk shows that participants are taking up opportunities to share personal information, including values and experience, which also encode identities (Ivanič, 1998). Online cumulative talk requires deliberate orchestration, either by the instructor or by assessment. This became apparent through the lack of focused or sustained interactions in the student-only driven forums of Case S. As this reduced the potential for jointly accumulating knowledge the texts produced on the forums could not be categorised as online cumulative talk. The absence of the instructor and hence, the lack of contingent scaffolding, contributed to how deeply interaction could harness students' growing knowledge as a collaborative activity. For this reason, while Case S will not be included in the following discussion, it does illustrate how the potential for jointly building knowledge was *not* realised.

7.5.7.1 Joint focus in online cumulative talk

A joint focus on the topic is crucial to engaging in effective online cumulative talk. Joint focus is evident when ideas are repeated throughout the interactions, when they are contrasted with another idea, or when meaning is unpacked to make sense or ideas recast⁵⁵. These dialogic moves can be understood through their lexical relations (of repetition, contrast, and synonymy), in which the flow of common ideas are organised in lexical 'chains' between interactants, and across discussions. When lexical chains are broken this indicates that ideas are not being continued. Joint focus can also be seen when interactants make conceptual links between ideas. These related links indicate that knowledge is being collaboratively constructed, and, can be understood through relations of expansion. Expansion relations⁵⁶ include extending⁵⁷ an idea through addition or variation [+], or elaborating [=]⁵⁸ through restatement (Martin, 1992; Eggins, 2004).

Relations of various topics can provide students with assurance they are 'on the right track' as well as indicating focused discussion. In Case A for example one of the discussion tasks required students to discuss their 'views on language and culture'. Although these were single posts rather than interaction clusters, each turn added to or

⁵⁵ Repetition, contrast and synonymy are known as lexical relations – where meaning is co-constructed through relations of repetition indicating joint focus on a topic, synonymy indicating recasting of ideas, and contrast indicating alternatives

⁵⁶ From the SFL resource of Logicosemantic relations

⁵⁷ Relations of extension (addition or variation) are indicated by [+]

⁵⁸ Relations of elaboration are indicated by [=]

elaborated on the ideas previously posted. For example, repetition of *cultural norms* (or *culture*) by each interactant indicated sustained discussion on this as the topic in focus, with alternatives considered, such as *cultural norms that are not English* and *cultural norms of English* as contrasting relations. Relations of synonymy were apparent when students were making sense of something by finding a similar meaning, or unpacking the concept so that it has some relevance to their current understanding. An example of unpacking meaning occurred when one student related the idea of *learning cultural norms* to her experience of being in France and to knowing some ‘schoolgirl’ French. In other words learning cultural norms was understood as synonymous with knowing the language. The diagram below shows how joint focus is created through repetition of an idea which forms a ‘lexical chain’ throughout the duration of a discussion (in this case *cultural norms*), with related offshoots to the main topic (i.e. relations of contrast and synonymy). Each of these contributed to the common knowledge being built.

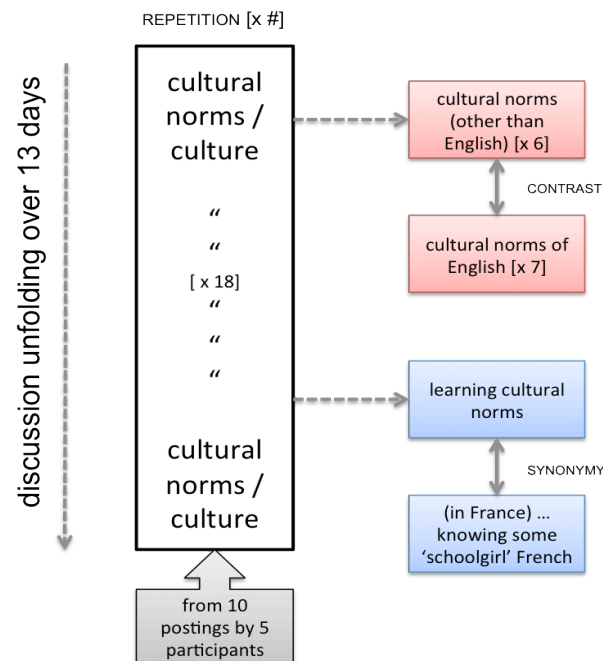


Figure 26: Sustained joint discussion through lexical relations

Relations of contrast are likely to emerge during discussion of controversial topic. This occurred in Case A in a reflection task in which students were asked to respond to some readings, one of which presented some contentious ideas on English as a global language. Repetition of lexis such as *Pennycook*, *Graddol*, *myth of English*, *English*, *Germany* confirmed joint focus on the content of the various readings while simultaneously relations of contrast between these ‘chains’ of repetition highlighted students’ diverse reactions. For example, Pennycook’s *abrasive tone* is contrasted with Graddol being *immensely readable and objective* as students responded critically to the readings. Some examples are provided below (with a complete analysis in Appendix K),

	Reactions to Pennycook reading (negative)	Reactions to Graddoll's reading (positive)
Vicky:	Pennycook was just too contemptuous for me ...	
Wendy:	Pennycook was rather extreme ...	Graddoll's perspective is both logical and interesting
Alice:	the Pennycook article was really confusing	Graddoll is extremely readable

Excerpt 7: Contrasting reactions to two readings

Progression in collaborative knowledge construction can also be tracked in the lexical relations made. In one of the first discussion tasks in Case I students were asked to define their present understandings of 'literacy'. Repetition indicated their initial definitions were similar to each other (i.e. repetition of literacy skills such as *reading*, *writing*, *speaking*, *communicating* etc). The term was further unpacked as students added to their basic definitions through relations of synonymy. For example basic skill-focused definitions became more generalised to a definition of literacy which was jointly constructed as:

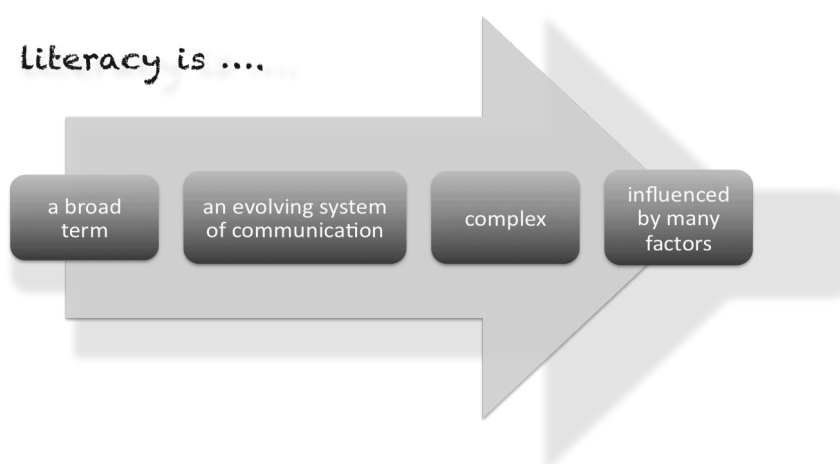


Figure 27: Literacy definition co-constructed through unpacking meaning – Case I

The instructor's comment that students had moved on 'from a very basic literal definition' was largely achieved through relations of synonymy to which they jointly contributed (see Appendix L for full analysis).

7.5.7.2 Extending ideas

Proposing a new perspective also contributes to building common knowledge. This occurs when ideas are extended through either addition or variation [+], and is often signalled by terms such as *and*, *also*, *but*, *however*, *alternatively* etc. As suggested earlier in the findings many variations to others' ideas are 'softened' interpersonally first by *agreeing with* or using interpersonal metaphor (such as *I think*) before proposing something new, as the following excerpts indicate,

I agree with you about the overbearing graphics and colours in the New Interchange text, however [+] I think this

can be a positive element for learners who find workbooks/sheets dull and boring (Wendy)

I **agree with** your reaction about how the content is highly Westernised. I think the issue **is not only that** [+] (**as you said**) some of the elements such as jazz music or restaurant dining may be irrelevant or uninteresting to the students, **but** [+] there is also the possibility that the material is culturally offensive also (Vicky)

... This is probably where it's good to be a newbie. As I haven't taught before, I think that I would be very open to fitting in with whatever approach was required ... (Alice)

→ Wendy response to Alice

Hi Alice, I have **similar thoughts** about 'fitting in with whatever approach was required'. Regardless of where you teach it is necessary to follow the institutional norms or requirements. **In saying that though** [+], teachers are generally encouraged to bring their own flavour or style to the classroom also. I think that a happy balance can be easily achieved in most situations

Excerpt 8: Proposing a different perspective with an interpersonal focus

Elaborating relations occur when one interactant restates or summarises what other participants have said, and also signals alignment with the idea. Often, although not always, elaboration was evident towards the end of an exchange, such as

<p>I'm not sure what place Toh's questions would have in an expat teachers' classroom. In some instances it may be appropriate for local English teachers to pose questions such as this, but is it ever really a teacher's place to introduce and encourage language policy debate in the classroom? (Alice)</p> <p>(After extended discussion on different approaches to understanding culture)</p>	<p>[=]</p> <p>[=]</p>	<p>Restating/clarifying/summarising:</p> <p>I agree with you about Toh's article - encouraging such debates seems to be stepping out of the teacher's role a little bit ... (Wendy)</p> <p>... In other words I guess I'm reiterating the same as most of the previous responses, a balance between the 2 approaches is required in the classroom (Alice)</p>
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Excerpt 9: Elaborating relations to extend ideas

From these findings online cumulative talk requires purposeful discussion of clearly defined topics either driven by assessment, as in Case A, or driven by the instructor as in Case I. The main characteristics of online cumulative talk is a "relatively uncritical acceptance of what partners say" (Mercer, 2000, p 33) which helps build content knowledge, but also important for "continuity of shared experience" (Mercer, 1995, p 33). Much of the talk in the online discussions reflected this, and as echoed by one student,

... [the comments I made] ... were supportive, positive comments ... rather than evaluative. I didn't think that was my place to do that (Interview, 2010)

This may be a reflection of asynchronous discussions where group members are not likely to have met physically, therefore there may be more of a need to mitigate any possibility of misunderstanding. However, in order to construct new understandings, talk needs to move beyond cumulative (but uncritical) talk, into what Mercer considers the more educationally valuable terrain of exploratory talk.

7.5.8 Online exploratory talk

Exploratory talk is described by Mercer as capturing an ideal heuristic model of discussion which foregrounds reasoning in the process of constructing knowledge, where “all participants are striving, in a committed but unselfish manner, to establish the best solution” (Mercer, 2000, p 173). The findings thus far have discussed at length the impact of the interpersonal in cultivating an environment which fosters the potential for learning through interaction. With this established our focus is now directed to cognitive indicators of exploratory talk which provide insight into how new understandings are developed in the talk, and which distinguish online exploratory talk from cumulative.

Building knowledge dialogically can be recognised when conceptual links are made between ideas that move beyond additive information. Here, expansion (logicosemantic) relations render visible the conceptual links made between ideas. The expansion relation of enhancement [x]⁵⁹ expands meaning by qualifying it in some way such as by reference to time, place, manner or cause (Eggins, 2004). Relations of enhancement show a more sophisticated way of making conceptual links. The kinds of extending and elaborating relations which were found in online exploratory talk differed to those in cumulative talk (discussed in Section 7.5.7.2) as they signalled that students are grappling with new ideas or perspectives. Enhancing relations often signal a ‘surge’ in knowledge building (Jones, 2005; 2010). In other words ideas are reframed into new contexts.

7.5.8.1 Grappling with new concepts

The beginnings of new understandings may be understood when some kind of discord, or cognitive conflict is exhibited linguistically (Hendriks & Maor, 2004). This always occurred after a stretch of cumulative talk. In one discussion in Case I on information technology and its impact in the classroom, common knowledge was accumulated over a number of contributions when ideas or perspectives were added to [+]. The final contribution to this revealed a level of discord or cognitive conflict as the student proposed and then justified a different perspective. This was realized in the text as enhancing relations [x] of manner and cause. The process of grappling with or reasoning provided below in Excerpt 10 (complete analysis in Appendix M) shows the conceptual links which were made between the literature, the preceding contributions to discussion, and the student’s own experience. The reality of her own context enabled her to question the validity of the reading (x of *manner*), which in turn acted as an external agent causing her to wonder

⁵⁹ Enhancing relations are indicated by [x]

and mull over [x of *cause*] what had been previously discussed, in relation to the reality of South African schools.

<p>[=] (the trend – restatement of ideas in preceding posts)</p> <p>[x] (<i>manner</i>) [x] (<i>cause</i>)</p> <p>[x] (<i>cause</i>)</p>	<p>I read your observations with great interest and of course agree that <i>the trend</i> [=] seems almost inevitable. The reading about Media Literacy, too, gave much food for thought. Cordes' comment ... <i>however true, made me wonder</i> whether we are set on a path of inevitable, irreversible polarisation, globally. What <i>made me mull over this</i>, is that in South Africa, there is a small percentage of schools ... that enjoy access to the kind of technology we are reading about. The majority of schools ... simply do not have this technology ..." (Amanda)</p>
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Excerpt 10: Enhancing relations showing cognitive conflict – Case I Forum 10

Reasoning skills, which are claimed to be important in exploratory talk (Mercer, 2000; Wegerif, 2008), may come to light through engaging with a contentious topic. In Case A, the topic of stereotyping triggered by a reading provided a good example of how discussion can harness reasoning skills. This topic elicited personally held values of the interactants, revealed as negative evaluation of stereotyping and of those who stereotype as well as revealing a strong group alignment with the notion that 'TESOL teachers should not stereotype' (see Delahunty, 2012). While the majority of students were critical of the practice of stereotyping, one student attempted to grapple with the concept through trying to understand the logic behind this tendency. Grappling through a process of reasoning was realized linguistically in relations of enhancement [x of *cause*] as well as through elaborating the meaning of stereotyping by reframing [=], shown in the excerpt below, (see Appendix N for full analysis),

<p>[x] <i>cause</i></p> <p>[=] elaboration</p>	<p>We may stereotype our learners partly <i>because</i> [x of <i>cause</i>] it helps us reduce an unmanageable reality to a manageable label [=]. When our students fail to interact in the way we expect them to, we readily explain their behaviour in terms of culture and cultural stereotypes. A critical awareness of the complex nature of cultural understanding and the problematic aspect of our investigative tools may help us open ourselves to alternative meanings and possibilities, thereby restraining our rush to stereotype the Other (Wendy)</p>
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Excerpt 11: Enhancing relation as part of a reasoning process - Case A Forum 3

Despite indications that the discussion was now moving towards developing some kind of new understanding, this 'invitation' was not taken up by subsequent contributors and discussion reverted to additive comments which were focused on a response to the reading. This reflects the unsettling of ideas, which have potential to expose gaps in understanding. Reverting to additive responses may be a less threatening way to contribute rather than pursuing unknown territory, or to 'save face', as expressed by one student,

... some of the theory type things we were covering ... I just couldn't understand it, so I was really conscious of 'he's gonna think me a dope'

If these represent productive 'struggles' in the process of acquiring knowledge, students need to be kept engaged in the process. Sustaining student engagement in discussion

requires expert mediation so that learners become increasingly confident to voice these struggles via the public domain of discussion forums.

7.5.8.2 Challenging ideas to explore new understandings

Challenging others' ideas in ways which create opportunities to construct knowledge publicly seems to be difficult in online discussions. In Case I, despite the high level of engagement and rapport that appears to exist, challenges were few and tended to be evaluations of ideas in readings rather than ideas proposed by other group members, for example,

I'm **not sure I agree** with this quote from the review of Schon's work ...

In the discussions of Case A challenging other's ideas occurred in later forums. This is understandable as it is over time that trust develops and students become comfortable enough with each other to give some evaluation of others' ideas. An additional motivation was that critical engagement in discussion was part of the assessment value, made clear by the instructor at the beginning of the course,

The subject is aimed at raising your awareness in and ability to engage with critical discussions of applied linguistics as applied to the English language and the teaching and learning of it.

Similar to Case I, students in Case A were generally more inclined to critique ideas external to the group, such as from readings or experiences. Any challenges to ideas presented by other group members were responded to with mixed results (as discussed in '*Not attending to others*' section), and successful challenge exchanges were mainly between two students – Vicky and Wendy. Notably it was revealed in the interview, that they had previously been classmates. This helped to explain the level of rapport, and thus why they could 'safely' evaluate the other's position and justify their own. Excerpt 12 shows the evaluations and justifications between Wendy and Vicky were made through adversative additions [+]. Wendy's justification of her changing conceptual position over time is emphasised through the enhancing relation [x] *of time*, (particularly if we imagine her response without it).

Forum 6 Wendy response to Vicky: Hi Vicky ... I think that this is a really important point. As a teacher wishing to travel abroad to teach English, I would no doubt want to present the language culture of my background to students. In fact I would be really excited about it. In saying this [+] it is necessary to firstly understand the culture ... before 'jumping in'	→ Vicky: Yes I agree with you, it would definitely be interesting to share your cultural perspective with students [=] ... however [+], I think that one of the main challenges would be ...
Forum 11 Vicky response to Wendy: Hi Wendy, I was just reading your additions and I thought number 2 'Extroverts are more successful language learners' was a generalisation that I have come across a lot ... there seems to be this assumption	→ Wendy: Hi Vicky, well when [x] I wrote that it was not something that I definitely agreed with but [+] rather something that I think is partially true ... although [+] the more vocal students I taught ...

that learners who are more assertive and vocal in class will learn language more successfully ... however [+] it has been my recent experience that more introverted students have also been more successful in language learning ...	generally had a higher English proficiency level ...
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Excerpt 12: Successful challenges

7.5.8.3 Changing perspectives

In online exploratory talk we would expect to find interactants jointly constructing new knowledge through self-critiques or questioning the validity of their own assumptions or those of others, but from a “relatively detached perspective” (Mercer, 2000, p 103). This was achieved through a combination of interpersonal and experiential choices as learners construed their experience simultaneously with their attitudes. In Case I this often occurred as self-critiques of their teaching practice, realized linguistically as negative judgements of their capabilities, such as,

I could recognise them in the samples **but** [+] **I wonder if I could recognise** the same characteristics in my own reflective writing

I **haven't been very successful** in taking my students to the level of 'dialogic' reflection, and terms like 'stepping back', 'mulling over' and 'looking at possible alternatives' gave me a focus.

or experiences in which mental processes indicated that students themselves had recognised a new understanding,

But [+] I **have realised** [mental process] **how limited** [x of manner] the definition is, **particularly** in my current teaching position

I **have realised** [mental process] **how much more** [x of manner] I do that in my classes ... for example **before I'd studied** [x of time] the course on teaching English in international contexts, **my understanding of the complexity of the role of culture was superficial**

I **somehow assumed** [mental process] that this ... would be happening in many schools but [+] **once I left** [x of time] I **remember** [mental process] **being surprised to discover** that it was localised to my area.

7.5.8.4 Summarising the online knowledge constructing talk: Cases A and I

From the findings presented we make some inferences about the kind of knowledge constructing talk evident in the online discussion forums. In Case A, even though the discussions generated 73,000+ words, it was mostly sharing information through *online cumulative talk* exhibited through the characteristics of additive contributions. Discussion moved occasionally into *online exploratory talk* as indicated when grappling with a way of explaining the tendency to stereotype in a series of interactions which were stimulated by a controversial topic, as well as in the challenging-justifying moves between Vicky and Wendy. The potential is undoubtedly there for discussion to move into more exploratory type talk, however is lacking 'expert' intervention to steer in this direction. While the discussions in Case I were a much smaller corpus (approximately 13,000 words), proportionally, there was more evidence of *online exploratory talk*, or coming to new

understandings. This was a result of mediation to firstly build common knowledge and then move on to co-constructing new knowledge, despite the absence of challenge-justify moves. There was more evidence of grappling with new concepts and of changing perspectives and practices, exemplified in the following response,

I find **now** [x of time] that when I approach a text/listening exercise/topic, I am **alert to** [mental process] the perspective students bring to the situation, and reflect more deeply on **how best** [x of manner] to bridge the gap ...

7.5.9 Linguistic characteristics of the online talk types

The insight gained from the findings has allowed the online talk types to be mapped to linguistic realizations. This provides a clearer understanding of the ways that interactants make meaning during online discussions, noting that there is a close link between the extent of attending to others and the kind of online talk that resulted. The table below summarises the characteristics and typical linguistic descriptions of each of the online talk types, and accounts for the enacting of interpersonal relationships as well as construal of knowledge.

Table 30: Online talk types and linguistic descriptions

Online talk types	Characterised by	Examples:	Linguistic descriptions
Non-dialogic online talk: disengaged; non-cooperative, individualistic contributions	Not attending to others	silence	Disengagement (i.e. reduced opportunities for interactivity)
	Inappropriate attending to	criticism – personal or misinterpreted (see Excerpt 4)	
	'Stand-alone' contributions	lengthy, academic-like language, no links to others' posts or their ideas	Closing down dialogic space to other voices ⁶⁰ e.g. mismatch in audience/genre of online <i>discussion</i>
Online cumulative talk: building uncritically on others' ideas, with an emphasis on interpersonal	Attending to (creating a positive environment for dialogue)	naming : Hi Sharon Great to hear from you Paula inclusive language: <i>we us our</i>	Opening dialogic space to other voices ⁶¹
	Agreeing with	looking forward to chatting with you all I agree, It appeared to me also	Emotion showing social inclination ⁶² Acknowledging – to open dialogic space ⁶³
	Complimenting	Hats off to you for being so persistent	Judging behaviour i.e. admiration of a person's resolve ⁶⁴
		I was so impressed by the table you created	Judging behaviour i.e. admiration of a person's capabilities ⁶⁵

⁶⁰ Engagement: monogloss

⁶¹ Engagement: heterogloss: dialogic expansion

⁶² Appraisal: Affect

⁶³ Engagement: heterogloss: attribute

⁶⁴ Judgement: social esteem: tenacity

⁶⁵ Judgement: social esteem: capacity

Online talk types	Characterised by	Examples:	Linguistic descriptions
	Thanking	Thank you for this valuable contribution to our discussion	Opening dialogic space Evaluating the quality of something ⁶⁶
	Jointly accumulating knowledge	Joint focus on topics / content by repeating words/ideas Jointly unpacking meaning: literacy is a broad term / ... / complex ... Presenting an alternative position: Pennycook's abrasive tone -- Graddol is immensely readable and objective Adding to others' ideas Restatement: e.g. stereotyping = a manageable label	Ideas/words related through repetition Ideas/words related through similarity Ideas/words related through contrast Expanding meaning by linking related ideas - i.e. adding / varying [+] Expanding meaning by adding more information to related ideas i.e. restating or summarising [=]
	Evaluating	Positive evaluation of others: You certainly leave me for dead ... / Hats off to you for being so persistent ... / I really like all of the comments and suggestions you've made ...	Judging behaviour i.e. admiration of a person's resolve, capabilities
Online exploratory talk: grappling with new concepts, reasoning, critiquing, challenging	Attending to	see Online cumulative talk	see Online cumulative talk
	Agreeing with		
	Complimenting	(see Excerpt 11)	Expanding meaning by linking related ideas i.e. by varying (i.e. adversative) [+] Expanding meaning by giving extra information to related ideas [x] Judging behaviour i.e. admiration/criticism of a person's resolve, capabilities Evaluating the social value of something or its social authenticity / validity
	Thanking		
	Challenging others/ideas	self-critique: I haven't been very successful in ... evaluation of others' ideas: Yes I agree with you, however ...	Mental process Expanding meaning by giving extra information to related ideas: [x] (i.e. of time) [x] (of manner) [x] (of cause)
	Evaluating		
	Expressing new understandings	self-recognition of new understanding: <i>I have realised</i> ... developed over time: when I wrote that it was not something I definitely agreed with of manner: I have realised how much more I do that ... of cause: Cordes' comment ... made me wonder	

⁶⁶ Appreciation: valuation

7.6 'Discussing discussion'

We can use 'cumulative', 'disputational' and 'exploratory' as concepts for discussing 'discussion' (Mercer, 2000, p 102)

The three-part typology of talk is a useful model for holding up to actual conversations (Mercer, 2000, p 33), and as we have done in this study, to actual online discussions. This has enabled us to identify different characteristics in the language choices of the interactants, which enable 'discussion of the discussions' in terms of the indicators characterising each talk type. In addition, mapping knowledge constructing talks of online cumulative and exploratory to linguistic choices provides much needed insight into the murky space we call 'online discussion forums'. Not only do we have a linguistic-based understanding of language choices which open up 'dialogic space', as an interpersonal prerequisite for online exploratory talk, but having a meta-language from SFL allows us to 'discuss discussion' in a systematic way, particularly when identifying language choices in knowledge constructing talk as it unfolds in the life of a subject. Differentiating linguistic choices made in cumulative and exploratory talk also sheds light on how the quality of dialogue may be enhanced, and as well as enhancing the space within which the dialogue is constructed (Wegerif, 2013), which is crucial in any learning situation (Alexander, 2008). In addition, explicit awareness of the purposes and characteristics of different online talk types, may prove beneficial for time-poor educators involved in design and mediation of online discussions.

To return to the aim of the paper – to understand what characterises the online environment that supports community building and co-construction of knowledge – the combined framework of talk types and the linguistic analysis has allowed us to make some informed interpretations about this in relation to each of the three cases.

Non-dialogic online talk is characterised as being Individually-focused (or standalone) contributions showing disengagement between participants, either through not attending to others (such as 'silence' of a no-response), inappropriateness (as interpreted by the recipient), or monologic-like posts (such as academic essay-style posts) which hinder discussion. Each of these contribute to closing dialogic space, therefore making interpersonal connections and learning through discussion extremely difficult to achieve. Individual focus is conceivably a reflection on the nature of adult learning which often assumes a high level of autonomy and self-direction toward learning goals. It may also reflect the nature of asynchronous discussion itself which can be 'rehearsed' and is not bound by time but which requires interactants to check-in regularly.

Online cumulative talk represented the greater proportion of talk in the assessment-driven discussions of Case A and the instructor-driven discussions of Case I. Discussion which

adds ideas, varies or considers alternatives is an important stage in the learning process. Mutual sharing of knowledge requires a level of cooperation built through non-disruptive interpersonal manoeuvres which nurtures an atmosphere of trust. This is important for developing a community, as the following sentiment expresses,

... it's like a classroom because you know when the lecturer's out the front there, talking away and then someone within the group makes a comment and then it adds to the conversation and it might steer away a little bit from what the lecturer was meaning but it clarifies, not just for yourself but others (Paula, Case I student).

Online exploratory talk is more likely to flourish in learning environments where interactions are cooperative, collaborative, and purposeful. Exploratory talk was more evident in Case I discussions, and to a proportionally lesser extent in Case A. Even though more difficult to achieve, the results are encouraging, particularly as the talk type approach was applied to these discussion forums after they had unfolded in authentic learning situations. In other words the research neither interfered with nor disrupted the natural flow of discussion. The findings indicate that new understandings often emerged from ideas built as shared, cumulative talk, which then progressed when learners made conceptual links across related ideas via a process of reasoning or internal logic. Self-reflection also encourages discussion of changing perspectives, often expressed as self-realisations of oneself or one's practice. As discussed earlier, making challenges and justifying one's position was not frequent and seemed to be more difficult to do successfully in online discussions, unless there is a high level of mutual understanding. Ideally, the learning climate should be one in which questions can be asked and relevant information given, where participants feel comfortable to challenge the ideas of another with justification given for such challenge, and where ideas are treated with respect and contributions build on what has gone on before (Mercer, 2000; Mercer & Littleton, 2007; Mercer & Dawes, 2012).

There is much scope for development of what would be the 'ideal' online knowledge constructing talk, as this data has not exhausted by any means the extent of what constitutes online exploratory talk. However awareness of and implementation of guidelines for knowledge constructing talk could dramatically change the online learning experience for both student and instructor. Case I stands out as the more 'nurtured' learning community as the involvement of the instructor in mediating discussion helped students move beyond cumulative and into exploratory talk (Delahunty et al., 2014).

7.7 Concluding comments and recommendations

The notion of exploratory talk offers much to aim for in building knowledge and community in online learning. While it is rightly argued that children may not be exposed to this kind of discussion outside of school (Mercer & Sams, 2006), the same could be said of postgraduate learners, particularly if there has been a long break in academic study, and even more so when using an online mode of communication. An additional consideration is that postgraduates' life experiences also include those of past learning, which may prejudice their attitudes towards some activities when re-entering education (Holt & Crocker, 2000; Golding & Foley, 2011; Rule & Modipa, 2012). These experiences affect confidence levels when participating in open discussion or collaborative group work, or in using new technologies. Equally, previous negative experiences can be the precursor for new resolve for an improved experience this time around. It is proposed then that the benefits of explicit instruction in effective discussion techniques would not be lost on a group of adult learners as it cannot be assumed that all postgraduates are confident in joint reasoning or that they are able to give and receive constructive criticism, particularly in discussion which is mediated through asynchronous technologies, in which meaning-making is regulated by the written mode.

It should not be assumed that online students, nor indeed all instructors, have the communicative skills needed for effective online discussion, which involves simultaneously enacting interpersonal relationships in knowledge building talk. The paper highlights a need for explicit theoretically informed protocols and online discussion guides, which are focused on the "expanding the capacity to participate in dialogue" (Wegerif, 2013, p 5) as an important principle of good teaching practice. As the findings have emphasised this involves skills in interpersonal manoeuvring to create a climate for cooperative learning to flourish.

Finally, Mercer's *Thinking Together* principles applied to online discussion is a useful tool for building a learning community and can be applied in both design and practice. As Salmon (2005) argues technology alone does not provide a natural progression to change pedagogical practices and face-to-face pedagogy is not directly transferable to the online context. In fact for online learning to be effective and beneficial requires instructors must intervene, as our three cases have shown. In this there needs to be appropriate pedagogical input, monitoring and "sensitive handling of the process over time by trained online tutors" (Salmon, 2005, p 203) and the technology itself cannot be a substitute for this kind of support. The position of this paper is that as dialogue and collaboration are essential to learning in face-to-face situations, these should also be central elements in online learning. However, because effective discussion is often elusive in online situations, an explicit description of conditions under which effective and

less effective interaction occurs will make a worthwhile contribution to online pedagogy, with a particular focus on postgraduate learners. Indeed an understanding of what the language choices reveal as interactants attend to each other's postings to create 'dialogic space' will make a valid contribution to designing, mediating and participating in online discussion. It is anticipated that the insight gained from using this approach will inform ongoing developments in online instructional practices and design to facilitate and improve the quality and efficiency of knowledge building discussion.

APPENDICES

Colour-codes used for Appraisal systems/subsystems

Appraisal systems	Subsystems	Colour-codes
Affect	dis/inclination; un/happiness; dis/satisfaction; in/security	pink
Judgement	social esteem (personal admiration / criticism)	blue
	social sanction (moral praise / condemnation)	teal
Appreciation	aesthetic: reaction; composition non-aesthetic: valuation	green
Engagement	heteroglossic	red
	dialogic expansion: attribute	orange
Graduation	force (upscale/downscale) (intensification; quantification)	Force ↑ ↓
	Focus (sharpen; soften)	Focus ↑ ↓

Symbols and colour-codes used for Logicosemantic relations

			Symbol / colour-codes
Logicosemantic relations	addition / variation		[+]
	elaboration		[=]
	enhancement	time	[x] time
		manner	[x] manner
		cause	[x] cause

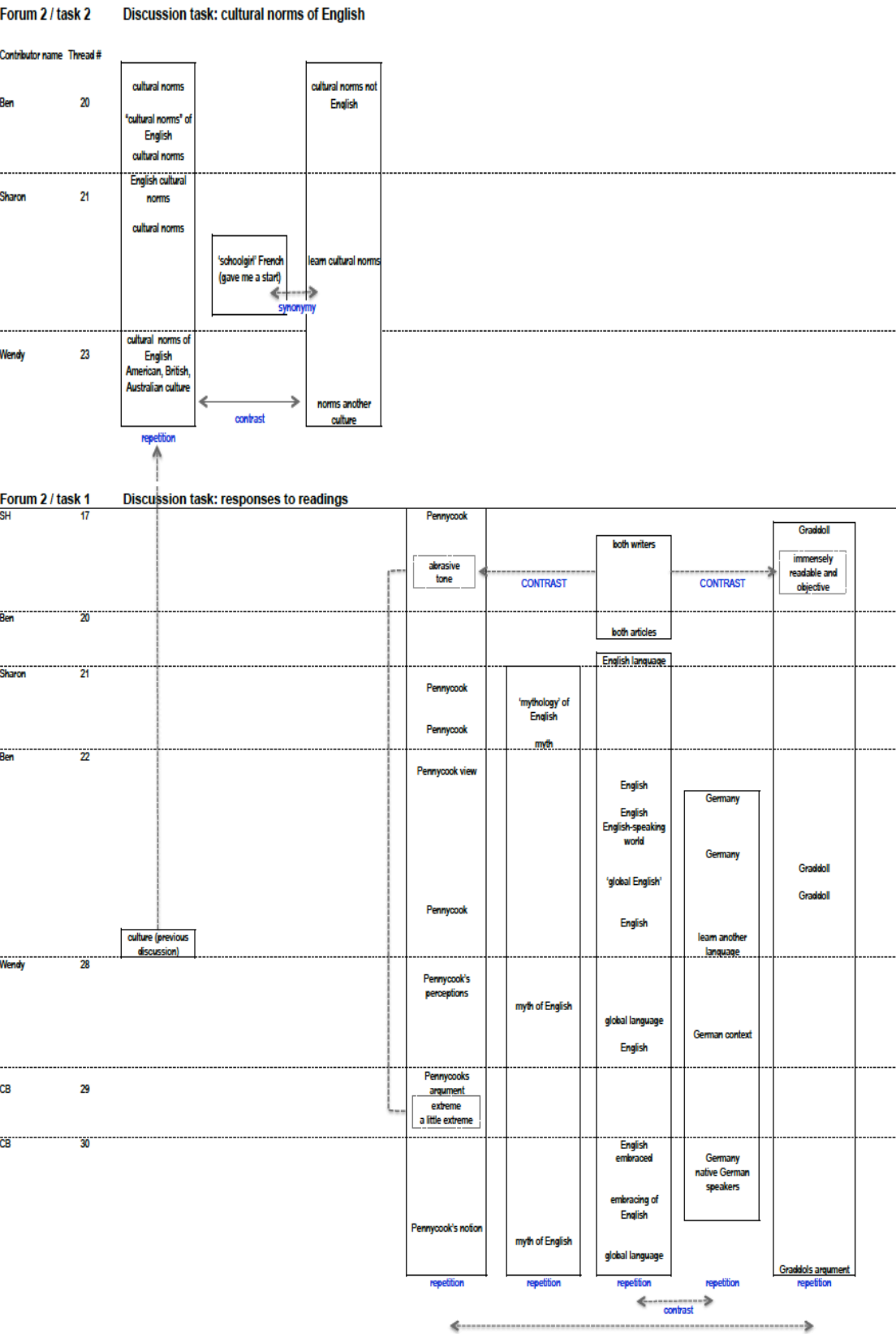
Appendix I: Linguistic analysis legends (Appraisal, and Logicosemantic relations)

Student Pseudonym	No. of Threads initiated	No. of times as First Responder	Total no. of times as Responder
Vicky	30	21	35
Wendy	31	32	42
Alice	28	2	8
Sharon	21	0	0
Ben	14	4	7
S1	27	9	12
TOTAL	151		

This table shows the number of times each student initiated a thread and responded to others. Ben initiated fewer posts (14) as a result of combining more than one task in a single post. Sharon initiated more than Ben but fewer (21) posts than the others.

The most active in terms of responding, or *attending to* others, are Vicky and Wendy as shown in columns 2 and 3. Wendy is the first to respond 32 times, and Vicky 21. The number of total times as responders is also higher, indicating their level of activity in the forum discussions.

Appendix J: Case A summary of forum contributions



Appendix K: Case A: Lexical strings analysis across two discussions

Forum 1

Discussion task: 'Literacy is ...'

Pseudonym	Turn #				
Instructor I	1	<div>present understanding</div> <div>reading writing</div>	<div>semiotic approaches</div> <div>semiotic system</div> <div>read society</div> <div>read society's artefacts</div>	<div>(no) equivalents</div> <div>(no) equivalents</div> <div>(no) equivalents</div> <div>equivalents</div>	
Paula	2	<div>next step speaking</div> <div>listening</div> <div>communicating</div> <div>written form</div> <div>read write</div> <div>communicate</div>			<div>broad term</div>
Instructor I	3	<div>(more than) reading</div> <div>writing</div> <div>(more than) reading</div> <div>writing</div>			
Mary	4	<div>(more than) reading</div> <div>writing</div> <div>ability read write</div> <div>language</div>			<div>evolving system</div> <div>of communication</div>
Will	5	<div>ability read write</div> <div>ability read write</div> <div>language</div> <div>ability speak</div> <div>ability to read write</div>	<div>functionally</div> <div>literate</div> <div>=carry out</div> <div>essential activities</div>	<div>Japanese</div> <div>equivalent</div> <div>"読み書きの能力"</div> <div>"yomikaki no noryoku"</div>	<div>(more) complex</div> <div>(influenced by</div> <div>many) different</div> <div>factors</div> <div>(means)</div> <div>something</div> <div>different</div>
Instructor I	6	<div>writing</div>			
Amanda	7	<div>(before) ability read</div> <div>write</div> <div>[contrast]</div> <div>(now =) limited</div> <div>definition</div>	<div>semiotic approach</div> <div>read more than</div> <div>words</div> <div>signs sounds</div> <div>faces</div> <div>environment</div>		
Instructor I	8	<div>literate</div>			<div>(moved on from)</div> <div>very literal basic</div> <div>definition</div>
		repetition	repetition	repetition	synonymy
			Synonymy		

Appendix L: Case I Lexical strings analysis: joint contributions to 'literacy' definition

IC10 “The changing nature of literacy” discussion

Contributions to the discussion		Lexical strings (showing cohesion in the discussion)		
		Topic focus (repetition)	Types of technology	Advancement of technology
Expansion relations	I personally think that these technological advances are so influential they have changed our role as literacy teachers. At the rate technology is advancing I'm beginning to wonder whether or not we will have books, newspapers, pens and pencils in fifty years from now ... the pieces of technology that could be used to replace each of these items are now available (e.g. laptops , iPads , e-readers , mobile phones , etc.) at a fairly affordable price (Mary)	technological advances they (technological advances) technology pieces of technology	laptops iPads e-readers mobile phones	advancing fifty years from now
+	...Our group is taking steps to incorporate video , listening exercises from radio such as interviews and discussion topics and mp3 recordings of student discussions into our lessons. It may be basic but I think even finding your way around the computer in a second language is now always easy (try working it out when everything is in Russian or Chinese!) ... (Paula)		video radio mp3 recordings the computer	
+	I am currently teaching a Year 1 class ... and it is very surprising to see the range of technology that my children have access to. I have two ipads , three desktops , three laptops and a digital camera ... I have tried to incorporate technology into my teaching as much as I can this year. I have created a blog for my children to use, this is something new to them ... but they can not stop talking about it ... Using information technology in the classroom is an important aspect in today's society and it is going to be the way of the future . As teachers I feel it is our responsibility to incorporate as much technology into our classroom as possible ... (Beth)	range of technology Information technology technology	ipads desktops laptops digital camera a blog this (the blog)	today's society the way of the future
<i>discord / cognitive conflict to 'the trend' (a restatement =elaborating relation) - the following response indicates the formation of a new perspective [x manner and x cause]</i>				
= X X X	I read your observations with great interest and of course agree that the trend seems almost inevitable. The reading about Media Literacy, too, gave much food for thought. Cordes' comment ... however true , made me wonder whether we are set on a path of inevitable, irreversible polarisation, globally. What made me mull over this , is that in South Africa, there is a small percentage of schools ... that enjoy access to the kind of technology we are reading about. The majority of schools ... simply do not have this technology ...” (Amanda)	access to ... technology CONTRAST do not have [access to] ... technology		↑ the trend

Appendix M: Exploratory talk process showing lexical and logicosemantic relations - Case I

Case A, Forum 3, discussion on stereotyping

Expansion relations Excerpts of student contributions to the discussion

	(Th31) ... Certain stereotypes such as obedience to authority , passivity and lack of critical thinking are not unique to students from particular cultures but exist across cultures (Ben)
+	(Th32) The main arguments of this paper ... is very narrow ... to suggest an entire "group" is obedient to authority and passive is ridiculous . Many factors contribute to a class environment where students feel comfortable and 'safe to contribute ... Stereotyping does no-one any favours, it brings the whole process down and is not effective (Sharon)
+	(Th34) I think [interpersonal metaphor] people tend to stereotype about all types of other people, including those who come from their own 'cultural' groups ... Let's face it , culture is a powerful force, especially when it is very strongly traditional ... I believe [interpersonal metaphor] that TESOL teachers observe perceivable patterns in a process of trying to gain some understanding of their students in order to improve their teaching ...
+	(IC35) We all know how easy it is to generalise and while stereotyping can be a very negative thing, it does incorporate observation of similarities in learners of similar cultural/experiential backgrounds ... no person is a clone of their culture, but certainly their culture is a major influence on their values and, in many cases, their learning process ... However having said that, the point that I find appalling in Kumaravadivelu's paper is the idea that the hugely diverse cultures and numerous peoples that form the geographical entity of Asia could be combined into one cultural and social entity by anyone, let alone TESOL teachers ... I wonder which Asians they are talking about – certainly not the ones I have in the classroom ... There are certain social behaviours in the classroom that one cannot help but notice set the various cultures apart ... Is this stereotyping or observation?
+	(IC35) Yes, I wonder how TESOL professionals could possibly harbour such stereotypes of their students and this is something I also found quite shocking in Kumaravadivelu's article. When 'Asian students' are categorised in such a way , it destroys the cultural sensitivity that is fundamental to TESOL ... (Vicky)
x =	(IC37) We may stereotype our learners partly because [x of cause] it helps us reduce an unmanageable reality to a manageable label [=]. When our students fail to interact in the way we expect them to, we readily explain their behaviour in terms of culture and cultural stereotypes. A critical awareness of the complex nature of cultural understanding and the problematic aspect of our investigative tools may help us open ourselves to alternative meanings and possibilities, thereby restraining our rush to stereotype the Other (Wendy)
+	(IC38) I find it hard to believe that such stereotyping is so prevalent, particularly in the TESOL profession ... for teachers who so frequently deal with international students, to have those presumptions is awful ... it's hard for me to imagine anyone stereotyping to this degree . While it might be helpful for teachers to examine a learner's cultural background, there is never an excuse for generalising/assuming an individual's personal experiences – it could even prove to be counterproductive to teaching (Vicky)
+	(Th40) ... in my limited experience in ESL classrooms I have been fortunate to work with a number of Asian students from several different countries ... the classroom interaction of each of these students appears much more related to the student's L2 ability and confidence ... rather than any 'culturally' predisposed passivity (Alice)
+	(Th43) Having spent a great deal of time in south-east Asia I have seen that ... these stereotypes can exist not only in the field of TESOL but in other aspects of life [+ variation]. It is not uncommon to hear workers discuss of their co-workers, clients or students in a relatively stereotypical manner ...
	Legend: Judgement: social sanction / Judgement: social esteem / Appreciation / Force / Focus Enhancing Relation of Cause

Appendix N: Case A - discussion on stereotyping

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CHAPTER 8

Discussion & Conclusions

In this chapter the main findings of the project are discussed, particularly the contributions the study has made to adult online pedagogy, informed by sound theoretical perspectives of learning *and* of language use in context. I identify how this project has provided much needed insight into the nature of discussion in online forums, particularly in relation to how the teaching-learning experience is shaped by the inseparability of enacting interpersonal relationships with developing content knowledge. In Section 8.1 I summarise the significance of the study and the findings; in 8.2, I present an overview of the outcomes of the study; and in Sections 8.3 to 8.6 I discuss how the research questions have been answered, including implications for online pedagogy. This is followed by conclusions and direction for future research (8.7).

8.1 Significance of the study

This project set out to investigate the use of asynchronous discussion forums and their role in enhancing the quality of learning in online contexts. The socio-semiotic approach taken - a combined framework of sociocultural theories and Systemic Functional Linguistics (SFL) – enabled an in-depth examination of the selected online subjects. The study took a holistic approach to online teaching-learning for examining the learning contexts from a macro-level of analysis, as well as at the micro-level of language in use by both instructors and learners. This approach demonstrated the dynamic interplay between context and text, and that language choices, as *semiotic acts*, were shown to construe the subject experience in particular ways.

To reiterate, Chapter 4 as a published literature review, was foundational to understanding what was occurring globally in online learning contexts, in particular, that sense of isolation was remediated largely by opportunities for dialogue. This review explored the role of online interaction and what fostered or inhibited community, learning and identity negotiation and helped explain the development of sense of belonging, or conversely, isolation so often experienced by online learners (also instructors) (Delahunty, Verenikina & Jones, 2014). Chapter 5 dealt with the implications for identity formation as a social construct, concentrating on student-student interaction and the effect that social dis/alignments had on student involvement in discussion (Delahunty, 2012). The focus of Chapter 6 moved to the role of the instructor as orchestrator and mediator of online discussion. Instructor mediation was exemplified as crucial for discussions that moved beyond additive (and uncritical) pooling of common knowledge, by stimulating broader thinking at the same time as encouraging the development of interpersonal relations. The guidance and support provided by the instructor encouraged learner involvement in effective online interactions (Delahunty, Jones & Verenikina, 2014). Finally Chapter 7 extended the *Thinking Together* approach (developed by Neil Mercer and colleagues) to adult learners interacting online, to understand from a different sociocultural methodology, the nature of the online discussions.

8.2 Research outcomes

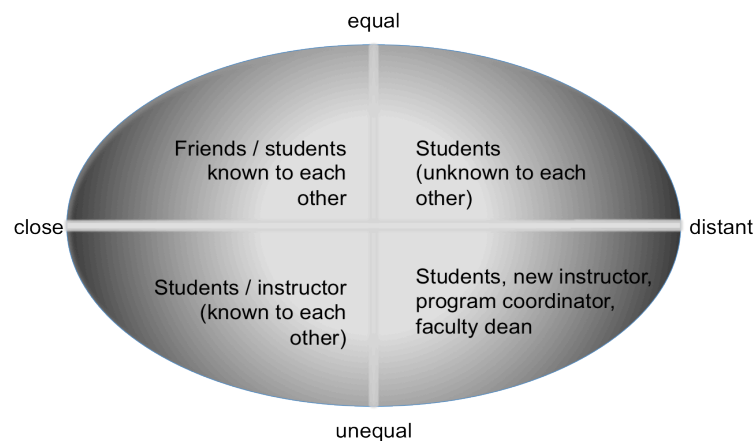
This thesis addresses the role of online discussion forums in the experiences of teachers and learners in selected TESOL online subjects to answer the main research question, *How do discussion forums shape the teaching-and-learning experience in TESOL distance education?* The socio-semiotic approach taken allowed a detailed examination of learning, communication and language in the postgraduate online learning environment. A range of analytical tools is provided for within this framework enabled in-depth insight into the complexity of learning through meaning-making choices in the online discussions. The qualitative multiple case study design allowed me to explore in detail the nature of the online forums, drawing on discussion texts, interviews and survey, as well as secondary data gathered from the learning sites. Triangulation of the findings was assured by the range of data sources used, as well as the combination of methodologies applied to selections of the same data.

The three guiding research questions focused on the nature of discussion in online forums. In answer to the first research question, *What kinds of knowledge are socially constructed in online forum interactions?* the outcomes of the study identify how interactions shape self-knowledge (identity) (Chapter 5) and the negotiation of shared knowledge and new understandings (Chapters 6, 7). However the effectiveness of these depended on the extent that interpersonal relations were cultivated, as such relations are fundamental for fostering interaction so that collaborative learning, community building, and sociality can be developed (Chapters 5, 6 and 7). These findings answer the research question, *What is the role of interpersonal contributions in a) fostering/inhibiting student engagement in forum interaction? and b) in building a sense of community?* Importantly, the instructor's role is critical in how discussion shapes the teaching-learning experience (Chapter 6 and 7), which answers, *What is the role of the instructor in mediating online discussion?*

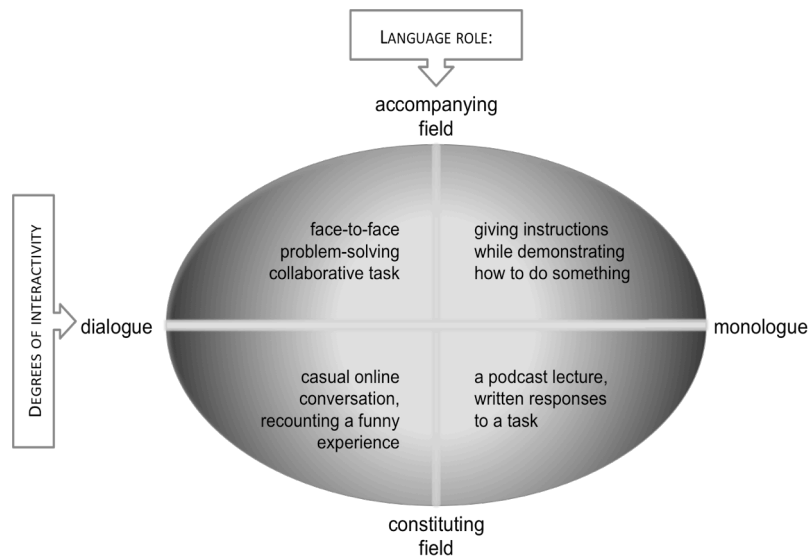
The research questions were formulated partly to account for the variations in the role played by the forums in each of the three cases. However, while different aspects of the online experience are represented in the questions, when articulating answers to the questions the reality of their interconnectedness is that they cannot be separated 'neatly' and presented as discrete findings. Rather each overlaps with other research questions to varying degrees, but simultaneously allows my attention to fall on specific aspects. The result is corroboration of the findings from different, but related, angles.

The 'climates' created for learning as social activity in each subject demonstrated the reciprocity between text-context as meanings in the texts shaped the discussions differently in each of the learning sites. Variation in meanings and interactivity in turn

created different online situations for learning, which in turn shaped the texts, and so on. Social activity was represented through the artifacts of interaction – the forum texts which realize the linguistic choices made to the unfolding discussions. As acts of meaning, the discussion texts revealed how participants were making sense of learning situations and the interpersonal relations in a mode of communication that can be problematic for ‘discussion’ *per se*. As often mentioned in this thesis, the absence of physical presence places the meaning-making load onto the written texts of the forums. When instructors or students contribute to discussion, making meaning is a tension between monologue (as for written texts) and dialogue (as for spoken exchanges). Such incongruences in communication can be accounted for through the notion of Mode, in that while *reciprocity* is assumed, discussion actually occurs in the monologic form of graphic channel and written medium, albeit with some conversational-like characteristics. Incongruences presented by channel and medium in online discussion can be amplified when Tenor relations are asymmetrical, that is when relations between participants are close or distant, or when social positionings are equal or unequal. Potential incongruences are represented in the diagrams below (replicated from Chapter 2, Figures 2 and 3).



(a) Mode variables



(b) Tenor variables

The study has provided fresh insight into the nature of interaction in online discussion forums in postgraduate distance education, particularly in relation to how teaching and learning are shaped in communications which build interpersonal relations simultaneously with knowledge. This chapter presents the contributions of the study to postgraduate online pedagogy, informed by sound theoretical perspectives of learning *and* of language use in context, and guided by the research questions. Implications of the findings are considered before moving to the study's conclusions.

8.3 Constructing or *constricting* identity: understanding sociality

Participation ... is both personal and social ... involv[ing] our whole person ... our bodies, minds, emotions and social relations ... identity [is] constituted through relations of participation (Wenger, 1998, p 56)

The contribution this study makes to online pedagogic practice is firstly to highlight identity formation as crucial to learner engagement – both interpersonally and as engagement with the subject content. The findings of Chapter 5 clearly indicated the important role played by interaction for providing opportunities to negotiate identities and form social alignments, thus helping to build self-knowledge as part of the learning process. The findings of this paper contribute to understanding the kinds of knowledge which are socially constructed in online discussions, in answer to research question one:

What kinds of knowledge are socially constructed in online forum interactions?

As a social construct, identity formation is an intrinsic element of any learning environment, and one which can become more important in online learning because of

the absence of usual face-to-face identity markers such as physical appearance, clothing, group affiliations, race and ethnicity, status, values, beliefs and so on. Such identity markers are important for negotiating multiple dimensions of our identities, and because access to them becomes less available in an online environment, the forum interaction becomes the primary social activity for identity negotiations. Paradoxically, identities which are constructed in social negotiations, can also be constricted by the inherent tensions of online communication and reduced opportunities this may present for interaction, also reducing opportunities for engaging in dialogue as a prerequisite for identity formation. In addition, because of the spatial and experiential distance in online learning situations, individuals are in an easier position to withhold, or overstate, some aspects of their identities. Thus a pseudo-impression of *who we are* and *what we do* can result from written online texts. Identity representations can also be complicated by the lack of control over reader interpretations and reactions (intentional or not) of our intended meanings. If negative perceptions of identity are created (as was the situation which arose in Case A) feelings of exclusion can result, particularly without the benefit of interactive immediacy to counter misunderstandings as they arise. Chapter 7 also raises issues pertinent to identity formation in relation to interpersonal connections, in that a 'no response', or silence, can also (unintentionally) disengage others in the discussion. This may put at risk their sense of self-value as a group member, and feelings of inclusion within the group. Thus disengagement may constrict identity formation due to reduced opportunities for meaningful interactions.

The initial entry into online discussions is often formalised through an introductory task or icebreaker. As this is also often the first point of social contact, the introductory task has an important pedagogical role to play: in a structural sense to flag the beginning of the subject; in the kinds of interpersonal relations which are enabled to develop; and how these relations influence open discussion (Pelz, 2010; Xie & Ke, 2011). The importance of having an introductory task is revealed in the following comments as impacting on peer relations and setting the tone for the class,

But I do like it when the lecturer says 'everybody introduce yourselves'. If they don't explicitly say that, oft times we don't have that little introduction time, and its just 'OK, let's go straight onto Topic 1' and we're sort of talking about the course without each other knowing very much about the others (Paula, Case I, an experienced distance learner)

I started off by introducing myself to everybody – I posted a little introduction – but there was no personal response to me. A couple of other people did the same thing – there was no response to them and nobody else made any contact (Jenny, Case S, optional introduction)

Interpersonal relations become the nexus for the kind of social interactions that occur which characterise the particular "online course culture" (Xie et al., 2013, p 408). Online course culture may serve to embrace diversity or it may become exclusive. As diversity and identity are intrinsically linked there is an element of risk-taking on the part of learners to be open about who they are and what they value (Hughes, 2007). Indeed

starting off 'on the wrong foot' can have an effect on how engaged or not some learners become in later cooperative activities and how this becomes resolved (or not) in the ensuing interactions (Xie et al., 2013).

The impact of negative identity as a potentially enduring factor was a significant finding of Chapter 5. The perception of not being a teacher (non-teacher identity) in a context where teacher identity was the valued social identity, led to disconnection from the learning group, particularly when there was also a lack of interpersonal connection. To illustrate this, it was significant that both non-teachers in this case, Vicky and Alice, held back from the first forum until after others had contributed. They both identified themselves as lacking, namely as being without teaching qualifications or experience. However as the discussions unfolded their identity trajectories took them on quite different paths. This socially created variance lay in the level of rapport developed between one or more other participants. Vicky had an already established relationship with one of the other class members (Wendy), which enabled her to engage in lively discussion that perhaps would not have occurred had not the level of rapport existed. Both Wendy and Vicky were highly active on the forums and were often the first to respond to others' contributions (shown by the red column in the graph of Appendix xiii. Certainly for Vicky this activity indicated growing confidence, particularly as she entered the online discussions very tentatively: *Unfortunately I have no teaching background (am I the only one ???!!).*

On the other hand, Alice became increasingly disengaged in the social activity of discussion as many of her contributions were unacknowledged (i.e. a response of 'silence'), and one response she perceived as inappropriate criticism (see 7.5.4). This reinforced a perception for her of the lesser regard that not being a teacher (non-teacher identity) had in this situation, despite the wealth of experience in other areas of life that she brought to the group. This construction of non-teacher identity permeated her contributions to the forums, as the examples below show:

Table 31: Reinforcing non-teacher identity - excerpts from Alice's posts

Forum No.	Alice: reinforcing her non-teacher identity (bold)
Forum 3: Thread 40	In my limited experience in ESL classrooms I have been fortunate to work with a number of Asian students from several different countries ...
Forum 5: IC55	I have no experience at all as a teacher or language teacher. My only experience is as a student of this course and as an observer/helper at my local AMEP TESOL classes Because of my inexperience , however, I would like to have good guidelines ie syllabus, coursebook or course requirements to work with initially This is probably where it's good to be a newbie. As I haven't taught before , I think that I would be very open to fitting in with whatever approach was required And while I haven't worked as an English Teacher overseas , I have worked overseas in other contexts and I know how critically important it is to adhere to and respect the customs, culture, beliefs and systems of the host country ...
Forum 7: Thread 84	I'm not currently teaching , so don't have any current circumstances to relate. My only access to learners and materials is once a fortnight at a local AMEP TESOL class

Forum No.	Alice: reinforcing her non-teacher identity (bold)
Forum 11: IC146	I haven't been teaching or done my prac yet but I have been sitting in on and helping at local AMEP TESOL classes for the last year ...
Forum 11: IC148	I haven't done any teaching , this is a complete change of career for me but I have been sitting in and helping with an adult TESOL class occasionally for the last year ...
Forum 11: IC149	I haven't done any teaching yet, but I definitely think I would start by using a diary or journal in the way Tice suggests ...
Forum 11: IC156	I'm not teaching yet , but I've been sitting in on the AMEP classes at our local TAFE for the past year, whenever I get away from my work ...

The different experiences of Alice and Vicky highlight a trajectory of online identity formation which is socially determined by the group, understood as a tension between feeling a sense of belonging *and* isolation, and between identities of high social value *and* low social value. These tensions are represented in the identity quadrant of Figure 28 below. Alice's perpetuated negative self-perceptions as a non-teacher would be described as falling into the least desirable identity quadrant of 'Lonely'. She came into the forum with a lower level of self-assurance, as linguistic analysis has shown. As some, but not all, of her contributions were attended to, this reduced opportunities for interpersonal rapport to be developed enough to counteract any underlying negativity. This was not her intention as she was keen to foster connections with others which was confirmed in her interview, and reciprocated any response she did receive. Alice's experience highlights an unintended consequence of the learning experience when perceptions of negative identity are not counteracted in appropriate social interactions. Negative perceptions can move learners towards disengagement, particularly unsettling if disengagement is not their intention. In Alice's case she anticipated forming connections with others, and was disappointed with the outcome.

However, some students may choose disengagement for various reasons. 'Loner' exemplifies two students who identified themselves as teachers. 'Loner' is distinguished from 'Lonely' because of the high level of self-assurance expressed without an overt need to be socially assured of this positioning. One student, Sharon showed what could be interpreted as indifference to the group by not investing in any interactions with others – she posted the tasks required, but responded to no-one. Ben, on the other hand, sometimes responded to others, but he did not encourage responses. This can be explained by the monologic quality of his contributions which were lengthy and written in an academic register more attune to a written assignment. This tended to make reciprocity difficult. As discussed in Chapter 7, Ben's intended audience was the instructor as assessor of the forums, rather than his peers. Indeed the extent that dialogic space is opened is influenced by the perceived target audience, with Ben's example illustrating some of the tensions between Tenor and Mode inherent in online discussions. Mismatch in target audience and hence in genre, with the purposes of discussion can account for some of the disconnectedness that can develop between interactants.

The preceding section draws attention to the notion of participant agency as fundamental to understanding sociality. It must be acknowledged therefore that agency includes the choice *not* to interact (although more difficult to exercise if participation is mandatory). Exercising this choice was borne out in the interviews, with some students expressing reluctance to contribute to discussion due to time constraints, workload priorities or that discussion was not meaningful enough to warrant involvement, as explained in the comments following,

I interpreted distance as 'do this by yourself', so that's what I did ... I just want to get on with it myself without the extra work of having ... to be in contact with these other people ... I don't need to be chatty ... and the social thing ... is not something I've really got time to get involved with (Jenny, Case S student)

I've had more success studying alone, so I don't know if that's prejudicing my input on the forum or my participation ... rather than spending too much time doing it I could [spend] my time to concentrate on the *real* job ... you know, getting the work done and submit it (Levi, Case S student)

Choosing not to participate can present as a challenge for instructors, particularly if the inclusion of discussion into the design of the subject emanates from sociocultural or dialogue-centred learning principles. However the reverse can apply to students when instructors do not participate. The following interview comments indicate the effects that lack of involvement in discussion had on the teaching-learning experience from the perspectives of academic designer, student and instructor,

I had one student who vociferously, as an ESL teacher, said she didn't want interaction – she refused to participate in discussion! ... I had a real problem because she refused to even participate in discussion boards. But there weren't many like her – most of them craved interaction (Case S, academic designer⁶⁷).

... if the lecturer doesn't participate in the discussion board, it seems to fall in a heap ... (Paula, Case A student)

... students who don't interact ... let's not use the word interact for a minute .. students who post comments on the forums, however don't interact with the others and also don't interact with me, other than sending assignments – that's obviously problematic ... there are some students I develop virtually hardly any rapport at all really, because of that (Case A, instructor).

Despite acknowledging that forum interaction will not be taken up enthusiastically by all online participants, students are in fact more likely to 'crave' interaction as indicated in the designer's experience (quoted above). Returning to consider the identity quadrant Vicky (from Case A) exemplifies a student who became increasingly engaged in lively discussion. She could thus be assigned an 'Initiatee' position in the community. Although she was less self-assured in her identity as a non-teacher, as already mentioned, this was remediated through engaged discussion, particularly with Wendy. This helped counteract her initial feelings of uncertainty. Wendy showed the characteristics of being an 'Initiated' online participant who was active in most areas of the group activities and

⁶⁷ The academic designer was also an experienced online instructor

who often took on a nurturing role as an experienced teacher. The following excerpt shows how she draws Vicky into the discussion through encouragement:

(Vicky): Considering I do not have any practical teaching experience, I can only draw from the TESOL subjects I've studied and my experience as a foreign language student ... The most important thing for me however, would be to adopt an approach which was suitable to my students, after all, this is why I want to teach – to help students develop and reach their own goals ... Having no experience and no fixed teaching philosophy, it is hard to predict what I would need to change, but I guess this would be determined by the circumstances.

(Response from Wendy): Hi Vicky, I think that you will find that as soon as you step into a teaching role, you will begin to understand your style and beliefs more so, though it looks as though you've got an open minded and flexible approach ready for action. That's really the key in international contexts I think (excerpt from Forum 5: IC61)

However it needs to be remembered that identity as a social construct is in a dynamic state of formation and re-formation, therefore the identity quadrant is not intended to show a permanence in identities, but rather a snapshot that may explain the extent of engagement at a point in time. It is clear that the opportunities afforded in social interactions with others can affect the extent of engagement, thus becoming a trajectory for identity construction, as well as identity constriction. The discussions on travel (see Appendix xiv for this discussion data) and stereotyping as discussed in Chapter 5 indicated some strong alignments in identities in terms of values held as becoming-TESOL-teachers. In these instances most of the learners could be characterised as 'initiated' into these particular areas of discussion, illustrating quite clearly the 'elasticity' that negotiating identities involves.

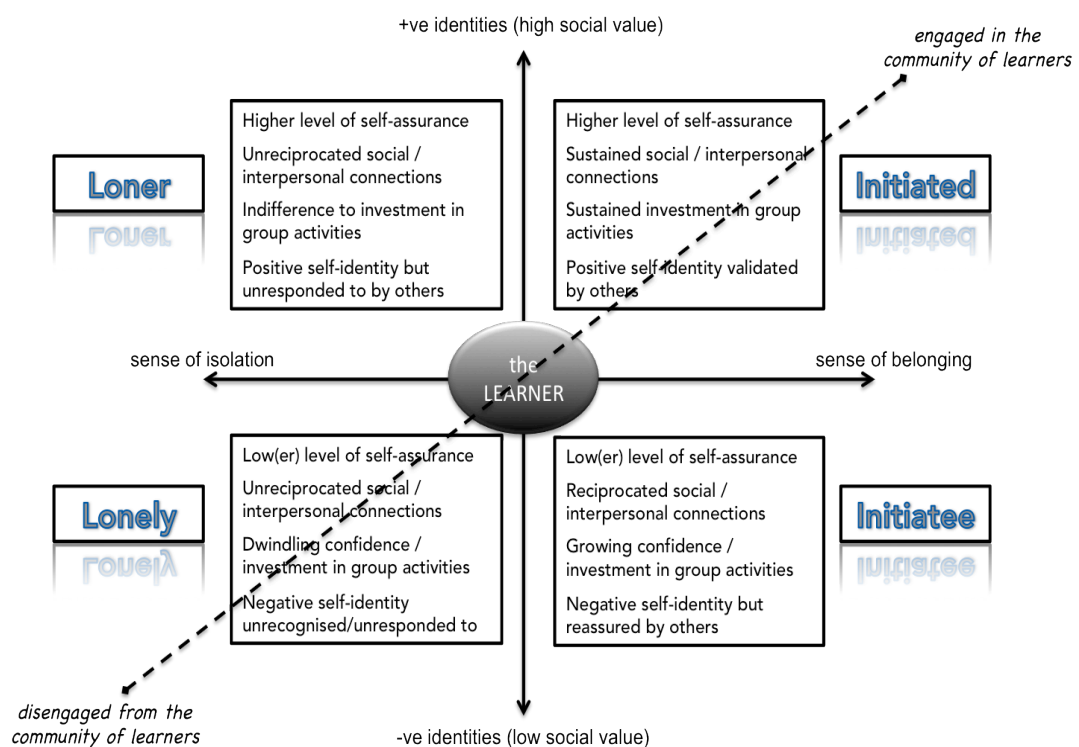


Figure 28: Identity quadrant: conceptualising identity formation as a dynamic process

An implication arising from these findings confirms the importance for postgraduate learners to have identity-building opportunities in a climate of acceptance, respect and support. This is argued by Knowles as crucial in adult learning contexts because intrinsically, “adults derive their self-identity from their experiences ... [they] *are* what they have *done* ... [and] have a deep investment in its value” (1980, p 50) (emphasis added). This highlights the need not only to create opportunities, but also the importance of instructors to be aware of tensions which may arise from disalignment in identities, particularly for postgraduate learning contexts where homogeneity would be the exception, and diversity in life experiences and values, the ‘rule’.

Ultimately this study argues that the notion of identity trajectory is useful in understanding some of the underlying reasons for *how*, *if* and *to what extent* an online learner engages in discussion. Indeed, if the benefits of discussion for enhancing the learning process are to be harnessed, participation is essential. However, interaction can be difficult to achieve when considering participant agency, unclear learning benefits of participation, or lack of active instructor involvement in discussions. Thus, the next section considers the effect of scaffolded interactional support provided by the instructor, particularly in relation to how this support fosters the co-construction of knowledge.

8.4 Scaffolding discussion to encourage collaborative learning

Meaningful interaction is essential for collaborative contributions to shared knowledge, from which new understandings and sense of community may be constructed. Understanding the impact of discussion for fostering an online learning community was the underlying motivation of Chapter 7 which applied principles from the *Thinking Together (TT)* approach to the three postgraduate online contexts of the study. In the analysis variations in forum discussion characteristics were described as different kinds of online talk: *non-dialogic online talk*, *online cumulative talk*, and *online exploratory talk*. An explanation for these variations can be found in the notion of *contingent* scaffolding, that is, interactional support provided at the point of need (Hammond, 2001). In Case I there was a higher incidence of knowledge constructing talk (particularly online exploratory), which was attributable to the active involvement of the instructor in the forums, who provided contingent support (also discussed in Chapter 6). This contributes to answering each of research questions.

As outlined in the methods chapter (Chapter 3), the academic design of the learning sites guaranteed similarities in the designed-in scaffolding for each of the cases (Hammond, 2001; Hammond & Gibbons, 2005). However, it became clear that a significant variation between the cases was the level of contingent scaffolding provided in forum interactions (Hammond, 2001; Hammond & Gibbons, 2005), with the point of departure being instructor mediation of discussions. The following table summarises the similarities and

differences across the three cases. The information indicates the relationship between the contingent scaffolding of discussion and the extent to which knowledge constructing talk and interpersonal relations were developed:

Table 32: Contingent scaffolding: effect on characteristics of online discussion

		Case A (Assessment-driven)	Case I (Instructor-driven)	Case S (Student-driven)
Designed-in scaffolding:	Online learning site resources	Subject outline; assessment/subject information; subject/topic study guides; links to readings, journals, YouTube, recorded lectures, library, etc		
	Online learning site help	Janison: FAQs, Help, Subject guide Contacts (faculty staff and university contacts) etc		
Contingent scaffolding:	Email contact with instructor ⁶⁸	yes		
	Forum discussion mediated by instructor	no	yes	no
Characteristics of forum discussion:	Assessment value	40%	5%	0%
	Social: evidence of interpersonal links	yes, but varied between individual participants	yes, consistent	not evident
	Collaborative learning: evidence of: Building common knowledge (online cumulative talk) Extending knowledge (online exploratory talk)	Extensive yes, but small % of total contributions	Extensive Evident	not evident n/a

The findings from this study show that social connections and collaborative learning were far less evident or consistent in the discussions where the instructor was not actively, or *interactionally*, involved. The purpose is not to criticise individual teaching practices because it became clear during this research project that the characteristics of the forums in each case reflected the design and resources of the subject for using this communicative facility. However, it does echo the point that Liu and colleagues made that technology itself does not create communities (2007). In saying this though, a sociocultural perspective of the teaching-learning process posits collaborative negotiation between instructor *and* students as essential regardless of the context, because learning is social activity (*not* individual) and is intrinsically linked to internalisation of knowledge.

Another perspective on how interactional support contributes to building community and enhancing the learning experience is found in the survey results (Appendices ix, x, xi and xii). For the instructor-mediated discussions of Case I, sense of community was rated more favourably than it was for the other two cases (Case A and Case S). The responses

⁶⁸ Note: email interactions were not collected for this study

from these two cases indicated that high assessment value apportioned to participation in discussion (Case A) and that little or no mediation or instructor involvement (Case S) were not conducive to building a sense of belonging. In addition, the extent to which students felt community was being built also influenced their perceptions of learning. For example, where community was rated more favourably as in Case I, student perceptions of the learning experience were also overwhelmingly positive. However, when there was more variation in the positive/negative responses to community, there was also more variation in their responses to learning (as in Cases A and S). In other words with a stronger perception of community students are more likely to view the learning experience positively. The following interview comments add some additional insight. Firstly, the instructor-driven discussions of Case I indicate the development of a learning community,

[the] level of connection ... has made the whole experience a very positive one ... it does definitely build a connection ... I find it an extremely beneficial part of the learning process, because it makes me think and then do things more thoroughly ... I'm not really a great sit-down-and-chat group type of person, so I don't need to have a person sitting with me to discuss elements. I found that the discussion forum worked as well as having a real live person. (Amanda, Case I student)

... [discussion] is essential ... in terms of ... what you get out of the readings ... they're very one dimensional, but with interaction ... it brings it into the next dimension. (Will, Case I student)

while the assessment-driven discussions of Case A produced a 'dutiful' learning community which developed from an obligation to say something "almost like a duty" confessed Vicky (Case A):

I feel connected to the tutor, but basically don't feel connected to any of the other people ... I certainly participated in every week's forums. I probably didn't participate as much in the back and forth commentary ... I felt that a lot of people were doing the back and forth thing just ... to get more marks ... (Alice, Case A student)

Belonging? ... I don't think there was really much of a connection to be honest ... [but] maybe knowing someone that I had previously met – that helped a *lot* ... I think the only thing I didn't enjoy was some of the forced responses. I thought interaction could have been a bit more genuine ... sometimes you just did it because you *had* to. (Vicky, Case A student)

Finally the role of the forums in Case S was to display individual responses and in this capacity discussion was peripheral to the subject. The lack of interactivity generated an under-developed sense of community,

I found that students didn't necessarily discuss things with each other either ... it seemed to be 'right – these are my comments, I'm posting them, and let's move on'. There wasn't really a connection, I didn't think ... I didn't go in expecting that so I'm not necessarily disappointed by that ... sometimes ... you could see 'OK I'm on the right track' or 'my opinion is not the same as that person's – I'd better go back and check and see if I am on the right track'. So that was helpful (Cathy, Case S student).

Thus timely and appropriate contingent scaffolding can account for differences in how Case I discussions developed as this kind of support "typically makes the task evident, promotes a feeling of ownership, is individually appropriate, promotes collaboration, and

fosters internalisation” (Bonk & Kim, 1998, p 71). The effect of mediating moves to prompt and focus students at various points in a discussion was more effective in assisting learners to extend their understandings (Hammond, 2001) than was high assessment or voluntary participation.

The implications for online pedagogic practice is that contingent scaffolding of discussions is essential if interactions are to move beyond individually-focused posting (also identified as an issue in Lander’s study, 2013) that students tend to revert to when left to their own devices (such as in student-driven discussions), or when concerned about grades (such as in assessment-driven discussions). Providing interactional support can help students to broaden thinking beyond accumulating shared knowledge. However, in order for forum interaction to be *discussion* and therefore to be effective for learning, students need a ‘present’ instructor to guide them towards acquiring the new understandings. The instructor also plays an important role in guiding them towards developing effectual interpersonal relations which will foster interaction.

8.5 Developing interpersonal relations and the effect on interaction

The next contribution that this study makes to online pedagogic practice is identifying ways in which interpersonal contributions affect both student engagement in discussion and the developing sense of community. This answers research question two:

What is the role of interpersonal contributions in fostering/inhibiting student engagement in forum interaction, and in developing a sense of community?

An important finding discussed at length in Chapter 7 was the notion of *attending to* others, which focuses on learner engagement in the discussion forums. *Attending to* others was demonstrated to be important interpersonally to the process of reciprocity in discussions. Of particular note is its opposite – of *not attending to* others. As this constitutes the notion of choice, *not to attend to* others can manifest as the ‘silence’ of not responding. At the very least in a face-to-face tutorial situation, silence or disregarding someone’s contribution to a discussion would be considered unsatisfactory. Yet a choice not to respond in an online interaction can effectively disengage another group member by reducing their opportunities for dialogue, vital for the social construction of knowledge, and for negotiating identities and social alignments. The interactive issues brought about by the asynchronous mode of communication are features of online discussion which can have a far-reaching impact on interactants’ perceptions of identity, sense of belonging to a community of learners, and willingness to contribute to common knowledge.

Chapter 7 also highlighted that the role of the instructor in modeling *attending to* behaviours was influential on what students tended to do in online discussions. From my recent reflections on this aspect of the discussion forums, reciprocity in making meaning in the social context of online learning can be represented as a system network. A system network privileges the notion of choice, and choices made will determine to a large extent the kind of dialogue that follows. Figure 29 shows a provisional system network of *attending to* showing a series of choices made by online participants in this study, entering the system from the position of *respondee*. To reiterate, the notion of language choice is the series of options available to interactants when negotiating meaning, in a network of relationships (as outlined in Chapter 2). Because making meaning is about language choices, what is *not* chosen is also significant. Entry into a system network is from the left with a set of broad options, and moves to the right of the network as more delicate linguistic choices are made.

The provisional *attending to* system network (Figure 29) gives the basic options⁶⁹ available to a respondee in an asynchronous forum. These are to *attend to* which is choosing to respond, or *not attend to* which is choosing silence. If the choice is to *attend to* there are further options: either to *acknowledge* or *not acknowledge* the author/audience. In addition a respondee may choose to either *attach* a response by using the reply function, or create a separate thread (*not attach*). If *not acknowledge* and *not attach* are chosen together, this renders the response non-dialogic. In other words the choice assumes discontinuance of further interaction i.e. shutting down the dialogic space.

On the other hand a dialogic response represents an interpersonal connection between the respondee and their audience⁷⁰. A dialogic response can be simply by *acknowledging* the author of the post, and by *attaching* (i.e. by clicking 'reply' in the open post) or *not attaching* it. When acknowledging, a respondee may choose to include a greeting or not. If chosen, the greeting can be personal, such as *Hi Beth, Nice to hear from you Alice and Sharon*, or general such as *Hey everyone!* The respondee may also choose to give a compliment, or not. If given, the compliment can be of the idea, either positive or negative, such as, *What a great solution!* (+ve) or *That activity would not work with my students* (-ve). A compliment could also be of a person, such as, *I admire you for your persistence* (+ve), or *She didn't provide enough feedback* (-ve). A dialogic response can also be explicitly expressed, such as *I would love to hear what you think*, or implicitly such as, *Maybe there's another way to tackle this*. These choices, either alone or in

⁶⁹ [in a system network represents an either/or choice
 { represents 'and' i.e. being able to choose from two options

⁷⁰ 'audience' assumes any participant reading the respondee's contribution including the author being responded to

combination, set up an interpersonal invitation for dialogue to continue. Such dialogic responses in online discussions are important for fostering intersubjectivity which enhances the development of solidarity and increased learning opportunities.

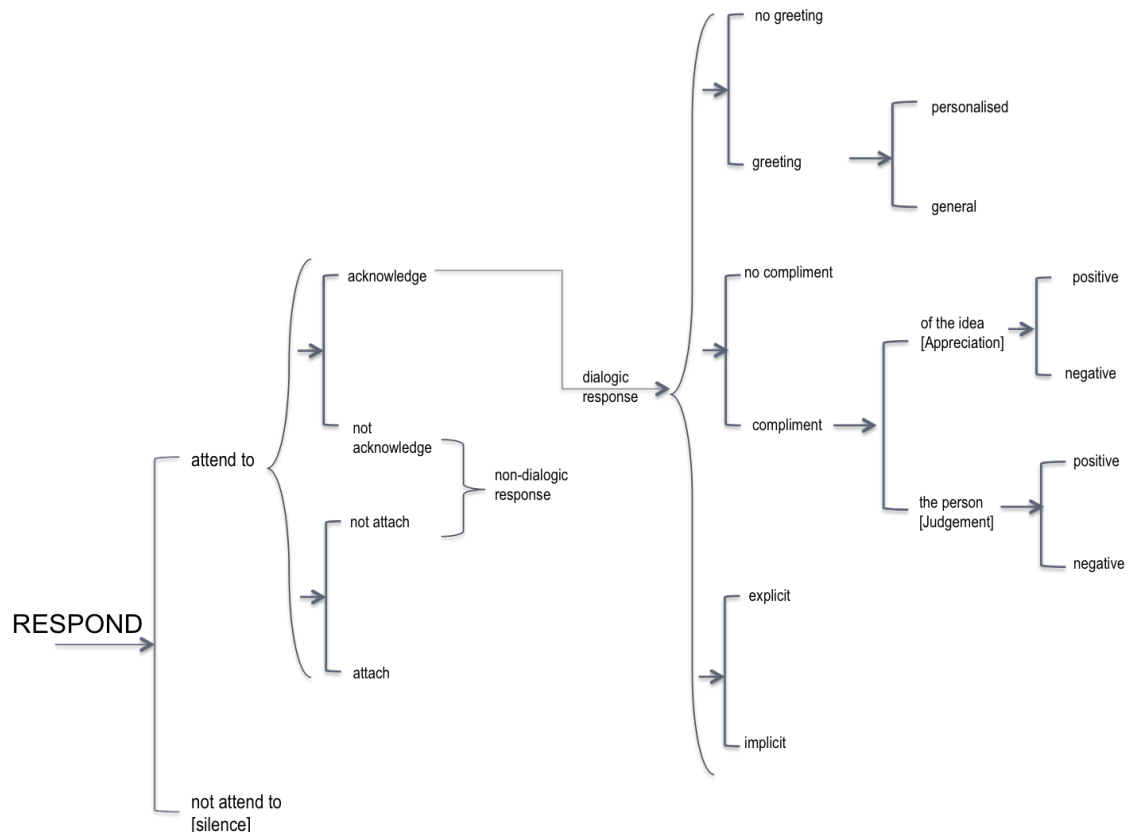


Figure 29: Provisional system network for *attending to* in online interactions

The high incidence of *not being attended to* in the student-driven discussions of Case S raised the question of the effect on the learners. Insight into this was found in the interview data. The extent of dis/engagement contributed variously to student perceptions of satisfaction with the learning experience. While the rate of *not attending to* was high, those students who contributed to the forums did so voluntarily and seemed to appreciate the option to be “left to our own devices” (Jenny, Case S student). However the lack of peer reciprocity did not foster any sense of belonging to the community, described in the comments below,

There was no feedback in the discussion forum from either students or the tutor ... there was none – there was no contact ... there was no personal response to me ... there was no response to them and nobody else made any contact. We never ‘spoke’ ... you wouldn’t call it ‘interactive’ by any stretch of the imagination (Jenny, Case S student)

I posted a comment saying “... oh that’s fantastic, I really admire that’ ... and then didn’t hear anything ... yeah, there didn’t seem to be interaction *between* students. So I didn’t ... you know, I didn’t *really* bother too much more after that (Cathy, Case S student).

These students did however appreciate that others had contributed, but the incentive to read others’ postings were focused on individual benefits, i.e. acting as “assurance ... that I was on the right track” (Jenny, Case S student), or “mak[ing] me think ... when I’m

writing one of the essays” (Levi, Case S student). While students in Case S seemed to cope with the lack of interactivity, or at least adapt to it (indicated by sentiments such as ‘getting on with it myself’ ‘having more success studying alone’ ‘fitting in my lifestyle’ and ‘doing it at my own pace’), lack of dialogue restricts the building of common knowledge and reduces opportunities for gaining insights from diverse perspectives of other participants. In addition, discussion was inadvertently discouraged due the absence of the instructor and the student-only zone which was created for forum discussion. One student felt this was not good practice, arguing that,

... if we were holding these discussions ... in a tutorial, the tutor wouldn’t just let people discuss, and discuss and discuss ... the tutor would bring people back to the main point ... or ask people to expand on some of their ideas and opinions ... (Cathy, Case S student)

As mentioned already, in terms of the subject as a whole, the forums in the student-driven discussions were on the periphery - collectively aided by non-mandatory participation, lack of instructor presence, and students perceiving the ‘real job’ as submitting assessable work. However lack of connection with each other as indicated by extent of individualistic posting, was not as negative as indicated by the extent of disengaged activity with students appreciating the choice to contribute or not. In the following comment Jenny (from Case S) who had commenced another subject in which interaction was expected, provides an interesting perspective,

... we’re encouraged to communicate with each other, to respond to each other’s online tasks, you know the tasks we upload, but I actually ... I think I mentioned this in the part of your survey that I’ve already done ... I find that to be a lot of pressure. I find that the first subject [i.e. Subject S], which could be seen as not as supportive, suited me better.

However the forums of Case S could not be considered ‘discussion’, but rather a ‘display board’. The practice of posting “purely of just the tasks” (Jenny, Case S student) resulted in lack of reciprocity. This showed participant agency limited to the choices in the system network of *not attending to* others or in responses which were *non-dialogic* and thus, these were interactions in which interpersonal relations were unlikely to develop, and indeed did not.

The implications of identifying a network of choices for *attending to* / *not attending to* has helped to theorise the interpersonal impetus for sustaining interactions beyond individual contributions, and potentially towards knowledge constructing talk. This system network acknowledges the role of community-mindedness as essential to these semiotic acts, and conversely that individually-focused, or unreciprocated contributions restricted the benefits inherent in the becoming-a-community-of-learners process. Opportunities for dialogue are entered into when dialogic space is opened and hence “a new space of meaning opens up” between interactants as well as including them in it (Wegerif, 2013, p 4). The notion of *attending to* others has been shown to have a significant impact on how dialogue is fostered or hindered, which is dependent on the choices made by the

respondee to either encourage further interaction through a dialogic response, or discourage it through a non-dialogic response or one of silence. There can be little doubt of the instructor's crucial role in scaffolding and fostering effective discussion.

8.6 Mover and shaper of discussion: the role of the instructor

The next contribution that this study makes to online pedagogic practice is to confirm the critical role played by the instructor in mediating online discussion, as detailed in the findings of Chapter 6. These findings re-emphasise what many studies have already found about the importance of the instructor's presence for developing interpersonal rapport and guiding learners towards knowledge acquisition (Baker, 2010; Gallagher-Lepak et al., 2009; Garrison & Cleveland-Innes, 2005). In addition, this study makes explicit the mediating moves made by the instructor in Case I, and the effect on students that learning and social support have on their levels of engagement in discussions. In these interactions a learning community was seen to be developing as individuals contributed freely to building a shared body of knowledge, as well as indications of individual acquisition of knowledge. These findings contribute to answering research question three:

What is the role of the instructor in mediating online discussions?

as well as encompassing research questions one and two: the kinds of knowledge being socially constructed in online forum interactions, and the role of interpersonal contributions in fostering / inhibiting interaction.

The premise on which Chapter 6 is based is the sociocultural perspective of the role of the instructor in learning. This role is crucial for moving learners towards their knowledge of tomorrow, or their ZPD, that is, what they cannot yet do without assistance from others (Vygotsky, 1978). Even though Vygotsky's studies were of individual child development, this principle applies equally to adult learning contexts. The notion of the ZPD in relation to adult learning is argued by Bonk and Kim (1998) as,

forcing educators ... "to think about skills amenable to instruction as well as how social interaction with more capable others elevates one's performance to developmental levels previously unobtainable" (p 70).

Included in the instructor's role of moving learners towards new understandings, and in shaping interaction in a way that facilitates progression in knowledge acquisition, the instructor must establish and manage a collaborative online climate. The extent to which this is established will influence how learners use discussion for co-constructing knowledge. The findings of Case I (corroborated also by those from Chapters 5 and 7) show that willingness to contribute to building collective knowledge is more likely to occur

when interpersonal relations are given attention. Online discussions exemplify what Halliday (2004) describes as the 'interpersonal gateway',⁷¹ where attention to interpersonal relations opens up the opportunities for learners to negotiate new, collective understandings. Creating opportunities to develop mutual understanding seems particularly important between students who are experientially and spatially separated through the online mode of learning.

As detailed in Chapter 6, mediated discussion involved deliberate and predictable moves by the instructor so that uncertainty or ambiguity were minimised for the learners. The interpersonal-focus of the instructor's language, as well as clarity in instructing and steering, were shown to establish instructor-learner intersubjectivities, and thus created a learning climate which enabled the instructor to 'push' learners more deliberately towards broader thinking about the field, or topic. From this particular case the movement through clear stages of Instructing and Steering shown specifically through phases of directing-organising and prompting-focusing-questioning, I was able to identify the generic structure of *Mediation*. The predictability of the instructor's scaffolded moves likewise gave students a degree of clarity for responding appropriately. Their texts also reflected the social purposes of online discussion, unfolding in a generic structure of *Topic discussion*. The effect of the instructor's mediation – which integrated social support and content support - was evidence that students were co-constructing knowledge and at times extending this to show individual knowledge acquisition. The following diagram shows the process of learning as students responded to mediated support. This diagram maps the sociocultural and SFL analyses to the findings from Case 1. The social construction of knowledge in group-based interactions (after Hendriks & Maor, 2004) is mapped to the language resources of the interactions as knowledge progressed (SFL analysis). These align with the stages of learning which I identified and described in Chapter 6. The progression from collective shared understandings to individual acquisition of new understandings, is evidenced by the linguistic resources used by the students during online discussions.

⁷¹ 'Interpersonal gateway' is defined by Halliday as "developing new meanings first in interpersonal contexts" (2004, p 352)

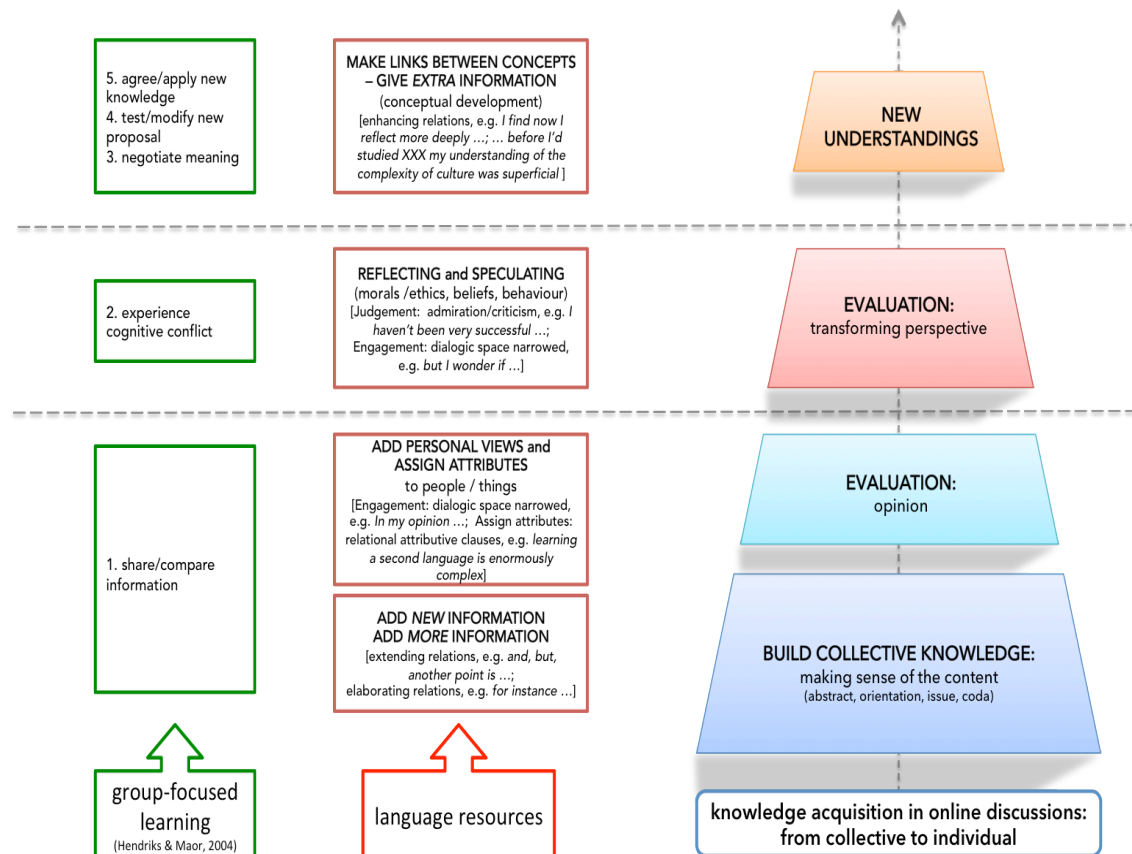


Figure 30: Knowledge acquisition resulting from instructor-mediated support

The preceding points were corroborated by the interview data from Case I participants. This confirms that the instructor's mediation of discussions greatly benefited their learning. To the interview question 'do you feel you learned from the contributions of others and responding?' came the following responses:

Yes! ... oh yes! Absolutely! Sometimes it can be as clear as anything written down, and ... they give us these little tasks to do or activities within each weekly topic ... I think 'yeah, yeah, I understood that' and then someone else will come and say it a different way and I thought 'oh God, I missed that point completely' (Paula, Case I student)

... quite frankly before the course I'd never really thought about literacy in the broader sense, other than just reading and writing ... the interaction within this course was really good because by looking up other people's postings, and the instructor's postings as well, it really got me thinking about the broader sense of literacy rather than the quite narrow definition of it (Will, Case I student)

While students in the other cases tended to concur with the above sentiments, their perceptions revealed a more overt emphasis on the benefits of the forums as self-oriented, and not so much on interactivity,

Yes I did. Like I said, you could measure yourself, see if you're on the right track, and obviously I had no teaching experience, so reading about things ... seeing other people's experience was all good (Vicky, Case A student)

I don't think I *learned* from them, but that acted as assurance ... I think we're all seeking that sort of reassurance (Jenny, Case S student).

This study has found that interactivity in online discussion is dependent on the extent of instructor involvement. The views expressed by students in the instructor-driven discussions of Case I attest to the benefits of being interactively guided by the instructor as the more experienced member of the learning community, which enhanced the quality of their learning experience,

I thought it was great because she was obviously interested in what we were saying. I also found it helpful because if I was sort of off target in a comment I had the feeling that she would maybe make a comment to bring me back on track or something (Amanda, Case I student)

I'd just like to say it was one of the ... more enjoyable subjects I've done so far ... there was more feedback from the tutor, which was really, really helpful ... great because it kind of replicated a tutorial in a way! ... I felt that she was always there guiding the conversation which was really good. And if we didn't have feedback then ultimately we wouldn't know if we were on the right track or not, so it's good to have the tutor reading our responses and putting her own responses on ... (Mary, Case I student).

The implications for online pedagogy are that the instructor must have a presence in the online discussions, if students are to develop interactive, and knowledge building online communication skills. In addition it should not be assumed that students (nor indeed instructors) have the necessary skills to communicate effectively and productively in online discussions. Further research into the development of guidelines for such skills is recommended.

The preceding sections (8.2 to 8.6) have presented how the study has answered the research questions, drawing heavily on linguistic analysis of the discussion texts. The discussion of the findings was supplemented by interview and survey data, which help to triangulate the findings, and corroborate these with the kind of online talk which transpired, as well as students' perceptions of their own engagement in discussion. These perspectives added more depth to answering the research questions on the knowledge being socially constructed in the online discussions (research question one), the effect of interpersonal contributions for engaging students in forum interaction and building a sense of community (research question two), and the impact of instructor mediation on discussions (research question three).

8.7 Conclusions

The significance of this study is its contribution to knowledge provided in detailed analysis and commentary on how online discussion forums shaped the teaching-learning experience in each of the case studies. Interaction is essential to learning, building a community, and reducing sense of isolation, but is often elusive in online situations. This study has shown that engaging students in effective online discussions is complex in adult learning environments where student agency in choosing to participate (or not) should be respected, while also endorsing (and orchestrating) interaction as providing valuable opportunities for identity negotiation, extending knowledge and developing

online interpersonal skills which are transferrable to other online learning situations. Aside from other variables presented by different online environments across disciplines and institutions, the findings also contribute to the complexity and challenge of how to improve interactions in teaching-learning to address the needs of postgraduate, multi-tasking, heavily committed, and often part-time, learners who are increasingly choosing online learning options. Embedding discussion into online learning is supported by the literature reviewed in Chapter 4 and the findings of this study, which advocate discussion as an essential component of the online teaching-learning experience. Interaction is essential for negotiating social alignments and identities – personal and professional – particularly to enhance *becoming-identities* as a process of learning, which in turn fosters more interaction. Indeed interpersonal interactions are central to establishing positive relations between participants, which encourages the sharing of knowledge, the creation of community, and opportunities for identity formation. However, these kinds of interactions are unlikely to be sustained without an instructor at the forum-helm, steering learners towards their learning potential.

The instructor's role is commendable. To harness the benefits of discussion, the online instructor has a responsibility to establish interpersonal rapport, to manage learner diversity and possible disalignment in identities, to provide social *and* teaching support, to guide discussion towards learning goals, to ensure clarity in expectations and avoid ambiguity, and to be aware that their examples of online communicative skills can (even inadvertently) act as models and protocols for their students⁷². At the same time, adult learners are capable of deciding their own level of commitment to the learning community, which may not necessarily be in cooperation with the aims, teaching philosophy or efforts of educators. In addition the concern for being 'on the right track' may be heightened by issues presented by the mode of delivery, particularly for clarification, as articulated by one of the student participants,

... the little things that you can just ask a classmate and it's really informal and you can just check whether or not you have a sound understanding of an assignment or something like that. Its just much quicker, it's much easier I think, just when you're sitting around having a chat in class, as opposed to sending off emails and ... doing it 'formally' ... if you email somebody or send them a message it has to be worth their time ... (Vicky)

Notwithstanding, it is an obligation for institutions to recognise the enormity of responsibilities expected of their instructors, as highlighted by this study, including the outlay of time involved in facilitating online learning, especially as it is not 'neatly'

⁷² particularly because of the 'permanence' of the discussion texts, as they can be referred to long after they were written

delineated by lecture/tutorial timeslots of on-campus teaching. In light of the findings, instructors need to be adequately equipped for the role and be provided with ongoing professional development, particularly to enhance their online communicative skills for guiding students in critical discussions to stimulate learning. Just as it should not be assumed that students have these skills, so also this assumption should not be made for instructors.

Some suggestions arising from the findings are to assume diversity, not homogeneity in postgraduate learners. This can present as a challenge to developing social alignments and interpersonal rapport in order to create an atmosphere conducive for discussion, and thus for opportunities in which identities can be negotiated. Regardless, diversity can be seen as a meaningful resource for learning rather than “something to be overcome” (Wegerif, 2013, p 14). Such a shift which considers difference as a way into dialogue, is also the means through which transformation of our *being* – our shaping as persons can occur (Wegerif, 2013; Halliday, 1978). Indeed, commencing the talk around identity through an introduction task has been shown to be pedagogically sound, and something that most learners are comfortable contributing to. However, this momentum needs to be continued once the ‘ice has been broken’, such as developing discussion tasks which draw out personally held values (for example, a contentious or controversial topic) and provides opportunities for identity negotiations, as well as using discussion to establish ‘common ground’ and diverse beliefs and values, engage in critical thinking, and broaden understandings.

The concern of this study and its motivation is, and has always been, to understand the nature of online engagement as part of the total subject design. In doing this work I have been able to highlight where the quality of online learning can be improved. I have concentrated on three TESOL postgraduate education online subjects at one institution, however further research should extend across different institutions, include undergraduate teaching-learning, and span disciplines. Ongoing research into the nature of online discussion from other teaching-learning perspectives is much needed. Other avenues for research could be in extending the *attending to* network presented in this chapter. The choices identified in this network are by no means exhaustive and such development would contribute to make more explicit the enacting of interpersonal relations, which would greatly benefit educators when designing and orchestrating online interactions. As this study has emphasised, establishing positive interpersonal relations is a prerequisite to effective discussion.

This study has shown that the success, or otherwise, of online discussion rests on the instructor, and continuing research will contribute to the development of theoretically-informed communicative strategies which can be easily implemented by practitioners.

Ongoing evaluation and development of such strategies, would make much needed contributions to the quality of online learning. It is on this point that I finish, and hand over to Will for the final word, who articulated well some of the issues this study was motivated by,

I think [interaction is] essential because without any interaction at all, we're just fumbling around in self directed circles ... the interaction really brought forward, in a sense I'm sure what it would have done in face-to-face interaction in an actual classroom, you know - it made you think about the greater context, which I think is the point, isn't it?

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APPENDICES: THESIS CHAPTERS

University of Wollongong



APPROVAL

HE10/322
e: 4221 4457

COPY

9 September 2010

Mrs Janine Delahunty
89 Fairloch Avenue
Farmborough Heights
NSW 2526

Dear Mrs Delahunty,

I am pleased to advise that the Human Research Ethics application referred to below has been **approved**.

Ethics Number: HE10/322
Project Title: "Looking into Distance: negotiating the online learning environment"
Name of Researchers: Mrs Janine Delahunty, Dr Pauline Jones, Dr Irina Verenikina
Approval Date: 9 September 2010
Expiry Date: 8 September 2011

This certificate relates to the research protocol submitted in your original application. As a condition of approval, the Human Research Ethics Committee requires that researchers immediately report:

- ♦ proposed changes to the protocol including changes to investigators involved
- ♦ serious or unexpected adverse effects on participants
- ♦ unforeseen events that might affect continued ethical acceptability of the project.

You are also required to complete monitoring reports annually and at the end of your project. These reports are sent out approximately 6 weeks prior to the date your ethics approval expires. The reports must be completed, signed by the appropriate Head of School, and returned to the Research Services Office prior to the expiry date.

Yours Sincerely,

A/Prof Steven Roodenrys
Chair, Human Research Ethics Committee

cc: Dr Pauline Jones, Faculty of Education

Research Services Office University of Wollongong NSW 2522 Australia
Telephone: +61 2 4221 3386 **Facsimile:** +61 2 4221 4338
research_services@uow.edu.au www.uow.edu.au/research
CRICOS Provider No: 00102E

Appendix i: Human Research Ethics Approval (2010)

AMENDMENT APPROVAL

In reply please quote: GH:CJ HE10/322

Further Enquiries Phone: 4221 4457

11 March 2011

Mrs Janine Delahunty
80 Fairloch Avenue

26

Dear Mrs Delahunty,

I am pleased to advise that the amendment request 7 March 2011 to the following Human Research Ethics application has been approved. The University of Wollongong/SE Sydney and Illawarra Area Health Service Humanities, Social Science and Behavioural HREC is constituted and functions in accordance with the NHMRC *National Statement on Ethical Conduct in Human Research*.

Ethics Number: HE10/322

Project Title: "Looking into Distance: negotiating the online learning environment"

Name of Researchers: Mrs Janine Delahunty, Dr Pauline Jones, Dr Irina Verenikina















Amendment/s: Section 3 – Participating researchers (details of co-investigator only).
Section 4 – Contact details for correspondence.
Section 5 – Expected duration of research
Section 6 – Purpose of Project
Section 11 – Research design
Section 22 – Number of participants
Appendix A – Subject designer interview questions
Appendix B – Subject instructor interview questions
Appendix D – Student interview questions
Appendix H – Consent form for University students
Appendix M – Participant Information Sheet – University students
Appendix N – Participant Information Sheet – Subject designer
Appendix O – Participant Information Sheet – Subject instructor

Amendment Approval Date: 10 March 2011

Expiry Date: 9 March 2012 **(Please note that an extension of time can only be given for periods of 12 months at each request).**

Appendix ii: Human Research Ethics Amendment Approval (2011)

Appendix E. Sample of discussion thread organisation

Thread / Interaction Cluster #	Resp Level	Resp. #	Thread Initiator (= Level 0)	Direct Response Level 1	Direct Response Level 2
8	0		 Hi from Allee- Alice, 5 Aug, 21:52		
IC 7	0		 International Context - China - Vicky - 5 Aug, 09:56		
IC 7	1	1		Re: International Context - China - NP:SH - 9 Aug, 16:23	
IC 7	2	2			Re: International Context - China - Vicky - 10 Aug, 11:29
IC 6	0		 Hello! - Vicky - 4 Aug, 09:42		
IC 6	1	2		Re: Hello! - Wendy - 7 Aug, 15:01	
IC 6	1	1		Re: Hello! - NP:RF - 6 Aug, 10:09	
IC 6	2	3			Re: Wendy & RF - Vicky - 10 Aug, 11:50
5	0		 HI All!! - Sharon - 3 Aug, 13:10		
4	0		 Hello Everyone - Wendy - 3 Aug, 11:28		
3	0		 Hello - NP:RF - 2 Aug, 20:34		
IC 2	0		 HI Everyone - NP:SH, 2 Aug, 08:12		
IC 2	1	1		Re: HI Everyone - Wendy - 24 Aug, 12:25	
1	0		 Hi and Introduction from your tutor - Tutor A - 1 Aug, 21:53		

Appendix iii: Example of numbering system for interaction clusters

Appendix iv: Student interview question matrix and probes

STUDENT: INTERVIEW QUESTIONS MATRIX & PROBES

What do I need to know?	Why do I need to know this?	Interview Probes
Lead-in questions:		
Thinking back to when you first enrolled in distance learning, what sort of expectations did you have about what you imagined this experience would be like?	Students should be able to talk about this easily, and is a way of easing them into talking about their perceptions of learning by distance To ascertain how aware or prepared they were for the distance learning experience	Expectations – about meeting others / networking / building friendships? Flexibility around work/life Workload / time management
Now that you've completed this online subject in what ways were your expectations the same or different to your experience	Pre-supposition: that students will be able to talk easily about their experience To gain some insight into their perceptions of the reality of learning by distance based on experience To gain insight into what ways the expectations were different to the reality To understand how student satisfaction is perceived in distance learning To understand student perspectives of the advantages/disadvantages	Advantages / disadvantages? Satisfaction / dissatisfaction e.g. to learning, content, the tasks, workload, interaction, support, site navigation?
SUPPORT AND CONNECTIONS		
As we know, distance learning is different to face-to-face classes - tell me about the kind of support you felt you had while doing this subject Where / who / in what ways did the support come? What are some examples that you can think of that made you feel more or less supported? How do you feel support should be provided in distance learning?	Pre-supposition: that there was some level of support provided by the institution, tutor, other class members, via discussion forums, feedback, emails etc Link to literature on level of support which contributes to building a sense of community Student perspectives on how it could be improved	Personal email contact with instructor / other students? Support staff? Through discussion on the forums? Through feedback from instructor?
Tell me about the kind of connections (or rapport) you experienced with other class members? Was connecting with others an important aspect of distance learning for you? Why / why not?	Link to RQs Link to the literature re building up trust and rapport Link to different learner needs and levels of autonomy Link to postings on the Discussion forums	Did this impact how you felt about posting and/or responding to the 'public' discussion? Did the level of rapport affect the whole experience (+ve or -ve)?
Tell me about the kind of rapport (or connection) you felt you had with your tutor In what way/s was this established, or not established? (if 'not established') How /in what way/s do you think this could be enhanced?	Link to the literature re Teacher presence and being approachable. Pre-supposition that students were able to and did contact the tutor individually, and that via feedback on assignments that some level of rapport was established	Via individual emails, feedback?
INTERACTION AND DISCUSSION FORUMS		
Tell me how you felt about contributing to the discussion forums.	To understand student perspectives on using the discussion forums as part of the subject requirements To understand what made it easy/difficult to contribute → link to RQs To understand what encouraged them to contribute and what hindered them?	Self conscious / awkward? At ease / not bothered? Gained confidence over time? Encouraged or not by challenge of the tasks? Encouraged or not by

STUDENT: INTERVIEW QUESTIONS MATRIX & PROBES

What do I need to know?	Why do I need to know this?	Interview Probes
		<p>comments of others?</p> <p>What encouraged you to contribute, what discouraged you?</p>
<p>Do you feel you learnt from the contributions of others? ... and learnt by having to read and comment on others' postings.</p> <p>Why / why not?</p>	<p>Link to the literature on sense of community and interaction, and satisfaction</p> <p>Link to RQs</p>	<p>Learning from a range of other perspectives</p> <p>Learning through having to thoughtfully comment?</p>
<p>With the discussion forums being a large component of assessment, how helpful do you feel this was to your learning experience? In what way/s?</p> <p>How helpful was this in building a sense of belonging to the group?</p> <p>How important do you think the role of interaction is in distance learning?</p>	<p>Link to the literature on sense of community and interaction, and satisfaction</p> <p>Link to RQs</p> <p>To understand student perspectives of the purpose of interaction Link to RQ2 and to the literature</p>	<p>Did it help you learn the subject content?</p> <p>Did it encourage to engage with the literature, the content?</p> <p>Did it help you connect with others?</p>
<p>When you were writing the discussion posts, were you aware of thinking about the intended audience and if so, who were they?</p>	<p>This may link to how the interaction/dialogue is constructed</p>	<p>Did this affect the way you wrote / composed your post / response?</p> <p>Did the intended audience vary?</p>
<p>The tutor ['appears' / doesn't 'appear'] on the discussion forums often – did this make you feel less/more inhibited when posting? Or how do you feel about this?</p>	<p>Link to the literature re Teacher presence</p> <p>Link to RQs</p>	
<p>Finally, how do you find navigating around the subject site (e.g. finding information, sending messages, using discussion threads, downloading resources etc)</p> <p>And how about using the thread system?</p>	<p>Link to subject design and design constraints → may affect ease of interaction</p> <p>Link to RQs</p> <p>To understand the impact of subject site navigation on the experience</p>	<p>Easy / difficult to find information? Send messages? Use discussion thread system? Download resources?</p>
EVALUATION AND FINISH		
<p>Is there anything else you'd like to add about your experience of being a learner by distance (difficulties, challenges etc)</p>	<p>To understand student perspectives and to understand how online pedagogy could be enhanced</p> <p>Link to literature, RQs</p> <p>To understand the pedagogy that 'works' and where it could be enhanced</p>	

Appendix v: Subject designer question matrix and probes

SUBJECT DESIGNER: INTERVIEW QUESTIONS MATRIX & PROBES

What do I need to know?	Why do I need to know this?	Interview Probes
<p>What sorts of decisions were made during the design (and setting up) of the subject?</p> <p>When was it designed?</p> <p>How long did it take?</p>	<p>To understand how design decisions impact on the virtual classroom in terms of how the information could be presented, how to incorporate interaction and what kind of interaction (forum/chat room), how to stimulate/maintain student interest/motivation</p> <p>Linked to: RQs</p>	<p>How to present the information</p> <p>How to stimulate / maintain student interest / motivation</p> <p>How to incorporate interaction and what sort of interaction</p>
<p>What were the goals for the design?</p> <p>What was the rationale behind the design?</p>	<p>To understand the core goals and rationale behind the subject design and what it was aiming to achieve, how this impacted the design aims in terms of what the resources included ...</p> <p>and the ideas for interaction and participation</p>	<p>What was the intended aim of the design? → what decisions were made about resources etc?</p> <p>It was it a matter of what could/could not be customized, how might this have affected the design?</p> <p>What about designing in opportunities for interaction and participation?</p> <p>Why was it designed the way it was?</p>
<p>What are the pedagogic goals? (what are the core goals?)</p> <p>How did these pedagogic goals influence the way the subject was designed?</p> <p>Were there other factors which impinged on the design?</p> <p>Did you have in mind the 'type' of learners that would be doing this subject?</p>	<p>To understand the educational purposes and how the subject was designed in order to meet these pedagogic goals (such as teaching / learning goals, student participation goals) and perhaps what was NOT ABLE to be included in the design</p> <p>To identify the learning outcomes and to understand how the design of the subject moves the students towards these</p> <p>[Link this to student perspectives: To see how the pedagogic goals are met from a student perspective??]</p> <p>Assuming a pedagogic goal is learning: RQ1 iii) to trace the knowledge under construction</p> <p>and that another one is to form connections between members: linked to: RQs factors impacting interaction and the community behaviours of the group</p>	<p>What were the core goals of the subject design?</p> <p>What learning was the subject hoping to achieve?</p> <p>How was it proposed that the teaching/learning would occur?</p> <p>Was establishing community an aspect considered in the design?</p>
<p>What constraints did you experience when designing the subject?</p>	<p>To find out what was not able to be included/done in an 'ideal' design in order to understand what has been included as part of the design.</p> <p>To understand the learning 'context' in view of the bigger picture and those things which were out of the designer's control and the considerations that needed to be made (in terms of the technology and technology students needed to participate, minimum computer skills) → this may be impact the extent of interaction/community building, the way in which knowledge is built up, the number of topics that could be covered</p> <p>Linked to: RQs what might foster / hinder interaction / the knowledge under construction</p>	<p>What constraints were there within the Janison platform (i.e. the kinds of resources that could be used, the type of interaction opportunities that were possible)?</p> <p>Constraints from the institution?</p> <p>Time constraints?</p> <p>Anything else?</p>
<p>What worked (in the design) and what didn't work?</p>	<p>To understand the implications of design decisions and any subsequent adjustments (i.e. the reality of 'trial and error') and why the adjustments were made. This could be in relation to managing interaction, facilitating community building, facilitating learning, assessment tasks</p> <p>Linked to: RQs</p>	<p>User friendly?</p> <p>Discussion thread system – easy / difficulty to use correctly?</p>

SUBJECT DESIGNER: INTERVIEW QUESTIONS MATRIX & PROBES

What do I need to know?	Why do I need to know this?	Interview Probes
How conducive to you think the Janison discussion forums are in encouraging interaction?	To understand how well the Janison discussion forum system is suited for the purpose of interaction to build knowledge and community in terms of its 'thread' system and how user-friendly it is perceived to be. Linked to: RQs what might foster / hinder interaction	Opportunities for subsequent adjustments? Managing interaction Facilitating community building? Facilitating learning?
Once the design is in place, what degree of flexibility is there to 298ustomize?	To understand whether there is appropriate flexibility in the design for the subject tutor to 298ustomize to suit the particular group Linked to: RQs what might foster / hinder interaction	Ability to adapt to changing circumstances / group dynamics, needs etc
Finally, when was the subject first designed? And how long did the design process take before it was implemented?	Contextual information	

Appendix vi: Instructor interview question matrix and probes

SUBJECT INSTRUCTOR: INTERVIEW QUESTIONS MATRIX & PROBES

What do I need to know?	Why do I need to know this?	Interview Probes
A. Role and Context		
How do you see your role as an online instructor?	To understand this role from their perspective and how they view their 'position' in the virtual classroom – the expert? the guide? the supporter? the mediator? To understand what they feel is more important and less important in carrying out their role? Link to RQs: learners engagement level in online discussion	Important aspects of this role? Less important aspects? As guide? Supporter? Mediator? Facilitator?
How do you feel about being an online tutor – particularly in relation to being separated. What are some of the advantages and disadvantages of being separated?	To understand the impact of lack of physical presence → some of the joys and demands which come with this role (e.g. class dynamics, establishing rapport, organisation opportunities for interaction, varying computer/technology skills, student expectations / demands on time, student level of autonomy ...) To understand how some challenges may be / have been tackled To understand how / why some challenges may not /cannot be fully resolved Link to: literature re effect of separation (but from tutor perspective) → not much in the literature from this perspective	Challenges in carrying out this role? (i.e. work harder to establish rapport? Provide more explicit feedback/responses more often?) Varying levels of student autonomy, technical skills, work-life demands etc Meeting students' needs / demands / extra TLC?
What kinds of things do you do to compensate for the lack of physical presence?	To understand classroom practice as it occurs for OLL as it may differ to face-to-face Link to: literature regarding variables in DE (physical presence, teacher presence and learner autonomy, Moore 1995)	Strategies used to overcome separation? How are these strategies different to face-to-face?
In what ways does the Janison learning site help or hinder you in carrying out your role? Any other factors (apart from Janison)?	To understand the 'context' and process of teaching in the virtual classroom and how well the learning site platform facilitates this To understand other factors which impact the instructor in carrying out his/her role	Technology issues (advantages / disadvantages) Time outlay? Catering to different needs of students? Demands of the institution? Admin duties?
B. Teaching		
Tell me about how you believe learning happens What are some issues for online learners that you've noticed What are some of the issues for you in relation to how teaching 'happens' online?	To understand the instructor's teaching philosophy and how the context of OLL impacts this To understand some teaching/learning issues from the instructor perspective	Ways you think about teaching? How does this 'translate' to the online context? Does it match with how the subject is / can be delivered?
Where does the 'expert' commentary happen? How / where to you see the process of knowledge building occurring? What role does the discussion forums have in your subject? What kind of	To understand the process of building knowledge and at what points or under what circumstances the instructor provides expert input To understand how the instructor sees the unfolding of knowledge development and whether these can be pinpointed Link to: RQs and theory (knowledge construction as revealed in the dialogue, and knowledge constructed through interaction)	From unit/topic guides, readings, links, announcements, discussion forms ... anywhere else? Knowledge building seen in discussion forums? In assessment tasks? Emails from students? How do students 'take control' of their learning?

SUBJECT INSTRUCTOR: INTERVIEW QUESTIONS MATRIX & PROBES

What do I need to know?	Why do I need to know this?	Interview Probes
knowledge do you see developed in the discussion forums, if any?		
What level of autonomy is expected of the students who do this subject?	To understand the context of this subject in terms of learner autonomy as this is connected to levels of interaction required, expectations of tutor presence Link to: literature	Are students aware of the autonomy expected, or is it assumed they will be at a certain level?
C. Interaction		
How would you describe the purpose of the forums	To understand how the instructor views the purpose of interaction, in terms of what is hoped will be achieved, as well as the importance of interaction and the type of interaction anticipated	What is the role of interaction → to build content knowledge? Build community? Other?)
In your experience have you noticed what might increase interaction and what might hinder interaction?	To understand the factors which may impact interaction Link to: RQs	Effect of instructor intervention / moderation? Differences between 'novice' / 'experienced' students? Group dynamics? (dominators / lurkers?)
What strategies seem to work best for encouraging interaction between group members? [Instructor A only: you have left the postings of the previous intake on the site → what is the reason for this?]	To understand the factors which may impact interaction Link to: RQs To understand the role of 'allowing' current students to view previous students' postings and how this may impact interaction	Are strategies dependent on the particular group, or people in the group?
Tell me about your decision to make the forums an assessable / non-assessable component. Why did you make this decision? How has this evolved over the history of the subject?	To understand the factors which may impact the kind of interaction that occurs (could link to question above) Link to: RQs	Development of content knowledge? Development of discourse knowledge? Development of 'thinking together'? Evidence of student reflection and applying knowledge to real life?
[If assessed]: How do you assess the forum discussions?	To understand how assessment is linked to the purpose of the forums and the subject outcomes / expectations → in terms of responding to others, developing content and discourse knowledge	
Do you have anything else to add about how the forum is used?	To understand what is working well and what is not in terms of the type, level and quality of interaction currently occurring To understand the factors which may impact interaction Link to: RQs	Etiquette? Reluctance to interact / participate?
D. Level of involvement		

SUBJECT INSTRUCTOR: INTERVIEW QUESTIONS MATRIX & PROBES

What do I need to know?	Why do I need to know this?	Interview Probes
Tell me about your level of involvement in the discussion forums. What decisions have you made in relation to this and why?	Pre-supposition: that the instructor has made some decisions about what level of involvement is appropriate To understand what these decisions are and the rationale for them Link to literature re teacher presence → this will also provide another perspective to the students' perspectives about tutor involvement	Is this made explicit to the the students (i.e. they know what to expect?) Does high teaching presence on the forums equate to reduced time on individual contact?
How do you manage individual student-instructor contact	Pre-supposition: that the instructor has made some decisions about how to manage contact with students (apart from the 'public' discussion forums) Link to literature re teacher presence, student feeling of connectedness Link to literature re teacher presence → this will also provide another perspective to the students' perspectives about feeling supported	Do you feel you need to spend more time / be more prompt / be more careful / more attentive? Is time spent in individual contact appropriate / excessive?

Matrix adapted from Maxwell (2005), *Qualitative Research Design*, pp 100-101

SurveyMonkey: QUESTIONNAIRE (students only)

Q1 Which distance subject have you just completed

- ☐ Subject X: Methodology in TESOL
 ☐ Subject I: Second Language Literacy
☐ Subject S: Speaking & Listening
 ☐ Subject A: English in International Contexts

Q2 & 3 Classroom Community Scale¹

Directions: Below, you will see a series of statements which should be answered in regard to the online subject you have just completed. Read each statement carefully and click on the column which comes closest to indicating how you feel about the subject.

Do not spend too much time on any one statement, but give the response that seems to describe how you feel. Please respond to all items.

			I disagree strongly (SD)	I disagree (D)	I neither disagree (N)	I agree (A)	I strongly agree (SA)
C ²	1	I feel that students in this subject care about each other					
L ³	2	I feel that I am encouraged to ask questions					
C	3	I feel connected to others in this subject					
L	4	I feel that it is hard to get help when I have a question					
C	5	I do not feel a spirit of community					
L	6	I feel that I receive timely feedback					
C	7	I feel that this subject is like a family					
L	8	I feel uneasy exposing gaps in my understanding					
C	9	I feel isolated in this subject					
L	10	I feel reluctant to speak openly					
Any further comments on the above:							

C	11	I trust others in this subject					
L	12	I feel that this subject results in only modest learning					
C	13	I feel that I can rely on others in this subject					
L	14	I feel that other students do not help me learn					
C	15	I feel that members of this subject depend on me					
L	16	I feel that I am given ample opportunities to learn					
C	17	I feel uncertain about others in this subject					
L	18	I feel that my educational needs are not being met					
C	19	I feel confident that others will support me					
L	20	I feel that this subject does not promote a desire to learn					
Any further comments on the above:							

Q4 Demographic information (short answer)

- Apart from this subject, have you studied by distance before
- If yes, was this at UoW or another university
- Where are you geographically located? (country, city/town)
- Is English your first language?
- If no, what is your first language?
- What post-graduate program were you doing when enrolled in this subject? (Grad. Cert, Grad. Dip, Masters)
- After completing this subject, what stage are you up to in your program of study (i.e. how many units completed / how many units till you finish?)
- What are the main reason/s for choosing to study by distance?

Q5 Interview (optional)

- Are you willing to be interviewed? (30 minutes)
- If yes, which would prefer: Skype, telephone, chatroom, or face-to-face (if feasible)
- If yes, enter your name
- and your email address (and I'll be in contact with you to organize the best time for you)

¹ Rovai, A. P. (2002b). "Development of an instrument to measure classroom community." *The Internet and Higher Education*. 5(3): 197-211. accessed 9 April 2010. ScienceDirect.

² "C" indicates questions relating to sense of community

³ "L" indicates questions relating to learning

Appendix vii: Survey Instrument

Case #	Pseudonym	Gender	Enrolled in:	Nationality (if not Australian)	Location	Level of research participation	Previous / current teaching qualifications
Case A	Designer A	M	-		Sydney	Full	-
	Instructor A	M	-		Sydney	Full	-
	Ben	M	Masters		Sydney	Full	Yes (high school English)
	Alice	F	Grad. Dip.		Maryborough, Qld	Full	No
	Sharon	F	Grad. Cert.		Wollongong	DF + survey	Yes (high school)
	Vicky	F	Grad. Dip.		Wollongong	Full	No
	Wendy	F	Masters		Wollongong	Full	Yes (primary)
Case I	Instructor I	F	-		Sydney	Full	-
	Beth	F	Masters		Sydney	DF + survey	Yes (primary)
	Mary	F	Masters		Sydney	Full	Yes (primary)
	Amanda	F	Masters	South African	Dubai UAE	Full	Yes (English college)
	Will	M	Masters	Canadian	Usa-City, Japan	Full	Yes
	Paula	F	Grad. Dip.		Mossman, Qld	Full	Yes (TAFE)
Case S	Designer S	M	-		Sydney	Full	-
	Instructor S	F	-		Wollongong	Full	-
	Susan	F	Not disclosed		Not disclosed	DF only	Yes (primary)
	Rachel	F	Masters		Sydney	DF + survey	Yes (English)
	Maralyn	F	Masters		Coogee	DF + survey	Yes (primary)
	Cathy	F	Masters		Tokyo, Japan	Full	Yes (English school)
	Jenny	F	Masters		Wollongong	Full	Yes (English College)
	Levi	M	Not disclosed		Cobram Vic. & Hong Kong	Full	Yes (high school PE, English school)
Case X	Instructor X	M	-		Sydney	Full	-
	Hayato	M	Masters	Japanese	Sydney	DF only	Yes (high school LOTE)
	Therese	F	Not disclosed		Abbotsford	DF only	Yes (primary)
	Rowena	F	Grad Dip.		Wodonga, NSW	DF only	Yes (primary)
	Sally	F	Grad. Cert.		Sydney	Full	Yes (primary)
	Nicole	F	Grad. Cert.		Sydney	Full	Yes (high school)
Full participation: designers = one x 45-60 minute semi-structured interview; instructors = one x 45-60 minute semi-structured interview PLUS discussion forums (DF) texts;							
Students were offered various levels of participation: Full = discussion forum (DF) texts PLUS online survey PLUS one x 30 minute semi-structured interview							

Appendix viii: Demographic Data

Classroom Community Online Survey Results Summary

Sense of Community responses

Response count per concept favourability category

Case Study A: High assessment value on discussion participation (40%)

Question	strongly unfavourable to concept	somewhat unfavourable to concept	undecided	somewhat favourable to concept	strongly favourable to concept	concept: "In this subject ..."
1		1	3			students care about each other
3	1	1	1	1		we are connected
5		2		2		there is a spirit of community
7	1	3				we are like family
9	1	2		1		I feel I am not alone
11		2	2			I can trust others
13			2	2		I can rely on others
15		2	2			others rely on me
17			2	2		I feel certain about others
19		1	2	1		I know others will support me
	3	14	14	9	0	

Case Study I: High instructor involvement

Question	strongly unfavourable to concept	somewhat unfavourable to concept	undecided	somewhat favourable to concept	strongly favourable to concept	concept: "In this subject ..."
1			2	3		students care about each other
3			2	3		we are connected
5			1	4		there is a spirit of community
7		2	3			we are like family
9			1	3	1	I feel I am not alone
11			1	4		I can trust others
13			1	4		I can rely on others
15		3	2			others rely on me
17			2	3		I feel certain about others
19				5		I know others will support me
	0	5	15	29	1	

Case Study S: Nil instructor involvement

Question	strongly unfavourable to concept	somewhat unfavourable to concept	undecided	somewhat favourable to concept	strongly favourable to concept	concept: "In this subject ..."
1		1	4			students care about each other
3		2	1	2		we are connected
5	1	1	2	1		there is a spirit of community
7	2	3				we are like family
9	1	1		2	1	I feel I am not alone
11			4	1		I can trust others
13			4	1		I can rely on others
15	1	3	1			others rely on me
17		1	3	1		I feel certain about others
19		1	2	2		I know others will support me
	5	13	21	10	1	

Appendix ix: Online Survey Results to questions relating to sense of community

Classroom Community Online Survey Results Summary

"Learning" component responses

Response count per concept favourability category

Case Study A: High assessment value on discussion participation (40%)

Question	strongly unfavourable to concept	somewhat unfavourable to concept	undecided	somewhat favourable to concept	strongly favourable to concept	concept: "In this subject ..."
2	1			2	1	I am encouraged to ask questions
4		2		1	1	help is easy to get
6	1		1	1	1	feedback is timely
8		2		2		exposing 'gaps' in my understanding is OK
10		1	1	2		I can speak openly
12		1		3		I learn a lot
14		1	1	2		I learn from others
16			1	2	1	I have ample opportunities to learn
18			2	2		my educational needs are being met
20				3	1	my desire to learn is promoted
	2	7	6	20	5	

Case Study I: High instructor involvement

Question	strongly unfavourable to concept	somewhat unfavourable to concept	undecided	somewhat favourable to concept	strongly favourable to concept	concept: "In this subject ..."
2				2	3	I am encouraged to ask questions
4			1	1	3	help is easy to get
6					5	feedback is timely
8				4	1	exposing 'gaps' in my understanding is OK
10				3	2	I can speak openly
12				3	2	I learn a lot
14			1	3	1	I learn from others
16				4	1	I have ample opportunities to learn
18				2	3	my educational needs are being met
20				1	4	my desire to learn is promoted
			2	23	25	

Case Study S: Nil instructor involvement

Question	strongly unfavourable to concept	somewhat unfavourable to concept	undecided	somewhat favourable to concept	strongly favourable to concept	concept: "In this subject ..."
2		1	1	2	1	I am encouraged to ask questions
4			1	3	1	help is easy to get
6				4	1	feedback is timely
8			2	3		exposing 'gaps' in my understanding is OK
10			1	4		I can speak openly
12		1		3	1	I learn a lot
14	1	1	2	1		I learn from others
16			2	2	1	I have ample opportunities to learn
18				4	1	my educational needs are being met
20			1	3	1	my desire to learn is promoted
	1	3	10	29	7	

Appendix x: Online survey results to questions relating to learning

Online survey summary - student perspectives on sense of community and learning

To summarise the survey results briefly, in relation to perceptions of community felt by students which is closely linked to how discussion was orchestrated, Case I (instructor-driven discussions) responses were generally more positive towards the learning community than the other two cases. This was evident from the responses to the extent that it was perceived that students cared for each other, that there was a good level of connectedness and sense of community, as well as of trust built between group members allowing them to feel supported with a level of certainty about others in the group. Regarding the survey questions, 'we are like a family' and 'others rely on me', none of the students across the three cases indicated that these reflected their experience. Being able to rely on others was the experience of students in Case I, but students in Case S (student-driven discussions) were unable to respond to this (i.e. 'neutral' responses), with Case A (assessment-driven discussions) responses showing less favourability to this idea. To the statement 'I feel isolated in this subject' students in Case A tended to agree with this, while Case I mostly disagreed, and Case S students were divided between these two positions.

In the responses to learning there were more similarities across the three cases. Almost all students felt they could speak openly, that they were given ample opportunities to learn, that the subjects promoted a desire to learn, and that they learnt a lot, although Case I responses indicated a more favourable response to this. All students felt their educational needs were being met. Case I responses were more positive than the other cases in regard to getting help when needed, the ease felt when exposing gaps in their understanding, the role of others in their learning process, and the encouragement to ask questions. Students in both Case I and S were very positive about the timeliness of the feedback they received, while Case A had mixed responses to this.

While the survey results are from a small data set (a total of 14 respondents), when viewed in conjunction with the other data analysed, they do provide compatible support to our findings. What is notable about these results is the largely positive responses from students in Case I to the sense of community aspects, and the absence of any negative responses regarding learning aspects. A surprising result is the tendency towards more negativity felt by students in Case A, even despite the fact that this would have been expected from Case S which showed a much higher level of disengagement in the discussions. This may provide some insight into student perceptions of high assessment on participation in discussions, as we could surmise that those students who did post to the forums in Case S did so voluntarily. Despite this however, Case S could not be considered a learning community because of the lack of interaction between group members.

Appendix xi: Survey results interpreted

Appendix xii: Survey Qualitative raw data - comments and demographic information

General Comments after Questions 10 & 20 in Community Survey:

Comments	Pseudonym,/Case
It's been a while so I don't have any comments really. I made comments on the forum as this subject required it more than the others. I only participate in the ones where I felt I had something to offer	Levi , Case S
It is very difficult for me to comment on many of these as I had no contact with any of the students in my course.	Cathy , Case S
My answers have been influenced by my experience in the 'distance' subject I am currently doing where there is a much stronger sense of 'community'. I had nothing to compare with in my first subject and didn't feel at all dissatisfied at the time.	Jenny, Case S
I think there is some level of isolation when you study by distance. Interacting electronically can never be a substitute for the quality experienced in face-to-face interactions, but as far as this network is concerned I think it served its purpose rather well.	Will, Case I
The tasks did not necessitate interaction with other students.	Ben, Case A
I haven't felt any need for the support of other students. I have always preferred to study alone	Levi , Case S
Everyone participated by responding to the readings and activities only each week. Therefore I was reluctant to ask any questions related to the course or participate actively in discussions.	Nicole, Case X
I did not rely on any other students for guidance or help. I felt that we needed to be self-motivated and disciplined in our approach to learning and I wasn't really aware of the other students as there was no interaction. I did rely on my supervisor to answer any queries. My first approach to the other students was in the form of an introduction. When there was no response I assumed that we were not working collaboratively so I just got on with the study and the online tasks myself. There was no feedback provided regarding my online tasks unlike the subject I am now doing. This is not a complaint as I was happy to work alone. I actually feel a certain amount of pressure having to keep up with the comments and postings on the distance forum in my present subject.	Jenny, Case S
I tried to contribute to the overall discussion but am unsure of the effects of my contributions. It is unfortunate that we could not all get together via Skype as that would allow me to put a face to a name. Although in this situation students are all more or less made to rely on each other, I find it difficult to do so unless I meet someone face-to-face.	Will, Case I
In regards to "I trust others in this subject", I don't really think this subject offered opportunities to establish such relationships.	Vicky, Case A
Some pre-recorded on-line video lectures could help with engagement.	Ben, Case A

Apart from this subject, have you studied by distance before?

yes	Levi , Case S
Yes	Mary, Case I
Yes	Cathy, Case S
Yes	Amanda, Case I
No so I didn't really know the process involved and was quite "lost" at first in terms of knowing where to access Janison.	Nicole, Case X

yes, once	Jenny, Case S
Yes	Will, Case I
Yes	Paula, Case I
No	Vicky, Case A
NO	Alice, Case A
NO	Ben, Case A
No	Sharon, Case A

If yes, was this at UoW or another university?

Monash Uni & LaTrobe uni, both in Victoria. Also Teach International	Levi , Case S
This university	Mary, Case I
No	Cathy, Case S
UOW	Amanda, Case I
UoW	Jenny, Case S
Open Learning through the University of Victoria, Canada	Will, Case I
UOW, University of New England, Central Queensland University	Paula, Case I
NA	Alice, Case A

Where are you geographically located?

This was all in Cobram Victoria. I'm now in Hong Kong	Levi , Case S
City	Mary, Case I
Japan, Tokyo	Cathy, Case S
Dubai, UAE	Amanda, Case I
Sydney, NSW	Nicole, Case X
Wollongong	Jenny, Case S
Japan, Usa-city, Oita-Prefecture on the southern island of Kyushu.	Will, Case I
Mossman, Qld	Paula, Case I
Suburbs/ Wollongong	Vicky, Case A
MARYBOROUGH QLD	Alice, Case A
Sydney	Ben, Case A
Wollongong	Sharon, Case A

Is English your first language?

Yes	Levi , Case S
Yes	Mary, Case I
Yes	Cathy, Case S
Yes	Amanda, Case I
Yes	Nicole, Case X
Yes	Jenny, Case S

Yes	Will, Case I
Yes	Paula, Case I
Yes	Vicky, Case A
YES	Alice, Case A
Yes	Ben, Case A
Yes	Sharon, Case A

What post-graduate program were you doing when enrolled in this subject?

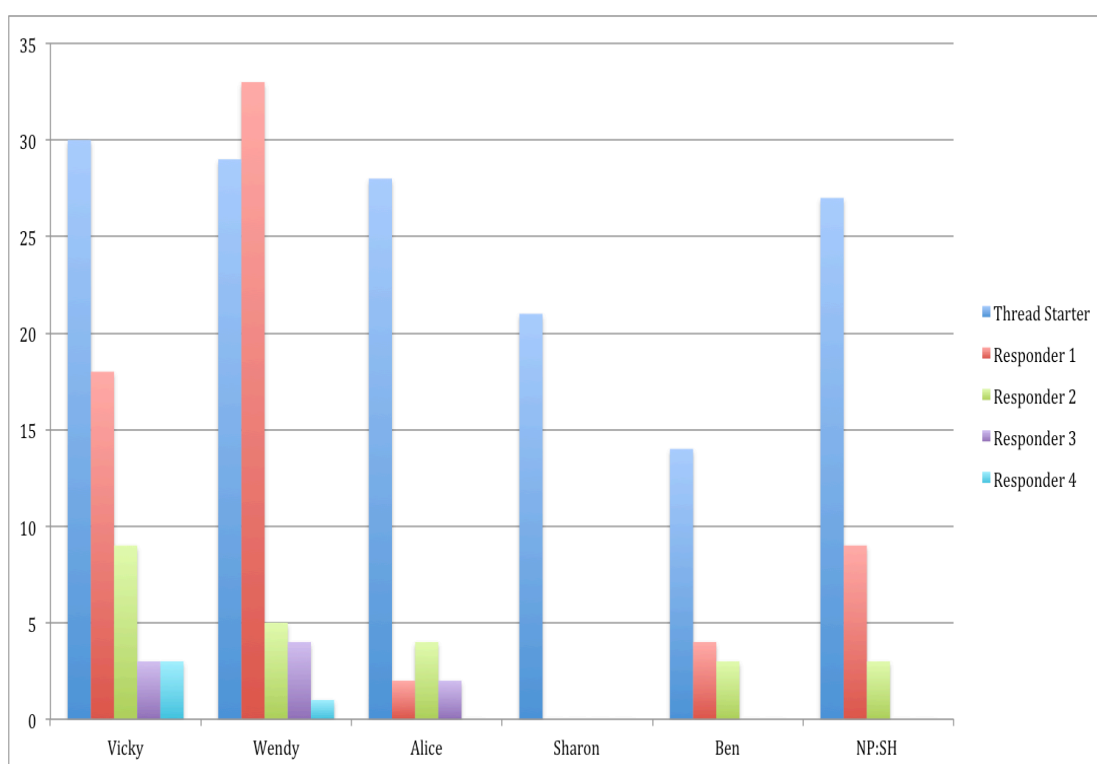
Before this I did a Graduate Certificate in 2002-3	Levi , Case S
Master of Education TESOL	Mary, Case I
Masters	Cathy, Case S
MED TESOL	Amanda, Case I
Graduate Certificate	Nicole, Case X
Master of Education TESOL	Jenny, Case S
Master of Education TESOL	Will, , Case I
Grad Dip	Paula, Case I
Graduate Diploma in TESOL	Vicky, Case A
GRAD DIPLOMA	Alice, Case A
Masters	Ben, Case A
grad cert in tesol	Sharon, Case A

After completing this subject, what stage are you up to in your program of study?

4 completed, 3 to go	Levi , Case S
Four units completed half-way	Mary, Case I
credit points to go	Cathy, Case S
2 UNITS LEFT TO COMPLETE	Amanda, Case I
One unit completed, three units remaining	Nicole, Case X
2 subjects completed, to go	Jenny, Case S
half way through the two year program completed 4 courses out of the required	Will, Case I
3 units to complete	Paula, Case I
Just finished my degree	Vicky, Case A
5 COMPLETED, 3 TO GO	Alice, Case A
5 completed; 3 to complete	Ben, Case A
2 units completed	Sharon, Case A

What are the main reason/s for studying by distance?

It was the only course where I didn't have to attend campus	Levi , Case S
Location in relation to the university, other universities didn't offer Commonwealth supported placements	Mary, Case I
I live overseas	Cathy, Case S
Convenience. It fits in with my fulltime work, and I work at UOWD, so it made sense to study through the 'mothership'.	Amanda, Case I
Easier to fit in with work and family	Nicole, Case X
so that it does not interfere with my teaching timetable at Wollongong College Australia	Jenny, Case S
I have two full time jobs and a family and am not able to take time off to attend classes at a university	Will, Case I
convenience, distance from preferred university, course offered by uni	Paula, Case I
Wanted to see if I was more suited to distance or on campus study.	Vicky, Case A
I WORK FULL TIME, IT'S THE COURSE I WANTED TO DO, CONVENIENCE	Alice, Case A
full-time employment prevented me from attending the campus	Ben, Case A
convenience with other commitments	Sharon, Case A



Appendix xiii: Case A - patterns in student posting across 11 forums

Turn #	Student	Discussion Text Excerpts
2	S1	... A traveller at heart who has not left Australia for many years I am constantly thinking of international contexts! ... I would love to work in Italy ... In my BA I majored in Italian and completely fell in love with it. I would love to combine English and Italian! ... there are no prizes for guessing which country I will be researching in this unit who knows what I will discover.
3	S2	... I recently spent 6 months teaching Hotel Management in Guangzhou, China, to university students. This was my first major oversea experience. It was a fantastic experience, which has lead me to wanting to work more with international students and to considering travelling and working overseas again ...
4	Wendy	... Last year the travel bug set in and since then I've travelled to Laos, Thailand and Cambodia and I've just returned from a 5 week trip to China and Malaysia, which was absolutely amazing. Teaching English overseas next year is my ultimate goal to extend upon my teaching experience and further my travel adventures ...
5	Sharon	... I've been teaching both in Australia and Canada for quite a while and I am looking forward to a challenge and learning new things...what life's all about, right? I loved teaching in Canada, very different to my experiences in NSW. I was there from 1991-2006 ...
6	Vicky	... I would love to teach in China at some point as members of my family have recently moved to Shen Zhen, and I guess I just like the idea of experiencing cultures outside of my own, and have always been interested in China. Like many people here, I am a traveler and have recently visited Austria, Slovakia, the Czech Republic and Serbia, and have my sights set on South America and China in the near future. I think teaching English internationally would be a very rewarding experience and a great way to cure the travel bug – that's why I'm here!
6.1	S1	Hi Vicky, I just did a 6 month teaching contract in Guangzhou, China. I loved it. ... There is a lot red tape, but if you are a patient person it is worth it. ...
6.2	Wendy	Hi Vicky What does your brother think about Shenzhen since he's been living there for a while now? We passed through there on our travels and it seemed to be quite a modern city with great subways and train networks. I think compared to other provincial capitals, Shenzhen would be a good place to live but it's more expensive as its within a special economic zone and close to Hong Kong. Beijing was amazing too! I think out of all the places we visited in China, it was the most impressive. There's alot going on there to keep a foreigner busy. Plus there would be lots of English teaching jobs available.
6.3	Vicky	Hi guys, Yeah Brad is actually back in Australia for a little while, but he seems to really like Shenzhen. He told me he felt like the only "Western person" in the area though, people would actually stare at him, point and say "guilau" (spelling?), which is apparently Chinese for "foreigner"! But he never encountered anything menacing, thankfully. As far as teaching goes, I've heard private teaching is becoming really popular, and pays quite well (I'm not sure where the best pay is). I will definitely look into NET - is that for secondary schooling?
7	Alice	... I love to travel and for me the best way to experience a community and culture is to become totally involved, working and living in the community. My goal in doing this course is to attain a qualification that will hopefully allow me to gain employment teaching Business English to adults in Asia ...

Appendix xiv: Case A - excerpts from discussion on travel

Pseudonym	Case Study #	Role	Consent given	Online Survey	Mode	Interview + Transcript completed	completed
Designer A	CS A	Designer	YES	n/a	Skype	Nov 2010	✓
Instructor A	CS A	Instructor	YES	n/a	Skype/phone	Nov 2010	✓
Ben	CS A	Student CS A	YES	✓	Phone	Dec 2010	✓
Alice	CS A	Student CS A	YES	✓	Skype	Dec 2010	✓
Vicky	CS A	Student CS A	YES	✓	Skype	Dec 2010	✓
Wendy	CS A	Student CS A	YES	L1 only	n/a	n/a	✓
Sharon	CS A	Student CS A	YES	✓	(opted out: interview only)	n/a	✓
Designer I	CS I	Designer	YES	n/a			Interview not completed
Instructor I	CS I	Instructor	YES	n/a	phone	July 2011	✓
Beth	CS I	Student CS I	YES	✓	n/a	n/a	✓
Mary	CS I	Student CS I	YES	✓	Skype Chat / Phone	June 2011	✓
Amanda	CS I	Student CS I	YES	✓	Skype	June 2011	✓
Will	CS I	Student CS I	YES	✓	Skype	May 2011	✓
Paula	CS I	Student CS I	YES	✓	Skype	May 2011	✓
Designer S	CS S	Designer	YES	n/a	face-to-face	July 2011	✓
Tutor S	CS S	Tutor	YES	n/a	face-to-face	June 2011	✓
Susan	CS S	Student CS S	YES	L1 only	n/a	n/a	✓
Rachel	CS S	Student CS S	YES	✓	n/a	n/a	✓
Maralyn	CS S	Student CS S	YES	✓	n/a	n/a	✓
Cathy	CS S	Student CS S	YES	✓	Phone	June 2011	✓
Jenny	CS S	Student CS S	YES	✓	Phone	May 2011	✓
Levi	CS S	Student CS S	YES	✓	phone	Sept 2011	✓
Designer X	CS X	Designer	cannot locate	n/a			
Instructor X	CS X	Tutor	YES	n/a	face-to-face	July 2011	✓
Hayato	CS X	Student CS X	YES	L1 only	n/a	n/a	✓
Terese	CS X	Student CS X	YES	L1 only	n/a	n/a	✓
Rowena	CS X	Student CS X	YES	L1 only	n/a	n/a	✓
Sally	CS X	Student CS X	YES	✓	Skype	July 2011	✓
Nicole	CS X	Student CS X	YES	✓	Phone	July 2011	✓

Appendix xv: Data collection schedule for all subjects in case study

Appendix xvi: Genre stages mapped to social construction of knowledge codes

Genre Stage: BRIDGING

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K ⁷³ CODING	Coding/phasing Description
IC1	11	MEDIATION	1	Mediator	bye for now, Mediator	sign off	
IC1	12	TOPIC	2	Paula	Hi everyone	greeting	
IC1	13	TOPIC	2	Paula	I work as a casual teacher for Mossman TAFE in far north Queensland. It's a small class of AMEP students with different levels of English, plus (THERE ARE) some students with learning disabilities. I'm not sure whether it is more difficult to have a large class all closely at the same level or a small one with varying abilities.	1. Sharing / comparing of information	social exchange
IC1	14	TOPIC	2	Paula	Anyway, it is only one day per week so I have time to think about it plus continue my studies.	1. Sharing / comparing of information	social exchange
IC1	19	TOPIC	2	Paula	I look forward to working and studying with you all. Kind regards. Paula	1. Sharing / comparing of information	social exchange
IC1	20	TOPIC	3	Beth	Hello Everyone, I am a primary school teacher	1. Sharing / comparing of information	social exchange
IC1	21	TOPIC	3	Beth	currently teaching at a new school to me this year and also in a new diocese that has 90% - 95% of children speaking English as a second language.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	22	TOPIC	3	Beth	I have a rather large class of 33 and have only had my children for three days, however it is easy to see in class discussions and writing tasks that there is a range of abilities within my classroom.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	23	TOPIC	3	Beth	This is a major challenge for me, as my previous years of teaching did not involve many children with English as a second language.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	26	TOPIC	3	Beth	Looking forward to this subject, as I believe it will assist me in the classroom. Beth	1. Sharing / comparing of information	social exchange

⁷³ SC of K = Social Construction of Knowledge

Genre Stage: BRIDGING

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K ⁷³ CODING	Coding/phasing Description
IC1	27	TOPIC	4	S3MD	Hi all. I have just completed my Bachelor of Primary Education at UOW and have decided to complete my Masters in Education (TESOL) as I believe that as an educator I should be promoting willingness to learn.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	28	TOPIC	4	S3MD	I decided to major in TESOL as where I live and teach has a plethora of cultures in one big mixing pot. It's incredible to be a part of. I enjoy communicating with those from different nationalities as all cultures are fascinating.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	32	TOPIC	4	S3MD	I wish you all a very successful time studying with UOW. Warmest Regards, S3MD	1. Sharing / comparing of information	social exchange
IC1	33	MEDIATION	5	Mediator	Great to hear from you, Beth, Paula and MD.	acknowledging	
IC1	36	TOPIC	6	Mary	Hi everyone, My name is Mary, and I'm a primary school teacher.	1. Sharing / comparing of information	social exchange
IC1	37	TOPIC	6	Mary	Last year I went on a teacher exchange program to Canada (teaching Year 6). For five years prior to that I taught (mainly kindergarten) in South Penrith. This year I have a job that's a little unusual. I'll be home schooling a Year 4 boy in Kensington for nine days per fortnight.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	38	TOPIC	6	Mary	It was interesting to read the introductions and responses already posted.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	41	TOPIC	6	Mary	I'm very much looking forward to this subject. An online chat Feb 22nd at EST sounds good! Kind regards and best wishes, Mary	1. Sharing / comparing of information	social exchange
IC1	42	TOPIC	7	Will	Hello everyone, Sorry for my late reply but it's been a busy week! My name is Will and I work as a lecturer in the international business program in a university as well as managing my own English conversation school in Japan. In the university I teach students at a variety of	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: BRIDGING

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K ⁷³ CODING	Coding/phasing Description
					linguistic levels.		
IC1	44	TOPIC	7	Will	In my own school I teach kindergarten children right up to adults. The focus of instruction is on communicative (spoken) language ability but some classes also engage in writing practice.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	51	TOPIC	7	Will	I look forward to learning more about this topic and how I can better assist my learners in the coming weeks! Cheers, Will	1. Sharing / comparing of information	social exchange
IC1	52	MEDIATION	8	Mediator	Welcome Mary and Will!	acknowledging	
IC1	55	TOPIC	9	S1	Hi everyone. Sorry for the late start.	1. Sharing / comparing of information	social exchange
IC1	56	TOPIC	9	S1	I teach a Bridging English course for international adults preparing for further study in Australia, and our new term has just commenced, so it's pretty busy at the moment.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	61	TOPIC	9	S1	Sorry, I've rambled too much. I'll try to make it tonight if I'm home in time. Best wishes. SH	1. Sharing / comparing of information	social exchange
IC1	62	MEDIATION	10	Mediator	Thank you for sharing your changing ideas on literacy, SH, and also for the relevant and personal anecdote concerning your son.	acknowledging	
IC1	64	TOPIC	11	Amanda	Hello from Dubai. Great to meet all of you, and to read your interesting responses	1. Sharing / comparing of information	social exchange
IC1	65	TOPIC	11	Amanda	I'm a South African currently teaching at Wollongong University in Dubai. I've been teaching in the Middle East for 10 years- 6 in Oman and 4 in Dubai. I'm currently doing my M.ED TESOL through UOW, and have found the modules really enlightening.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	70	TOPIC	11	Amanda	Once I've worked out what time EST will be here in Dubai, I'll see if I'll be awake to chat! Regards. Amanda	1. Sharing / comparing of information	social exchange

Genre Stage: BRIDGING

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K ⁷³ CODING	Coding/phasing Description
IC1	71	MEDIATION	12	Mediator	Great to hear from you, Amanda – especially since you are so far away	acknowledging	
IC2	76	TOPIC	2	Will	Speaking from personal experience, I firmly believe that learning a second language, especially one with a different script, helps one to come to terms with many of the difficulties in understanding a complex subject such as literacy.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC2	86	MEDIATION	3	Mediator	Thanks you so much for your detailed and informative account of achieving functional literacy in a second language, Will.	acknowledging	
IC2	88	TOPIC	4	Paula	Hi everyone. Your experience was very interesting Will. Hats off to you for being so persistent.	1. Sharing / comparing of information	social exchange
IC2	91	TOPIC	4	Paula	I agree with Mediator's former student about the difficult relationship between the letters and the sound particularly if this isn't your L1 script.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC2	96	TOPIC	4	Paula	Cheers, Paula	sign off	
IC2	97	MEDIATION	5	Mediator	And thank you also for this valuable contribution to our discussion, Paula!	acknowledging	
IC2	99	TOPIC	6	Amanda	I was really interested in both Will's and Paula's accounts. Fascinating insights. I admire you both for your efforts to learn and success in learning Japanese and Thai	1. Sharing / comparing of information	social exchange
IC2	105	TOPIC	6	Amanda	A very useful article I found compares the reading strategies of a group of Nigerian students with Chinese, and this reading has given me further invaluable insight into the complexities of my classes. Parry, K, (1996). Culture, Literacy and L2 Reading, in TESOL Quarterly, Vol 30, No. 4, pp 665-692	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	109	TOPIC	2	Paula	Hi everyone, I've been a bit slow this week mainly due to my laptop having a major heart attack and the hard drive dying	1. Sharing / comparing of	social exchange

Genre Stage: BRIDGING

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K ⁷³ CODING	Coding/phasing Description
					a quick and unexpected death.	information	
IC7	114	TOPIC	3	Paula	Hi everyone. Could I add some more thoughts now that I've gone through some of the suggested sites and readings about reflection	1. Sharing / comparing of information	social exchange
IC7	119	TOPIC	3	Paula	I've bookmarked that UNISA site because I think it will be useful when I come to do my prac teaching for my Grad Dip.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	121	TOPIC	5	Paula	Hi ... Yes I did a few of the activities but especially activity 2	1. Sharing / comparing of information	social exchange
IC7	123	TOPIC	5	Paula	I found the examples interesting i.e. the HD and the fail from students. I think it's a really good reference point that we could use in a lot of contexts. Paula	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	130	TOPIC	7	Mary	I know this response is very late, but I found this topic interesting and wanted to respond. I particularly enjoyed reading Schon's "The Reflective Practitioner"	1. Sharing / comparing of information	social exchange
IC7	135	TOPIC	7	Mary	I like how Amanda used the term 'process of discovery'	1. Sharing / comparing of information	social exchange
IC10	140	TOPIC	2	Mary	I personally think these technological advances are so influential they have changed our role as literacy teachers. At the rate technology is advancing, I'm beginning to wonder whether or not we will have books, newspapers, pens and pencils in fifty years from now.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	145	TOPIC	3	Paula	Hi Mary & Mediator I agree. I think you've made some valid points Mary. I wonder if people will be considered literate because they can sign their name rather than printing it? Maybe it won't matter as we could be identified by thumbprint or eyes.	1. Sharing / comparing of information	agreeing (to concur with a statement)
IC10	149	TOPIC	3	Paula	Paula	sign off	

Genre Stage: BRIDGING

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K ⁷³ CODING	Coding/phasing Description
IC10	156	TOPIC	6	S2	Hi Paula, Mary and Tutor B. Yes, I do feel that as teachers we should be taking into account new technologies that assist our students to read, write and communicate so long as the technology is appropriate to the learners needs	1. Sharing / comparing of information	social exchange
IC10	163	TOPIC	6	S2	I found it interesting to read that in Canada they removed handwriting from the syllabus	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	166	TOPIC	6	S2	I also agree with Paula that using a computer is like learning another language for many.	1. Sharing / comparing of information	agreeing (to concur with a statement)
IC10	168	MEDIATION	7	Mediator	Thank you for this extensive response and references S2.	acknowledging	
IC10	170	TOPIC	8	S2	Thanks ... the article was interesting reading and I agree with the concluding statement ...	1. Sharing / comparing of information	social exchange
IC10	173	MEDIATION	9	Mediator	Thanks for your input, S2 –	acknowledging	
IC10	176	TOPIC	10	Amanda	Hi all. I read your observations with great interest, and of course agree that the trend seems almost inevitable.	1. Sharing / comparing of information	social exchange
IC18	183	TOPIC	1	Will	Here are a few things that I came across while looking up issues related to disaster stricken areas and health and welfare literacy.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC18	190	TOPIC	1	Will	Best wishes, Will	sign off	
IC18	191	MEDIATION	2	Mediator	Thank you so much, Will, for sharing this appropriately-named concept of 'disaster literacy' although it is so unfortunate that so many of us may well need it!	acknowledging	
IC18	193	TOPIC	3	Paula	Hi Will. Glad to hear some news of you. I was wondering if you would be directly or indirectly affected by everything that's happened in Japan.	1. Sharing / comparing of information	social exchange
IC18	195	TOPIC	4	Will	Thanks Paula,	sign off	

Genre Stage: BRIDGING

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K⁷³ CODING	Coding/phrasing Description
IC18	197	TOPIC	4	Will	I'm glad that you found the information useful but hope that you never have to put it to use. Good luck with the remainder of the course and thanks for your comment! Cheers, Will	1. Sharing / comparing of information	social exchange

Genre Stage: ABSTRACT

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K CODING	Coding/phasing description
IC1	15	TOPIC	2	Paula	At this stage, I understand 'literacy' as a very broad term that is the next step from speaking and listening.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	24	TOPIC	3	Beth	My understanding of the term 'Literacy' at the moment involves being able to read, write and communicate effectively to others, in order to have a similar understanding.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	29	TOPIC	4	S3MD	I understand literacy as being an umbrella term, whereby many things come underneath it, such as reading and writing, listening and speaking, as well as understanding to make meaning.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	39	TOPIC	6	Mary	To me, literacy is also more than just reading and writing too. It's a system of communication that is constantly evolving.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	45	TOPIC	7	Will	To me, the simple definition of 'literacy' is the ability to read and write in a language.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	57	TOPIC	9	S1	I'm still coming to terms with 'literacy'. Previously I held the narrow definition of a person's ability to read and write. However, this is rather inadequate.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	66	TOPIC	11	Amanda	My response to the word 'literacy' a few years ago would have been 'the ability to read and write',	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	110	TOPIC	2	Paula	My thoughts about reflection are that it's a necessary part of my learning especially in the classroom.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	124	TOPIC	6	Amanda	Reflection. I found the UNISA site very interesting and helpful, with its practical examples and guided reflective writing	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	141	TOPIC	2	Mary	The pieces of technology that could be used to replace each of these items are now available (e.g. laptops, iPads, e-readers, mobile phones, etc.) at a fairly affordable price. I also think	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources,

Genre Stage: ABSTRACT

IC #	Msg #	Genre	Turn #		Text chunks	Scaffolding and SC of K CODING	Coding/phasing description
					environmental concerns are strong enough to make a good argument against the use of paper products.		stating opinions
IC10	157	TOPIC	6	S2	Labbo (2006, p 199) states that whenever new technologies appear there is always a “gritty time of transition that entails the pull of the new against the push of the old”. As a teacher, I find new technology challenging and very exciting as it introduces other dimensions to the traditional teaching methodologies.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: ORIENTATION

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC2	78	TOPIC	2	Will	As a multicultural society, Canada becomes home to thousands of new Canadians every year. Those of us born in Canada are often unaware or take for granted the complexities of our own language and the struggle many go through to reach a basic level of functional literacy.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC2	89	TOPIC	4	Paula	These are my thoughts on the subject. There are some interesting aspects about learning a second language that I have gauged from studies and talking to and interviewing learners. There is a complex mental process going on	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC2	100	TOPIC	6	Amanda	My experiences in Oman and Dubai have been slightly different, in that English is widely used, seen, heard on the radio and TV, and taught in schools and at university	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	111	TOPIC	2	Paula	As I mentioned earlier my one day a week class has mixed levels and I am continually trying to think of ways where I can provide the most useful guidance to each level while not spreading myself too thinly	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	115	TOPIC	3	Paula	The UNISA site was really helpful. I didn't realise there were so many levels of reflection	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	131	TOPIC	7	Mary	I was lucky enough to recently work at a primary school that valued teacher reflection and provided the staff with opportunities to reflect during scheduled staff meeting times.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	134	TOPIC	7	Mary	I came across the attached article by Larivee in my reading, which also supports the premise that reflection makes for better practice. It suggests we can't move forward in education unless we become critically reflective and challenge our long-held assumptions about teaching	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	146	TOPIC	3	Paula	Our group is taking steps to incorporate video, listening exercises from radio such as interviews and discussion topics and mp3 recordings of student discussions into our lessons.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

IC10	150	TOPIC	3	Beth	I am currently teaching a Year 1 class in a new school this year and it is very surprising to see the range of technology that my children have access to. I have two ipads, three desktops, three laptops and a digital camera. I am thinking about the future and wondering in ten years time what access children will have to technology.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	158	TOPIC	6	S2	The use of computer technology in my classes has allowed me to provide learners with interactive activities that reinforce concepts learnt in class, while also providing for different learner levels through scaffolding of activities which is supported by Laddo (2006, p 202) and Harmer (2008, p.59).	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	161	TOPIC	6	S2	I also use a program called Read and Write Gold which "provides outstanding literacy support synonymous within textHELP products in ANY Windows application" (Spectronics, 2003).	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	177	TOPIC	10	Amanda	The reading about Media Literacy, too, gave much food for thought.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: ISSUE

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC1	16	TOPIC	2	Paula	I imagine some cultures (our own indigenous people for instance) who have not had a need for literacy because of their nomadic and hand-on culture therefore the language hasn't been written down. On the other hand, western cultures put a lot of store in being able to communicate in written form.	1. Sharing / comparing of information	extend an opinion/argument to give further emphasis
IC1	18	TOPIC	2	Paula	For instance, some time ago when we lived in Thailand, I decided that I could manage learning the spoken language but I found the written form very daunting. I guess my motivation was not strong enough whereas my husband had to do it for his work.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	25	TOPIC	3	Beth	I have noticed that children with English as a second language, who have a difficulty in communicating in English also experience some difficulty when writing.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	30	TOPIC	4	S3MD	Literacy enables us to communicate in the various media forms that we are now exposed to. Different cultures have different ways of making meaning, stories or facial expressions for example.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	40	TOPIC	6	Mary	I'm particularly interested in the latest developments in tools and technology (e.g. e-books, ipads, etc.), and the impact these will have on literacy as we know it. I've often had a conversation with friends about whether books and pencils/pens will become 'old fashioned'.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	43	TOPIC	7	Will	Those in the international business program tend to have a higher level than those in other, more general courses but none of my students could be classified as more than an intermediate level when it comes to language ability.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	49	TOPIC	7	Will	To be functionally literate or able to carry out the essential activities of daily adult life differs a great deal from being literate in a professional, academic or technical sense of the word.	1. Sharing / comparing of information	extend an opinion/argument to give further emphasis

Genre Stage: ISSUE

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC1	58	TOPIC	9	S1	Some of my ESL students know grammar in detail and can read and write at high levels – yet their level of spoken English is very basic. Likewise, some people may be very capable as far as reading and writing, but fail to cope with simple mathematical tasks. Others feel inadequate with any computer related work.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	59	TOPIC	9	S1	My interest in this topic was sparked 9 years ago while we were living in Greece and our son's teacher told us he would never learn to read, write or do basic maths because of his learning difficulties due to dyslexia. So I took him out of school and home-schooled him.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	69	TOPIC	11	Amanda	I've become aware of the different schema that students bring with them to the classroom, the range of strategies they use to decode and interpret, and the role played by signs, sounds, faces and the environment generally	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC2	79	TOPIC	2	Will	I remember my first day in Japan; after being deposited in my flat by my new boss, it was up to me to make my way to the supermarket to buy food for that evening's dinner. Reaching the market, I was shocked by what I found. I was not able to read the labels and packaging of any of the food products in the shop, nor was I able to read the signs posting what products were listed in each aisle. Needless to say, I ended up eating pasta for about 3 months before some of my students taught me some basic characters for items that I wished to purchase!	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC2	81	TOPIC	2	Will	In addition to reading and writing it took me a very long time to adjust to what I might call 'community literacy', or being able to function within Japanese society. Buying liquor from vending machines, using Japanese-style toilets (I sat the wrong way on one of these for the better part of a year...it's rather difficult to ask someone how to use a toilet!!), or taking part in any number of administrative duties often expected of people living within any given neighborhood.	1. Sharing / comparing of information	extend an opinion/argument to give further emphasis

Genre Stage: ISSUE

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC2	90	TOPIC	4	Paula	For instance, one friend who was doing a TAFE hospitality course for SLL explained how she had to read the text, convert that information to Russian then back to English then write it all down again in English according to her understanding.	1. Sharing / comparing of information	extend an opinion/argument to give further emphasis
IC2	92	TOPIC	4	Paula	I have only learnt to speak another language that has a different script (Thai) and that was hard enough. I didn't even attempt to learn the alphabet even though we lived there for two years. My husband had to learn to write because of his work so I can only relate some of his feelings about it. It was a continuous and arduous process.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC2	93	TOPIC	4	Paula	Some particular difficulties he had, were: • Learning to form the characters. From our studies, it's been suggested that if you are already literate in your L1 then literacy in L2 shouldn't be as difficult but he felt it was quite difficult learning the shapes of the letters. Even though it is L to R (same as English) there seemed more vertical formation than horizontal formations. • Recognising individual characters. As someone suggested earlier, there is no spacing between the words so it makes it difficult to realise the beginning of a new word and the end. This is particularly hard when you're not a fluent speaker either. • Recognising the character clusters. As native speakers we intuitively know acceptable consonant clusters (spr, st, kl, kn, etc) but it took some time to 'undo' this learning because in Thai you can't have two consonants without a vowel in the middle. That's why they have difficulty getting their tongue around words like 'stamp' (they want to say 'sa tamp').	1. Sharing / comparing of information	extend an opinion/argument to give further emphasis
IC2	94	TOPIC	4	Paula	Regarding being judged on literacy competence; I remember losing quite a bit of confidence and self-esteem while living in Thailand and it had to do with my inability to communicate outside my functional Thai. My husband was often told he was 'very intelligent' because he managed to learn to write. I felt as though no-one knew me because I couldn't express myself adequately. It seemed that because I couldn't	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: ISSUE

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
					<p>speak/write very well in Thai then that was the basis for everything else I could do.</p>		
IC2	101	TOPIC	6	Amanda	<p>As a result, the necessity for me to learn Arabic was not urgent (even though it would have been really beneficial and respectful to have done so). The smattering of spoken Arabic that I have learned is always appreciated by Arabic speakers, but in no way am I functionally literate in the language:</p>	1. Sharing / comparing of information	justify an opinion
IC2	103	TOPIC	6	Amanda	<p>However, my current teaching situation involves classes with sometimes as many as 8 different nationalities e.g Chinese, Kazakh, Spanish, Russian, Iranian, Uzbekh, Emirati and Turkish, and I've had to become very aware of and sensitive to the impact of their different L1s , not only on writing and reading, but on listening and speaking too. Direction of writing is just one challenge, and punctuation (or the lack of), as well as syntactical differences are constant hurdles to be overcome, especially at the elementary level</p>	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	112	TOPIC	2	Paula	<p>It's a weekly challenge and I often come away thinking I could have done x better or students didn't react in the way I thought they would to an activity. It's really difficult to spend equal time with each but hopefully it's made up the next week so over time it becomes close. The other part of reflection is talking to colleagues particularly a mentor or someone with experience. I find those teachers who have had multiple levels in a group most helpful because they appreciate my task but give hints on how they managed</p>	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	125	TOPIC	6	Amanda	<p>With the Upper-Intermediate classes I sometimes teach, I have found that keeping a reflective diary with details of their contact with English-speakers, situations where they've had to use English in a transactional manner or perhaps in social situations in multi-cultural Dubai, is a starting point, but one which rarely goes beyond the stage of</p>	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: ISSUE

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
'Descriptive reflection'							
IC7	132	TOPIC	7	Mary	My school also (as part of staff development program) allowed us to choose our areas of interest to research, and share our findings with the rest of the staff. At that time, I was teaching kindergarten and chose to research the influence of play on brain development during the early years, which greatly influenced my lesson planning	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	136	TOPIC	7	Mary	At the school I used to work at, our staff was working towards using this discovery process in our classrooms. At staff meetings we had been reading and discussing articles regarding the transition from teacher-centred classrooms to student-centred ones, with a focus on facilitating learning experiences rather than leading them	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	142	TOPIC	2	Mary	I'm wondering if it will ever get to the point when writing by hand will become a lost art, and people will look to their grandparents to see 'how it was done'. When I was on teaching exchange in Canada last year, the province I worked in had taken handwriting out of the syllabus. Teachers were no longer expected to teach it, and the common opinion was that with the way computers are now being used, students don't really need to know how to write in cursive.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	143	TOPIC	2	Mary	I was listening to the radio on the way to work this morning, and they were discussing whether or not school children (not specifically high school) should be allowed to take their mobile phones to school. I think schools have different policies on this. Some allow them, and some make students sign them in at the office, where they're locked in a safe until the end of the school day. A high school teacher who rang in actually said she uses phones in her lessons. Most phones can now be used for conversation, texting, tweeting, and surfing the Internet. They can also access applications like Google maps, measurement conversions, and global time zones,	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: ISSUE

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
					just to name a few. The teacher who rang in said she understands that they can cause distractions, but that these distractions would be reduced in a 21st century learning classroom, as they would be used as a tool. One example of how she gets students to use their phones is by asking them to tweet responses to opinion polls, etc. using Twitter during class discussions.		
IC10	148	TOPIC	3	Paula	I also use a few different items so that I have time to work around the class. For example, I might start the Level 1s off with a listening task from a workbook while I talk to the Level 3s about preparing for a discussion that will be recorded. I think the Thai students have a computer at home but they're using Thai as the default language. Last week I downloaded a talkback show on The Forum Guide (at ABC Radio). There were 3 issues that people were concerned about so in a small group students had to work their way through listening, pausing, discussing, clarifying then back to listening etc again before my joining into the conversation. I get one of the students to be controller which leaves me free to do something else with the other levels. Our next module will be 'presentations' so that will let us use something like PowerPoint although I don't really want it to turn into a computer lesson.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	151	TOPIC	3	Beth	I have tried to incorporate technology into my teaching as much as I can this year. I have created a blog for my children to use, this is something new to them and spelling has created a bit of an issue, but they can not stop talking about it.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	159	TOPIC	6	S2	Also many of the computer literacy programs available on the internet are interactive and provide graphics to help with meaning.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: ISSUE

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC10	165	TOPIC	6	S2	Also, this is not just limited to adult learners, I often hear from school teachers about the difficulties they have with students completing homework due to not having a computer or access to the internet at home. For this reason, I would hope that in Australia, unless these resources are provided to all learners that the learning of handwriting remains in the curriculum addressing the needs of learners and not disadvantaging those who cannot afford the technology	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: EVALUATION

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC1	17	TOPIC	2	Paula	I think developing literacy is the 'hard' part of communication.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	31	TOPIC	4	S3MD	So to me, expressions and gestures are incorporated into literacy as well, as you are trying to develop understanding.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	46	TOPIC	7	Will	Since coming to Japan however, I can see that literacy is somewhat more complex than that, and is influenced by many different factors. Here in Japan , one's ability to read and write a language is much more valued than one's ability to speak.	2. Experiencing cognitive conflict	to have a different perspective
IC1	48	TOPIC	7	Will	Furthermore, I believe that a definition for the word 'literacy' depends heavily on the context in which it is used	2. Experiencing cognitive conflict	
IC1	60	TOPIC	9	S1	Needless to say we returned to Australia a few years ago and he's on par with others his age group.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC1	68	TOPIC	11	Amanda	I think the semiotic approach sounds far more likely, as in our search for meaning, we need to be able to read far more than just words.	1. Sharing / comparing of information	agreeing (to concur with a statement)
IC2	80	TOPIC	2	Will	Japanese is an extremely complex language to write; consisting of two syllabaries; hiragana and katakana, in addition to logossyllabic characters called kanji which have their origin in Chinese. Words can also be represented by romaji, which is a representation of the pronunciation of the words using the roman alphabet.	1. Sharing / comparing of information	extend an opinion/argument to give further emphasis
IC2	82	TOPIC	2	Will	Having lived here for as long as I have, I would consider myself to be functionally literate in Japanese society; able to read and write and carry on with many of the daily routines such as shopping, doing taxes, PTA meetings etc, that are expected of members of any given society. However I am reminded on a daily basis of how far that I have left to go before I attain a level even approaching	2. Experiencing cognitive conflict	to have a different perspective

Genre Stage: EVALUATION

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
					that of a native speaker.		
IC2	85	TOPIC	2	Will	Living here in Japan, I am never expected to know or function as other Japanese are ... Japanese are pleasantly surprised and genuinely pleased when non-native speakers achieve a functional level of proficiency in their language. However I often feel as if I am being judged by a different standard than other native speakers when it comes to being functionally literate	2. Experiencing cognitive conflict	critiquing (of self / reality)
IC2	102	TOPIC	6	Amanda	I've been too immersed in teaching English to take that step, I'm very ashamed to say.	1. Sharing / comparing of information	justify an opinion
IC2	104	TOPIC	6	Amanda	There's no doubt that the process is enormously complex, and I feel I'm only just beginning to scratch the surface of these complexities. I'd certainly agree that functional literacy can only be judged differently for these learners when one considers what they bring to the learning process. I've become particularly interested in the students' approaches to reading, the different strategies they employ, and how important it is to prepare them well before reading by tapping into their own experiences.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC7	113	TOPIC	2	Paula	There are many unexpected influences on our best laid plans so I think experience and time are useful considerations but also you might use the same task/activity with a different group and something changes to make it work well. Not the least our own ability to modify and adapt it from an earlier attempt	2. Experiencing cognitive conflict	critiquing (of self / reality)
IC7	116	TOPIC	3	Paula	I could recognise them in the samples but I wonder if I could recognise the same characteristics in my own reflective writing. I felt the Schon reading did however back up what I had said in the previous posting. 1. You have not really learnt anything until you begin to change some of your behaviour. So you can lead a horse to drink	2. Experiencing cognitive conflict	critiquing (of self / reality)

Genre Stage: EVALUATION

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
					but you can't make them drink		
IC7	118	TOPIC	3	Paula	2. Another important point I noticed he talked about was that it doesn't matter how much you know (through academic study or experience) but how well you can pass that information onto others. So I'm sort of relating this to the mentor that I mentioned in the previous posting	2. Experiencing cognitive conflict	restate argument (i.e. connecting literature to reality)
IC7	126	TOPIC	6	Amanda	I haven't been very successful in taking my students to the level of 'Dialogic reflection' and terms like 'stepping back', 'mulling over' and 'looking at possible alternatives' gave me a focus In terms of my own reflective role, Schon's 'coach' responds to the learners' actions by 're-framing', 'listening', 'reflecting', 'engaging in dialogue', and 'trying again'.	2. Experiencing cognitive conflict	critiquing (of self / reality)
IC7	133	TOPIC	7	Mary	I'm not sure I agree with this quote from the review of Schon's work, suggesting that we have not taken Schon's advice and become more reflective: 'If we knew this in 1987, however, it does not appear to have had a profound impact on our actions in the decade-and-a-half since then'. Perhaps in general teachers are not more reflective now than what they were in 1987, but this is largely due to the fact that schools are busy places, and teaching is a busy profession.	2. Experiencing cognitive conflict	counteracting: to have a different perspective
			7	Mary	I think if there were fewer constraints on teachers, [then] more would take the time to become reflective practitioners. This is why I think it was very considerate of my school to provide our staff with time to reflect on our practice	2. Experiencing cognitive conflict	
IC10	147	TOPIC	3	Paula	It may be basic but I think even finding your way around the computer in a second language is not always easy. (Try working it out when everything is in Russian or Chinese!) I think even at lower levels it's a good way to make them at least comfortable.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions

Genre Stage: EVALUATION

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC10	152	TOPIC	3	Beth	The enthusiasm that I have seen over the past two weeks is amazing , I even had some of them go home and add entries onto the blog. I have now added a video clip from you tube related to our HSIE unit and I am looking forward to seeing what their responses will be this week. Using information technology in the classroom is an important aspect in today's society and it is going to be the way of the future.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	160	TOPIC	6	S2	However , if the concepts learnt are not backed up with other activities, students do not really retain the information. This is also supported by Laddo (2006, p.200) who suggests the need for "crafting computer related activities that follow well grounded and theoretically based guidelines" or visa-versa. An example of this is using Look, Cover, Write for spelling is great using computer technology, however the students then need to use these words both verbally and written to transfer new learnt skills from short term to long term memory.	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	162	TOPIC	6	S2	The tools are easy to use and assist learner's needs with reading, writing, spelling, phonics, dictionary and many more features. The main benefit for my students is that this technology allows them to read information of interest from the internet that they otherwise may not be able to read. Also enabling them to practice listening skills and pronunciation of words however, this may be compromised if the selected voice is not authentic	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating opinions
IC10	164	TOPIC	6	S2	I do not fully agree with this concept , as many of my current adult students do not have access to a computer at home and in some cases also live in remote areas with limited access to power, let-alone the internet. Hence , my students have a genuine need for functional learning of handwriting.	2. Experiencing cognitive conflict	critiquing (of self / reality)
IC10	172	TOPIC	8	S2	It has been great to read how technology is being used by many of us ... I believe it is important to address our learner's needs and expose them to whatever	1. Sharing / comparing of information	exchange ideas, experiences / pooling resources, stating

Genre Stage: EVALUATION

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
					technology is necessary and available so that they feel part of a community. Cheers		opinions

Genre Stage: NEW UNDERSTANDING

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC1	47	TOPIC	7	Will	Therefore I can see how literacy would mean something different depending on the culture of the country in which you lived.	3. Negotiating meaning	show new understanding
IC1	67	TOPIC	11	Amanda	but I have realised how limited the definition is, particularly in my current teaching position, where I may have 12 different nationalities in one class.	3. Negotiating meaning	show new understanding
IC2	77	TOPIC	2	Will	It wasn't until I came to Japan 13 years ago that I became aware of the complexity of becoming functionally literate in a society.	3. Negotiating meaning	show new understanding
IC2	83	TOPIC	2	Will	Many of the hardships that I have encountered (and continue to encounter) have given me a new respect for the students that I teach and the complexities of literacy itself.	3. Negotiating meaning	proposing / negotiating newmeaning (to show compromise, propose and negotiate a new understanding)
IC2	95	TOPIC	4	Paula	I realise now that it was a very good learning curve because I know as native speakers it is very easy to forget that some students we come across may have been health professionals, teachers or public servants in their own country but it's the language that is the barrier now and impeding their job prospects here.	3. Negotiating meaning	proposing / negotiating newmeaning (to show compromise, propose and negotiate a new understanding)
IC7	117	TOPIC	3	Paula	Furthermore, I can think about different things that might help in my own teaching/learning but until I start to experiment and take the new knowledge on board then I haven't really progressed much	4. Testing and modifying the new proposal	
IC7	122	TOPIC	5	Paula	That's where I realised that my own reflections might sit somewhere between a descriptive and dialogic reflection and I need to investigate how I could expand to a critical reflection	3. Negotiating meaning	proposing / negotiating newmeaning (to show compromise, propose and negotiate a new understanding)
IC7	127	TOPIC	6	Amanda	I have realised how much more I do that in my classes the further into my studies I go, but that at the end of a 6-week course, I look forward to trying again with a new class, in order to do things ' better '. For example before I'd studied the course on 'Teaching English in International contexts', my understanding of the complexity of the role of culture was superficial .	3. Negotiating meaning	proposing / negotiating newmeaning (to show compromise, propose and negotiate a new understanding)

Genre Stage: NEW UNDERSTANDING

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC7	128	TOPIC	6	Amanda	I find now when I approach a text/listening exercise/topic, I am alert to the perspective students bring to the situation, and reflect more deeply on how best to bridge the gap, maximise the existing knowledge, and include myself in the process of discovery.	5. Agreeing and applying newly constructed knowledge	
IC7	137	TOPIC	7	Mary	I somehow assumed that this kind of development would be happening in many schools and once I left I remember being surprised to discover that it was localised to my area	3. Negotiating meaning	proposing / negotiating newmeaning (to show compromise, propose and negotiate a new understanding)
IC10	153	TOPIC	3	Beth	As teachers I feel it is our responsibility , to incorporate as much technology into our classroom as possible and teach our children how to read images, how to search the internet, how to gather relevant information and use different modes of technology effectively .	5. Agreeing and applying newly constructed knowledge	synthesising

Genre Stage: INSTRUCTION

IC #	Msg #	Genre	Turn	Speaker	Text chunks	Scaffolding and SC of K CODING	Coding/phasing Description
IC1	9	MEDIATION	1	Mediator	I ask that you reflect on what you understand and mean when you use this word and then suggest articulating your thoughts in writing by posting your response(s) here by way of an introduction.	Directing	indirect
IC1	10	MEDIATION	1	Mediator	Please click on 'Reply' so that we can conveniently group our responses within topics.	organising	
IC1	35	MEDIATION	5	Mediator	We can perhaps explore our digital literacy with an online Chat session – any takers for Feb 22 nd at EST?	organising	housekeeping
IC1	63	MEDIATION	10	Mediator	However, the Chat is scheduled for the 22 nd February at 8.30pm EST – not tonight ...	organising	
IC1	73	MEDIATION	12	Mediator	Perhaps you can suggest a later or better time for our chat?	organising	
IC7	108	MEDIATION	1	Mediator	I thought, therefore, that this would be a timely topic that may well be helpful for you	Directing	indirect
IC10	169	MEDIATION	7	Mediator	I have found this recently published article that may be relevant to this topic [Attachments: Media Literacy]	Directing	indirect
IC10	174	MEDIATION	9	Mediator	maybe others might like to transfer discussion regarding technology and literacy to Forum Topic Four: Teaching writing.	organising	
IC10	175	MEDIATION	9	Mediator	We could discuss how best to support our students in developing their writing and whether technology can help or hinder us with this?	Directing	indirect
IC18	185	TOPIC	1	Will	Please have a look at this website which suggests an alternative method to the 'duck and cover' called the 'triangle of life'.	Directing	direct
IC18	187	TOPIC	1	Will	but please have a look at the Time magazine article: http://www.time.com/time/specials/packages/article/0,28804,1953379_1953494_1958235,00.html#ixzz0ehPXXL2C as well as the YouTube video on the site entitled: "Wow!	Directing	direct

This one minute could save your life."
Website: <http://www.amerrescue.org/>

Genre Stage: STEERING						Scaffolding and SC of K CODING	Coding/phasing Description
IC #	Msg #	Genre	Turn	Speaker	Text chunks		
IC1	1	MEDIATION	1	Mediator	I have found that one of the most valuable introductory activities to this subject is not only one where we meet each other, but also one where we comment on our present understanding of the word, "literacy".	Prompting	giving positive appraisal of discussion, and expectations of participation in it (indirect)
IC1	2	MEDIATION	1	Mediator	I have been tutoring this subject by distance for a few years now and have also lectured on campus. At the same time as tutoring online, I work as a Head Teacher for the Languages section at my local TAFE college.	Prompting	credentials
IC1	3	MEDIATION	1	Mediator	My research interests and experience in the area of language acquisition, relate to teacher education, multimodality and communication in the new media. These interests relate directly to my interpretation of what it means to be a fully "literate" person in the 21st century	Prompting	credentials
IC1	4	MEDIATION	1	Mediator	One interesting and relevant definition of "literacy" in your Topic notes relates to semiotic approaches: "Language is but one semiotic system and a literate person needs to be able to 'read' society itself as well as its artefacts (film, painting, science) . . ."	Focusing	
IC1	5	MEDIATION	1	Mediator	Another interesting point mentioned in your course notes reads: "Most languages have words for describing the processes of reading and writing but, not even among European languages that are close to English, are there equivalents for the word, 'literacy'."	Focusing	
IC1	6	MEDIATION	1	Mediator	(Of course there are other terms such as "privacy" and "numeracy" in English that also do not seem to have equivalents in other languages . . . see Anna Wierzbicka and her work such as "Understanding Cultures through their Key Words" 1997).	Prompting	problematising the concept

Genre Stage: STEERING						Scaffolding and SC of K CODING	Coding/phasing Description
IC #	Msg #	Genre	Turn	Speaker	Text chunks		
IC1	7	MEDIATION	1	Mediator	Do any members of this group speak another language and wish to share "equivalents" for the term "literacy" in this other language?	questioning	seeking opinion, suggesting
IC1	8	MEDIATION	1	Mediator	Being your tutor for "Second Language Literacy" online inevitably raises the question of how much our ideas of "literacy" differ for what we expect from native English speakers and how this may have changed over the last two decades . . .	Prompting	
IC1	34	MEDIATION	5	Mediator	It's interesting that most of you regard literacy as more than simply reading and writing – a reflection perhaps of our changing times and the term, 'multiliteracies'?	Prompting	
IC1	53	MEDIATION	8	Mediator	I'm pleased you are interested in our Chat session, especially since this is one of the ways in which we can see how literacy is changing.	Prompting	
IC1	54	MEDIATION	8	Mediator	Although we are 'chatting' we are doing so in writing. Yet, our online chat writing is usually quite different from our letters, essays and traditional written texts.	prompting	
IC1	72	MEDIATION	12	Mediator	Also good to read how so many of us have moved on from a very literal and basic definition for 'literacy'	Prompting	
IC2	74	MEDIATION	1	Mediator	Dear ... students. A former student wrote the following: <i>"The most obvious difference and therefore, difficulty facing someone learning English as L2 will be if their L1 is not written in the Latin alphabet. This major difference will not only slow down their reading while they learn to recognise a foreign alphabet but will slow down their progress with pronunciation and writing. Having had the personal experience of learning a different script (Hebrew) from an early age, I know this is what held me back from progressing as quickly as I did in another language I studied (German), which is instantly</i>	Focusing	

Genre Stage: STEERING						Scaffolding and SC of K CODING	Coding/phasing Description
IC #	Msg #	Genre	Turn	Speaker	Text chunks		
					<p>recognisable if not always comprehensible. I have encountered ESL students who are masters at reading passages quite fluently and correctly with little to no comprehension of what they have just read. This is the other side of the coin – the familiarity of the written word lulls them (and the teacher) into believing that they understand more than they actually do. Another challenge in a totally different script is whether it is written L to R like Hebrew, in characters (Japanese), or in the case of Thai, with no breaks between words (only at the ends of sentences). If the student is highly developed visually then initially these issues can create quite a bit of confusion. Slow 'bottom up' repetition of writing the letters, pronouncing them, and building the basic skills correctly at the beginning will help the student (after a seemingly slow start) make quick and steady progress. There are no short cuts to learning a foreign alphabet!"</p>		
IC2	75	MEDIATION	1	Mediator	Does the process of acquiring proficiency in a second language, especially if it uses a different script, helps make us aware of how complex a concept literacy really is? Do we judge functional literacy differently for a native speaker than we do for a learner of a second/foreign language?	questioning	
IC2	87	MEDIATION	3	Mediator	All the more valuable to share with us since that language uses a different script/different scripts	Prompting	
IC2	98	MEDIATION	5	Mediator	Lack of fluency and or/literacy in the lingua franca is definitely not helpful for one's self-esteem.	Prompting	
IC7	106	MEDIATION	1	Mediator	Reflection is a critical part of the teaching and learning process. Most of the assignments for this course actually involve you reflecting on the readings and your practice.	Prompting	

Genre Stage: STEERING						Scaffolding and SC of K CODING	Coding/phasing Description
IC #	Msg #	Genre	Turn	Speaker	Text chunks		
IC7	107	MEDIATION	1	Mediator	For more information on this topic, please look at the short review of Schön's "The Reflective Practitioner" in Readings under Resources. Another perspective on reflection is the idea [[of adding a ninth intelligence]] to the traditional eight of Gardner; i.e. reflection on one's thinking processes! Hatton & Smith (1995) discuss the higher cognitive levels of reflection, beyond Descriptive: Dialogic and Critical – see http://resource.unisa.edu.au/mod/resource/view.php?id=834	Focusing	
IC7	120	MEDIATION	4	Mediator	Thanks Paula – I'm wondering whether you attempted the activities as well; e.g. Activity 2? I think these levels of reflection involve delicate analysis?	questioning	
IC10	139	MEDIATION	1	Mediator	As information and communication technologies are transforming how we read, write and communicate, how should we be taking account of these changes in our teaching?	questioning	
IC10	154	MEDIATION	5	Mediator	Thank you for these comments regarding how technology is impacting literacy and schooling, especially Paula's comment on using a second language to find one's way around the computer. I have heard that URLs are to be available in other scripts . . .	Prompting	
IC10	155	MEDIATION	5	Mediator	Perhaps the specific cultural associations of different languages with the word "privacy" are also important here when teaching second language students how to manage the settings on their various accounts?	Prompting	