

**Collaborative online learning:
The experience of
undergraduate students**

Thesis submitted by

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**A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy, Faculty of Education, Monash University**

September 2012

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Glossary

ATN Australian Technology Network

HTML HyperText Markup Language (the basic formatting code of webpages)

LMS Learning Management System

NESB Non-English Speaking Background

SCERH Standing Committee on Ethics in Research involving Humans

TESOL Teaching English to Speaker of Other Languages

Pseudonyms

Uni Technovation – ATN university selected for the study

Centre for Online Learning (COL) – Distance Education Centre at *Uni Technovation*

LearnIT – Name given to the Learning Management System (LMS)

Learning to Resolve Global Conflicts 201 – Name of course selected for the study

SurveyIT – online survey tool at *Uni Technovation*

Abstract

This study investigated the learning experiences of undergraduate students enrolled in a fully online international relations course at an Australian university. The main aim of the study was to provide a comprehensive account of how students experience such courses cognitively, socially, and instructionally, and to consider the implications for teaching and learning online. In particular, the study examined how students interpreted the expectations inherent in the instructional design of the course and its associated resources to achieve its planned outcomes.

The course was designed to promote collaborative learning in groups using a student-centred pedagogy that engaged students in interactive processes of inquiry to further the shared knowledge of the community of learners. The course comprised two stages of learning: first, the shared response to topics central to understanding international relations, and second, the ‘real-world’ application of those understandings to a role-play scenario based on an escalating international conflict. The investigation employed a mixed methods case study design, and adopted an interpretivist orientation. Forty of the 132 students enrolled in the course in 2006 agreed to participate in the study prior to its commencement. The participants were allocated to three of the six seminar groups in the first stage of the course, and then randomly allocated to smaller country forums for the role-play scenario in the second stage of the course. Participants were selected for focused examination to compare individual with group experience. Data relevant to student experience in the course were collected in the form of instructional resources and web forum transcripts. Garrison’s Community of Inquiry model informed the coding of the instructional resources and web forum transcripts using indicators of cognitive, social, and teaching presence. Two online surveys of student attitudes towards their experience and web data logs of student activity within the environment were used to corroborate findings and provide deeper insights.

The analyses of cognitive, social, and teaching presence showed that individual students contributed in unique ways in addressing the set instructional tasks to achieve the planned learning outcomes. The analyses also highlighted that groups

engaged in uniform and predictable patterns of participation, and that these patterns changed to reflect the nature of the different learning tasks. In the seminar discussions, students did not contribute as instructed, while in the role-play scenario they preferred different methods of communication to those provided to suit the problem-solving nature of the task. The students' main concerns about the course were the volume and complexity of information, the lack of clarity around expectations, and the inappropriateness of the mediating technologies for particular tasks.

The study demonstrated that student-centred pedagogies within a well-planned, scaffolded, and organised course environment can provide large and small groups of students with effective and supportive learning opportunities, especially when task-appropriate technologies are employed to support flexible delivery. However, not all students participating in groups possessed the metacognitive awareness to recognise when these opportunities occurred, or how to make best use of them for their personal learning and development. The online moderator was somewhat removed from the learning process for many who wanted greater levels of instructional visibility and direction in a highly student-driven environment.

Future research might explore the role of the online moderator or the instructional designer in facilitating metacognitive awareness in students. The mediating technologies and strategies they employ in the process would help articulate the relationship between what individual students contribute to and what they gain from the shared learning experience.

Declaration

I declare that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge it does not contain any materials previously published or written by another person except where due reference is made in the text.

25/09/2012

Acknowledgments

This study was conducted over a decade in external part-time study mode with interruptions at various stages of the process. An undertaking of this magnitude impacts on the work and lives of many people to whom I am deeply grateful. My supervisor, Professor Ilana Snyder, has supported and guided me patiently throughout my journey of development as an aspiring educational researcher and believed in me when, at times, I found it difficult to believe in myself. I thank her particularly for her generous commitment of time in reading successive drafts with care and for contributing to the advancement of my understandings of the field of investigation.

I would like to thank former colleagues, Prof. Barbara Comber, Assoc. Prof. Phillip Cormack, Dr. Ian Reid and Peter Jacobs for the encouragement, inspiration and opportunities they provided in the early stages of my PhD research. In the latter stages, Dr. Greg Yates and Prof. Mohan Chinnappan for their expert assistance in discussing the organisation and presentation of statistical data in the thesis. Dr. Jenny Barnett and Dr. Zheng Lin who generously assisted with workload when required to help me progress writing on my thesis. Assoc. Prof. Michele Simons and Prof. Robert Crotty who offered advice and support as critical friends when needed.

I am grateful to Dr. Katharine Vadura for the opportunities she provided to make this research possible. I am indebted to David Gardiner who offered his time and expertise for the extraction of data from the LMS databases, for establishing relationships between various sources of data, and for de-identifying the data and making it available to me in an accessible format for analysis.

I am thankful to the professional staff at Monash University who welcomed me on my regular visits and helped with resourcing. Marie-Ange Malherbe was always a welcoming face when I arrived at Clayton campus. I thank her for arranging work spaces and photocopying access for me while on brief visits, and for introducing me to staff and research students with whom I could share experience and expertise. I thank David Yammouni who was always willing to assist with IT access and services, and was eager to engage in friendly discussions about the latest

technologies and the benefits or otherwise of the MacOS over Windows-based computer systems.

Elsevier who, in conjunction with RightLink, granted me license to use the Community of Inquiry diagram (see Figure 2.1) and the Editor-in-Chief of the *Internet and Higher Education* journal, Prof. Laurie Dringus, Graduate School of Computer and Information Sciences at Nova Southeastern University, Fort Lauderdale, Florida, for his support of the licence application.

I dedicate the thesis to Mum and Dad who were proud of my academic achievements even though they were not around for the completion of the thesis. I also dedicate my thesis to my wife, Heather, and my children, Caleb, Timothy and Hannah and their partners, who shared my journey, spent many holiday periods in Melbourne playing and shopping while I studied on campus, and supported me without too much complaint in my endeavours to complete my research and thesis.

Chapter 1

Introduction

The historical context of this study was the early 2000s in an increasingly competitive higher education sector in Australia. During the 1990s, many Australian universities adopted new learning technologies to increase the opportunities available for teaching and learning in higher education. These developments in networked computer technologies came at a time of increased competitiveness in the higher education market for student enrolments and reduced resources for educating students (Marginson, 1997). Internet-based learning technologies had spawned new conceptions of innovative possibilities for flexible learning that allowed formal education to happen regardless of time and place with supposedly more efficient use of resources. If Australian universities were quick on the uptake to implement the new opportunities afforded by the technologies, they would be well positioned to benefit from the perceived competitive advantages in the higher education market, particularly the lucrative international student market.

For Australian universities to realise the claims of more efficient course¹ delivery with more effective use of available resources, the ways in which they conducted their business of knowledge advancement required change. A traditional undergraduate university education involved the transmission of knowledge through lectures, reading lists, tutorials and assessment of student learning. By contrast, the new technologies seemed to have the capacity to shift the teacher-centred focus of education towards student-centred learning practices. There appeared to be potential for the generation of exciting new approaches to learning through which students could interact and collaborate to advance their learning and to solve problems together over distance and time. However, for this to happen, structural and organisational changes to universities were required to accommodate the new

¹ The term 'course' in this thesis is used to refer to a single-semester subject of 0.25 full-time equivalent (FTE) study load within an undergraduate degree.

practices. Academic staff in universities where student enrolments were increasing needed to be persuaded of the benefits of online education with some ‘coerced’ into using the tools available in newly implemented learning management systems to design online versions of all courses on offer. At the same time, some pioneering academics experimented with teaching and learning in the new online environments and particular courses were held up by management groups as models for others to follow.

This thesis investigates one such lighthouse online course at an Australian university as an explorative case study. It analyses the features of the instructional design of the course that was acclaimed as an exemplar of innovative pedagogical practice and examines the ways in which the undergraduate students who were enrolled in it engaged in learning to develop and apply new understandings in their field of study. More specifically, the thesis explores the pedagogical and operational design of a particular course of study to meet planned course outcomes and the ways in which students engaged with the pre-designed learning environment to develop and apply interactively and collaboratively new conceptual understandings in a role-play scenario. The investigation is informed by Garrison et al’s. (2000) Community of Inquiry model to explore the cognitive, social and teaching aspects of groups of learners’ online educational experiences in a single course of study.

This first chapter situates the study in an historical and political context, locates the researcher and his interests within this context, identifies the principal research problem and aims of the research, discusses the significance and limitations of the study, and presents the structure of the thesis.

1.1 Background to the research

This section describes the development of my interest in the study as a situated participant in the context and the challenges that I encountered on the research journey. My background, history and dispositions were integral to the formation of the problem and my theorising about practice in this site. In this respect, it is important for the reader to know something of my educational history and career background to understand why and how I came to do this project.

Born in Australia and schooled in the public education system during the 1970s in a working class suburb of Adelaide, newly established around local industries, the reforms to higher education under the Whitlam Federal Labor Government enabled me to pursue interests in languages education at university in the early 1980s. Without the equal opportunity reforms, I might never have experienced a university education; although supportive, none of my family had gone to university and only a few of my matriculating classmates had ambition to pursue higher education. My degree afforded me further opportunities to teach abroad for 18 months in an academic institution. On my return to Australia, I was employed as a language educator in a language centre that was part of an institute of technology, which later became a university under the Dawkins Reforms to higher education in the late 1980s. As a language educator, I prepared international and immigrant students for tertiary study. The language centre in which I was employed became the first merged 'department' within the newly formed university. The new centre incorporated the teaching of international students and professional immigrants, the preparation of TESOL (Teaching English to Speakers of Other Languages) teachers, TESOL research and consultancies, and TESOL publications. After more than 12 years as a language educator, I became a lecturer in the Faculty of Education co-located on two metropolitan campuses of the university.

My career and research interests developed after my return from overseas in the mid-80s. I became actively engaged in an environment similar to the one in which this study occurred. I developed a keen interest in and began experimenting with the multimedia capabilities of computers to support language learning. The capabilities were limited in terms of speed, capacity, colour, motion and sound, but I came to know every aspect of the computer, including the connections between hardware and system and application software, to enable the greatest efficiency in its operation for teaching and design purposes. I became influential in the design, set-up, networking and support of computer suites to support student learning in the centre in which I taught English as an additional language and academic study skills. I also designed and ran professional development workshops for staff in the Faculty of Education in the use of computers to support academic work.

My interest expanded into the networked capabilities of the computer as I constructed online environments to support learning at a distance in the mid- to late-90s. The computer as server was new to me but with some experimentation and support from more technically able colleagues I managed to streamline and secure international communications using text-based asynchronous protocols. I established environments for PhD students in Canada enrolled at the institution in which I worked so that they could interact with each other and with their Australian and Canadian supervisors in a variety of ways.

My early research focus was on issues of access as I believed that if students had the technical resources and means for participation, they would fully engage in the online environment. I further believed that if professional development in the use of the environment and its tools could be provided, there would be greater participation and engagement. Through early research I became aware that simply constructing an environment for learning and expecting participants to automatically engage in learning within the environment was a simplistic notion and that more complex social, cultural and political issues were at work. My initial research showed that learners in the Canadian PhD program preferred direct communication with their supervisors using the privacy of email rather than sharing knowledge in a community-based learning environment in which they might be vulnerable to their peers.

My interests for my own PhD research grew out of these beginnings. As a language educator working with language and literacy researchers, I began to explore notions of literacy in terms of space/location, social identity and multimodal texts. My teaching of information literacy to undergraduate students from the year 2000 expanded my understandings of the nexus between computers and their informational and communication capabilities for learning. Working with colleagues in Design and Technology Education also allowed me to explore notions of design in relation to computer-based applications to learning. As a language educator, I was very much interested in the socio-cultural aspects of communication, but began also to think about the socio-cultural aspects of instructional design. During my Master of Educational Studies degree in the early 1990s, I explored socio-cultural notions of education and produced a minor thesis that explored the relationship between

language ability, cultural attitudes and academic performance for two groups of international learners at different stages of studying for a medical degree. These forays into research informed the focus of my PhD which commenced in early 2001.

From the outset, I planned to investigate new spaces or environments for interaction and learning: spaces that were multimodal and socially and culturally constructed for the learner. This led to the possible investigation of immersive simulated environments for learning. But my interest was in a particular kind of learner; I was most interested in what the social, cultural and linguistic design of these new learning spaces meant for learners from diverse linguistic, social and cultural backgrounds. My specific interest was in international students engaging in such immersive environments as a simulated real-world application of their learning. This possibility almost became a reality if not for the ‘messiness’ I encountered in the research process.

1.1.1 The vagaries of doctoral research

Those who have conducted scientific research of a social nature on this scale will most probably agree that it is rarely as straightforward as one might plan or anticipate. Before commencing PhD studies, I attended a seminar presented by Dr Blye Frank from the University of Mount St Vincent in Nova Scotia, Canada. During the seminar, Dr Frank discussed the messiness of various aspects of social science research. I learned that such messiness can, at times, cause researchers to question their ability to conduct reliable and valid research that has meaningful and significant outcomes. Brewer (2000) conceives research based on modern methodology as a process rather than as a series of hermetic stages:

It does not follow a neat pattern but is a messy interaction between the research problem, the design of the research and data collection and analysis. (Brewer, 2000, pp. 102-103)

The ‘messiness’ of research I encountered in this study was a consequence of the seemingly simple matter of choice of course for the collection of data. I required an academic course at an Australian university that considered itself contemporary and innovative. *Uni Technovation*, an Australian Technology Network (ATN) university, presented itself as an ideal choice, the reasons for which are discussed in the next section on the context of the study. Data were to be collected from a course that was

offered only in one semester each year and so a missed opportunity would require a long wait for the next to present. As a full-time academic myself, conducting a study of this nature on a part-time basis presented its own set of problems. Data collection was set for an undergraduate course in the Faculty of Business in semester 2 of 2003 that involved international and local students in blended learning arrangements including an online hypermedia simulation. Due to unanticipated delays in the processes for human ethics approval and a decision by the Course Coordinator not to run the course in the same format the following year, data collection for this course was abandoned.

The following year, arrangements could not be made for data collection as I took on a new role with a demanding workload that included overseas teaching. A new course with an international student enrolment was found in early 2005 for data collection which was based on an immersive simulated environment. The simulation was considered cutting-edge and included all of the features I required. I was given the opportunity to explore the environment to prepare for the investigation. The data collection was set to take place in September 2005, but in May, ‘messiness’ struck again. The person responsible for the course and the development of the simulation moved to a private educational institution. I had understood that the course, its enrolled students and its resources, including the simulation, were under the auspices of *Uni Technovation*, the site chosen for the study. However, once in his new position, the aforementioned person, with whom I had developed a good professional relationship over the course of my PhD studies, informed me that the course, although conducted on a campus of *Uni Technovation* and taught by *Uni Technovation* staff, was contracted out by the private educational institution in which he was now employed. The students also had been recruited by this institution, and the resources of the course, although developed by *Uni Technovation* staff, were the intellectual property of the private institution.

Research relies not only on the ethical conduct of the investigator but also on the cooperation and trust of the participating organisations and communities. Relationships are developed between the researcher and the participating organisations and communities, the relationship often of mutual benefit. However, in this case, despite assurances by the person responsible, the institution did not want

the research to proceed without involvement of its international lawyers to protect its interests. Time was of the essence and so I decided to abandon the data collection to look for another option.

Switching mid-stream is never an easy achievement. The process is not unlike moving from one kayak to another on a fast moving stream. If one kayak has developed a leak and is rapidly sinking, then the benefits of transfer, even if not immediately apparent, can assist with the longer-term goal of reaching one's destination. (author unknown)

Fortunately, at short notice in late 2005, I was able to set up a pilot study for a suitable course, *Learning to Resolve Global Conflicts 201*, in time for the commencement of an online role-play simulation. The pilot informed the structure and design of the principal study which I conducted in semester 2 of 2006. The data collected in the global conflicts course forms the basis of this study.

The course under investigation in this study represented a significant shift from my original idea. The course was entirely text-based and so lacked the multimedia elements of the previous choices. It included a text-based simulation that was more an imagined scenario than an immersive 'real world' online environment. Also, international student enrolments were limited. However, although the learning environment was entirely text-based, it did include both a conceptual development and an application phase of learning. I considered the course worthy of investigation because many courses of study at Australian higher education institutions were using such approaches to online learning and research into transactional processes within such environments was relatively limited at the time.

The course under investigation was held up as a model of innovative online pedagogical practice at *Uni Technovation* in that it provided opportunities for students to engage in interactive discussion of online learning materials to build shared conceptual knowledge and to collaboratively apply what was learned to a real-world conflict scenario in a role-play simulation. I set out to examine the course which was an example of flexible, student-centred, collaborative, conceptual and experiential learning, using Garrison et al.'s (2000) Community of Inquiry framework.

The Learning Management System (LMS) which was used to present the course was developed at *Uni Technovation*. When compared to commercial products at the time, the LMS offered a relatively inexpensive scalable solution for a large multi-campus university that provided academics with an easy-to-use interface and set of tools to create interactive web spaces for their courses. With the rapid development of web-based and mobile smart technologies for learning, the technologies employed in this study may seem out-dated. However, there are some intrinsic characteristics of the technologies employed that are still inherent in the technologies used for similar courses today. For example, the asynchronous text-based interactions recorded in the course environment in this study are not dissimilar to wiki space collaborations. Such asynchronous text-based forums are still in common use in online learning environments at universities today.

After these delays, a pilot study was conducted in late 2005 which informed the logistics and analytical framework for the principal study. Despite the messy beginning, that could have subverted the focus of the research, a purposeful and relevant study with clear direction and generative outcomes was initiated in 2006.

1.2 The context of the study

The study was located at the conclusion of a decade during which global changes to information and communication flows and rapid technological development and implementation profoundly influenced higher education in Australia. This section discusses these changes in relation to higher education and their influence on choosing the course for investigation.

1.2.1 The changing role of the university

Pedagogical practices have changed significantly in recent times in Australian higher education as the sector has undergone a period of rapid and radical restructure designed to better serve the needs of a society in an evolving global context. Although universities have existed worldwide for many centuries, and more recently in Australia, their purpose and goals had not been challenged until recent times. Universities traditionally were about intellectual pursuit, predominantly for its own sake, and they educated a very privileged minority. They were placed in cities but

were not really part of them. Their activities were 'hidden and abstract, and academics led cloistered lives, unengaged with the outside world' (Ross, Frank, Love, & Hennelly, 1976). Universities had separated themselves from the broader society in pursuit of idealised purposes and goals. Ross et al. (1976, p. 140) describe the *idealised* university that had emerged in the early 1900s over the centuries of its existence:

The university is a small community of intellectually talented people separated from the larger society and united internally by a respect for knowledge and a love of learning that is involved in a search for truth and the perpetuation of high culture and civilized living.

However, universities in more recent times have had to undergo radical transformation in order to meet the challenges presented by the developments of the modern world. Marginson and Considine (2000, p. 1) concur with Ross's view that universities have been 'far removed from standard, modern ideas about power, control and management.' Rather, they have been 'self-organising institutions steeped in tradition with a curious mix of medieval authority and modern science' (Marginson & Considine, 2000, p. 1). They are characterised by 'a unique set of paradoxes' that contradict the operation of a modern organisation, and have acquired a form of 'individualism which asserts itself as a total right to academic freedom, expressed with equal plausibility as a responsibility to defend and criticise the dominant cultures of the day' (Marginson & Considine, 2000, p. 1). Yet at important stages of historical reform, the university 'chose to synthesise elements of the old and new, to reinvent its own internal culture, and to self-organise a unique form of university authority' (Marginson & Considine, 2000, p. 2).

The university that emerged after the Second World War in Australia reformed its idealised goals to become more relevant to an increasingly industrialised society. A university education had to include the training of a large number of professionals in specified fields and the application of knowledge to social use (Ross et al., 1976). However, to a large extent, the university remained restrictive, elitist and irrelevant to the broader society. This post-war university is what came to be known in more recent times as the *traditional* university (primarily due to reforms to the nature of its constituency, its functions, its ethos, its standards, its autonomy, its political posture,

its curriculum, and its community) to distinguish it from the newly formed and globalised *contemporary* university and the *idealised* university of the past.

1.2.2 The impact of government reforms on Australian higher education

In Australia, the *traditional* university received the majority of its operational and research funding from the federal government with support from private industry and, at different times, the receipt of student fees. The higher education sector commenced a period of significant change from the introduction of reforms by the federal Whitlam Labor Government of 1972 that induced a broader set of social changes. One of the key reforms for higher education was the abolition of student fees. Prior to the abolition of fees in 1973, a university education was exclusive and elitist, primarily available to wealthier households which could provide children with a private secondary education leading into a tertiary education for the professions. There existed a number of second-tier tertiary institutions that provided a less theoretical and more applied education for those unable to access a university education. These included colleges of advanced education and institutes of technology which did not receive the research funding provided by the federal government to the universities. Higher education provision was made more widely accessible with the introduction of equal opportunity initiatives under the newly elected Labor Government. University education was fully funded by the new government, allowing access to anyone who was able to obtain the entry scores required by the public examinations. This resulted in the emergence and growth of a greatly diversified domestic student population covering formerly disadvantaged groups such as women, Indigenous Australians, those with low socio-economic status, mature-aged people, non-English-speaking background (NESB) migrants and those with disabilities. These groups were encouraged to attend universities as a means to improve their opportunities and status in society as well as contribute to the economic growth of the nation.

University education in Australia continued to be publicly funded through successive terms of Liberal and Labor federal governments which perpetuated the diversification of the student population and increased the number of students wanting a university education because of the benefits it provided. The federal

government encouraged the continuation of education beyond secondary schooling, possibly to conceal a shrinking semi-skilled labour force affected by industrial automation and technological innovation, but also to prepare the Australian workforce for a new era in which knowledge would become a valuable commodity. Government decisions were shaped by globalising forces and the impact of globalisation on Australian higher education is considered later in this section (see 1.2.4).

Two significant government decisions in the late 1980s transformed the higher education sector in Australia and assisted in the formation of the *contemporary* university. The first decision was to significantly increase the number of publicly funded universities from 19 to 36. John Dawkins, the Federal Minister for Education under the Hawke Labor Government, reformed the higher education sector by elevating colleges of advanced education and institutes of technology to university status, making them distinct from the Vocational Education and Training (VET) sector. The increased number of universities in Australia popularised university education and amalgamated the tertiary education sector into a national unified system. Universities differed from Technical and Further Education (TAFE) colleges in that they educated for the professions rather than offering training for the skilled vocations. Within the university sector, the newly elevated technical colleges formed the progressive Australian Technology Network (ATN) of universities, while the more traditional universities retained their leading research and academic status within an elite group of eight universities, referred to as the Group of Eight (Go8). In all, 39 Australian universities operated onshore in 2009: 37 public universities and two private universities. This number remains constant in 2012 (Universities Australia, 2012) but there has been increasing competition from international universities setting up campuses in Australian cities (e.g. Carnegie Mellon University in Adelaide).

The second decision was to reintroduce student fees to fund higher education with the implementation of the *Higher Education Funding Act 1988* (Australian Government, 1988). The Higher Education Contributions Scheme (HECS) was introduced in 1989 as a means of financing the large-scale expansion of the higher education system. HECS was perceived as a suitable means of seeking a greater

contribution from individuals towards the cost of their education while minimising a potentially adverse impact on participation. A university education was subsidised by the government and HECS could be deferred until a student was professionally employed making repayments through income tax contributions. In addition, international students were required to pay full non-subsidised fees for the first time. This created a competitive market for a new and potentially lucrative source of funding for universities. The dominant objectives of the Dawkins Reforms were fourfold: to increase numbers of students; increase access and equity; increase relevance of higher education to Australia's global competitiveness; and lower operating costs (to be achieved partly through rationalisation of institutions) (Yerbury, 1996).

From 1996, the reforms to the Australian Higher Education sector intensified with the Vanstone and Nelson reforms of the Howard Liberal Government. The Howard Government gradually withdrew federal funding from the higher education sector, beginning with the *Higher Education Funding Amendment Bill 1996 (Australian Government, 1996)*, to encourage universities to rely on other sources of funding. This was the commencement of the marketisation of universities (Marginson & Considine, 2000). Universities were to operate with the efficiencies of modern businesses and to be responsive to market demands for higher education (Marginson & Considine, 2000). This required increased relevance and application to commerce and industry in an increasingly internationalised market. The number of international students increased during the 1990s with greater reliance of universities on the soft funding these students provided.

1.2.3 Changing pedagogical practice

The establishment over centuries of a traditional tertiary teaching framework culminated in determined roles for staff and students in which the transmission of knowledge was the primary concern. In the *traditional* university, the lecturer provided authoritative knowledge in the form of a lecture supported by readings and tutorial discussions, and students played the receptive role of noting down what they considered important for later discussion and recall for assessment purposes. Most students in the traditional university were young school leavers who performed well academically in their secondary education and proceeded to pursue a professional

career. The role of the lecturer was to deliver information and manage learning. Students of similar backgrounds with similar ambitions systematically and simultaneously progressed through their degree programs and were assessed on how much was learned about what was taught (Laurillard, 2002; McDonald & Postle, 1999).

The traditional academic culture emphasised individualism and autonomy for both staff and students. In terms of the traditional teaching model, academics worked autonomously, with preparation of teaching materials very much an individual task, and the control of content a right (Laurillard, 2002; McDonald & Postle, 1999). The only restriction in the way they worked under a traditional tertiary teaching framework was that administrative requirements restricted the use of time and space. Under this model the university calendar was dominated by enrolment, timetabling and assessment schedules. Typical independent and individual student activities included tasks such as conducting library research or laboratory work. Students also worked one-to-one with tutors on their academic studies and for counselling and pastoral care. One-to-many modes of instruction were based on the lecture format while many-to-many modes included tutorials, seminars and forums (Laurillard, 2002; McDonald & Postle, 1999).

The pedagogical focus and practices of tertiary teaching and learning shifted significantly during a period of rapid global change, the process of which is commonly referred to as *globalisation*. Globalising forces and associated political policies affected the transformation of the *traditional* notion of university education into a *contemporary* form of university education.

1.2.4 The impact of globalisation

The reforms to higher education were not simply the result of changes in government policy. The changes in government policy and higher education organisation and practice were in response to broader societal changes brought about by globalisation. Globalisation is not a new concept but has been applied specifically in recent times to encapsulate significant global changes that have combined over the past few decades to create what Castells (1996) calls the 'network society'. Governments, businesses and industries, and educational systems have, to a large extent, re-

positioned and transformed themselves to meet new global conditions and challenges to remain relevant and competitive in a global context.

Castells (1996) views the information revolution as the primary force driving the globalising processes. The information revolution refers to the capacity for the production and exchange of vast amounts of information by organisations, institutions and individuals made possible with the introduction of personal computers and their interconnection on a global scale.

The circuits of electronic impulses is the material foundation of the information age just as the city in the merchant society and the region in the industrial society...information is the key ingredient of our social organisation...it is the beginning of a new existence...marked by the autonomy of culture vis-à-vis the material basis. (Castells, 1996, pp. 412, 477-418)

Castells (1996) assumed information and communication technologies to be a central transforming force in the development of modern society, with all other trends implicitly related. For the first time in history, information and knowledge had become primary productive forces which defined social processes and social organisation. Consequently, material production and services have come to rely on access to and exchange of information.

The role of the university has always been involved in the production and transmission of knowledge, but within the new global context, the *contemporary* university is no longer regarded as elitist with idealised notions and disengaged from the broader society in which it exists. Rather, it aims to be responsive to global challenges. Knowledge is produced and exchanged as a marketable commodity in the globalised society and computer networks facilitate information flows across traditional borders to provide instant access to almost any location worldwide.

As information and communication technologies became more pervasive in all aspects of society and more commonplace in schools and the home throughout the 1990s, universities made use of the information processing efficiencies of computer technologies and their interconnection on a global scale, not only to produce, store and share knowledge, but also to use them as tools for learning. A shift in pedagogical focus began to occur as universities adopted computerised, network-based learning management systems. The development of flexible delivery of

university courses has aimed at achieving a wider range of educational purposes for a growing student population with increased diversity in background, purpose and need. This shift in focus is described as moving from *traditional* to *contemporary*: ‘from teaching to learning; from elite to inclusive; from “producer” to “consumer”; from local perspective to international; from credentialing (four year-degree) to life-long learning (40 year degree)’ (Nunan, Reid, & McCausland, 2002, p. 1). A potentially new way of educating to meet the professional challenges of a rapidly changing global society has emerged as a result of political, social and technological forces.

An example of the *contemporary* Australian university that has emerged was chosen as the site for this study. It is one of the newly formed ATN universities, *Uni Technovation*. The university was created by a merger of two institutions as an outcome of the Dawkins Reforms: one, a college of humanities, and the other, an institute of technology. The newly formed university had developed expertise in distance education through one of its former institutions and so was relatively prepared to take on the challenges presented by flexible learning using educational technologies. The university restructured and reformed through the 1990s to position itself competitively in the higher education market for the approaching new century.

1.3 Statement of the problem

Traditional universities have been producers (through research activity) and transmitters (through teaching activity) of current knowledge. This knowledge has been transmitted through the provision of reading lists, lectures, tutorials and seminars. Undergraduate students were to make sense of the knowledge with which they were presented and to reproduce it in various forms for assessment purposes. Although information and communication technologies have transformed the ways in which information is communicated and transacted in general society and have provided the means for learning to be similarly transformed, many university students and academic staff initially were reluctant to make use of the new technologies in their teaching and learning practices. The use of information and communication technologies was imposed primarily through pressures from

institutional management and the federal government. The decision for *Uni Technovation* to develop scalable and flexible delivery solutions for all of its courses came from the Senior Management Group (SMG) and was implemented by the *Centre for Online Learning* (COL). All academic staff had access to the newly developed online learning resources but few took advantage of their capabilities for many reasons, including their lack of understanding and training in the use of such technologies and their lack of understanding of the ways it could be used effectively and innovatively in teaching and learning. There were also the increasing pressures of time and workload commitments, with a growing number of student enrolments and reductions in permanent academic staff. The consequence was the provision of lecture notes or recorded lectures linked to the course homepage, with the list of relevant readings, and a text-based asynchronous discussion forum for student use or a synchronous chat session for 'live' tutorial discussion.

Online course materials were provided as a support for face-to-face teaching arrangements; in most cases the courses did not include any direct online teaching or facilitation of learning. The re-named and re-visioned Distance Education Centre, COL (*Centre for Online Learning*), was not only responsible for the development and implementation of a Learning Management System (LMS), but also for staff development and training in its use and application to learning. A division of COL was established as both a support for student learning and for academic staff development. Academic staff who made creative and innovative use of the resources available to them were supported by COL and had their online courses showcased as a model for others to consider as suggesting possibilities for their own courses. *Learning to Resolve Global Conflicts 201* was one such course that was showcased by the COL for its innovative use of the *LearnIT* online tools provided by the LMS.

1.4 Aims of the study

The aim of this study was to investigate the pedagogical practices associated with an online course in an undergraduate bachelor degree program in a contemporary Australian university, considered to be innovative at the time of development. The purpose was to determine the extent to which instructional intent and pedagogical purpose, as evidenced in the instructional design and conduct of the online course,

aligned with the educational experience of the learners who participated in the course. If misalignment of purpose and practice was discovered, the aim was also to determine where the misalignment occurred and why and how this might have affected learning processes and outcomes. By presenting detailed accounts of cognitive, social and teaching participation for individuals and groups and of participant views of the learning experience, the study aimed to elucidate the implications for pedagogical design and instruction of such online courses at Australian universities.

1.4.1 The research questions

The research questions of interest for this study are as follows:

Main questions:

1. How does the design of an online course create a flexible student-centred learning experience?
2. How do undergraduate university students at an Australian university experience such an online course, both collaboratively and individually?

Sub-questions:

- What are the distinctive features of the instructional design of the online course?
- How do the students engage in learning during the course?
- To what extent do the learners follow planned processes?
- If deviation occurs, why and what are its consequences in terms of meeting the planned learning outcomes?
- How much (and what kind of) knowledge do individuals contribute to the shared learning experience?
- How important are social and teaching elements in facilitating and progressing cognitive processes?

1.5 Methodology

I determined that a mixed methods case study of the educational experience of participants in an online course to be the most suitable methodology to address the research questions. This conforms to a pragmatist stance in which the most suitable methods for addressing research questions take priority over the metaphysical debates concerning research designs (Stake, 1985; Yin, 1994). Triangulation of data obtained from multiple sources using multiple methods enabled me to ensure a reliable and valid study. I performed a cursory analysis of collated data from a pilot study to inform the design, implementation and analysis of the principal study. Unobtrusive methods were used to collect, de-identify and relate the multiple sources of data and both qualitative and quantitative software applications were used to code, analyse and represent the data for corroboration and to identify components for deeper analysis.

1.6 Significance of the study

This study set out to contribute to scholarship and knowledge in the field of online teaching and learning in higher education through an investigation of innovative online pedagogical practice. Its significance lies in how it integrates the three intersecting categories of cognitive presence, social presence, and teaching presence in Garrison et al.'s (2000) Community of Inquiry model by implementing a holistic qualitative content analysis of an online learning experience. At the time of data collection, only sections of the model had been applied to the analysis of web forum transcripts that involved the collaborative construction of knowledge. The present study used the 'real-world' application that a role-play simulation can provide. By providing insights into the online learning experiences of a cohort of undergraduate learners, the study's findings will inform online learning design and practices at the site of investigation and more broadly within the Australian higher education context. However, as the study represents a single case, it is limited in its scope. Its value lies in the extent to which readers decide the case is similar to and therefore likely to be instructive about theirs (Stake, 1995).

1.7 Structure of the thesis

Chapter 1 provides a context for the study and an overview of its methodological approach, the questions explored and their significance to the context.

Chapter 2 presents foundational concepts from the literature on the cognitive and social aspects of learning, including social constructivism (Vygotsky), experiential learning (Dewey and Kolb) and Computer-Supported Collaborative Learning (Koschmann).

Chapter 3 presents foundational concepts from the literature on the teaching and instructional aspects of online course design.

Chapter 4 introduces the methodology, including the research design, the methodological framework used for analysis, the pilot study and the methods for data collection, representation and analysis.

Chapter 5 presents and discusses the analysis of quantitative and qualitative data relevant to teaching presence drawn from the webpages of the course website and the web forum transcripts produced during the course.

Chapter 6 presents and discusses the analysis of quantitative and qualitative data for groups of learners and for selected individuals relevant to social presence and cognitive presence drawn from the web data logs of the course website, the web forum transcripts produced during the course, and two online surveys completed by the research participants.

Chapter 7 presents and discusses the analysis of qualitative data in the form of summaries of individual student experience.

Chapter 8 consolidates the findings presented in the previous three chapters in relation to the research questions, discusses their implications for online learning, and concludes the thesis.

Chapter 2

Theories of learning

With the aim of providing a background to the study, chapter one explained how social and technological transformations on a global scale and government reforms at a national level have impacted on pedagogical practices in higher education in Australia. The selected site for this study, *Uni Technovation*, had implemented a teaching and learning strategy involving the use of information and communication technologies that aimed to promote student-centred learning and flexible delivery arrangements. Without the availability of such technologies, both student-centred learning and flexible delivery would not have been as viable. Changes during the past century, accelerated in recent decades, had culminated in theoretical positions about the nature of teaching and learning that make use of the potential of information and communication technologies for collaborative learning opportunities.

As reported in the introductory chapter, when reflecting on my early ventures into researching online learning environments, I recognised that providing access to mediating technologies and training in their use did not automatically produce the group learning processes or outcomes anticipated. However, it seemed that researching the experience of learners in an online environment could offer insights into teaching and learning practices with a view to improving group processes and outcomes. A review of models designed to capture the experience of students learning in online text-based environments at the time this research was conducted suggested that the Community of Inquiry framework, developed by Garrison et al. (2000), was the most holistic model for analysing student experience in such environments. The Community of Inquiry framework presents cognitive presence, social presence, and teaching presence as essential elements in fostering effective educational experiences in computer-mediated distance learning environments in higher education settings. The research reported here, which investigated how students engaged in an online learning environment to meet the objectives of a

particular course, was informed by the theories relevant to this particular model. This chapter explores those learning and social theories and their interrelationship, while the next chapter explores the teaching and instructional design theories and their interrelationship with learning.

2.1 The Community of Inquiry framework

The Community of Inquiry is a conceptual framework for the optimal use of computer-mediated communication to support critical thinking and critical inquiry through transactional discourse among students and online instructors (Garrison et al., 2000). The framework is represented diagrammatically below:



Figure 2.1: Community of Inquiry framework

The central premise of the framework, that a community of inquiry leads to deep reflective learning outcomes, has been criticised by many since its inception due to the lack of empirical evidence to support the claims about its effectiveness (Rourke & Kanuka, 2009). Many models available at the time focused on cognitive processes rather than the learning experience situated at the nexus of cognitive presence, social presence, and teaching presence in online instruction. Prior to the present study, even the Community of Inquiry framework itself had only been used to analyse the different categories of presence in the model independently of the others. This study was conducted to analyse the extent to which individuals experienced learning in an online undergraduate course as leading to deep effective learning outcomes for them and as being supported by community processes. This chapter explores the learning

theories associated with online collaborative learning and with the Community of Inquiry framework. It explores both the cognitive and the social aspects of learning and the mediation of computer technologies to support the learning processes online. The next chapter explores the relationship of teaching to learning and theories of pedagogical practice and instructional design that support the development of deep learning outcomes.

2.2 Cognitive presence

In the Community of Inquiry framework, cognitive presence consists of a four stage process initiated by a problematic situation or question that necessitates a process of inquiry to reach a satisfactory resolution. The first stage of evocation involves a triggering event that leads to an exploration of the problem. The inquisitive processes of exploration progress to an integration of findings and a tentative resolution. When sufficient consensus of evidence or agreement is reached, a commitment is made to the resolution of the problem. The foundational theories of community inquiry are rooted in pragmatism, a tradition of philosophy and social action that rose to prominence at the turn of the 20th century (Bishop et al., 2004). Charles Sanders Pierce, a noted scientist and philosopher, is credited with developing the term community of inquiry and used the phrase to refer to a group of individuals (most often scientists) employing an interpersonal method for arriving at results (Paradales & Girod, 2006). John Dewey furthered these theoretical foundations in relation to learning. This section explores the cognitive theories that underpin notions of community and inquiry, beginning with Dewey.

2.2.1 Experience and inquiry

As a Pragmatist, Dewey believed that educational experience should be embedded in everyday practice. He rejected Behaviourist notions of learning which viewed learning as a process of behavioural change in individuals, and that individual behaviour should be modelled to suit the industrialist working conditions of the time. Dewey also rejected dualistic views of the individual and society preferring a view of the individual as participant in society. For Dewey, society and the individual were inseparable and one could not be subordinated to the other (Dewey & Childs, 1933;

Garrison & Anderson, 2003). To understand education from Dewey's perspective is to understand the interplay between personal interests and experience and societal values, norms and knowledge (Garrison & Anderson, 2003).

Dewey promoted learning as a process of inquiry. According to Dewey, the individual experiences the world through interaction with the immediate environment and in the process encounters problems which raise genuine doubt. These problems present opportunities for learning through a process of inquiry. For Dewey, inquiry represents a particular kind of experiencing. In particular, inquiry is conducted within and in response to what Dewey calls a 'problematic situation'. 'Situation' is a technical term for Dewey and denotes the entire, pervasive, unique character of all conditions under which and within which an individual functions at a given time (Talisie, 2002):

What is designated by the word 'situation' is not a single object or event or set of events. For we never experience nor form judgments about objects and events in isolation, but only in connection with a contextual whole. This latter is what is called a 'situation'. (Dewey, 1981, p. 72)

A situation is problematic or indeterminate when its constitutive factors are in disorder. This disorder incites inquiry. Dewey defines inquiry as follows:

Inquiry is the controlled or directed transformation of an indeterminate situation into one that is as determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole. (Dewey, 1981, p. 108)

Inquiry is an operation activated in response to doubt; however, Dewey understands doubt to be an 'existential' condition rather than a psychological phenomenon (Dewey, 1981, p. 30). It is the situation which is doubtful, not simply the internal state of the individual. 'Doubt' characterises situations which are themselves 'uncertain, unsettled, [and] disturbed'; doubt is not exclusively private or inner state, 'it is the situation which has these traits' (Dewey, 1981, p. 109). Thus, the object of inquiry is not the discovery of an antecedent, fixed reality, but rather 'the controlled reconstruction of existing conditions' (Talisie, 2002, p. 76).

The individual begins a process of inquiry when encountering a problematic situation; the individual begins to introduce certain alterations within the situation to affect a resolution to the problem. In other words, the individual begins to transform

the situation by introducing controlled changes into the world. Each change effects a reconstruction of the situation. These are not psychological activities but occur within the environment in which the individual is situated. Inquiry ceases when the situation is transformed so as to eliminate the problem (Dewey, 1981; Talisse, 2002). In Dewey's conception, the experience of the individual is regarded as a significant contributor to learning through the reconstruction of a problematic situation into a meaningful experience.

2.2.2 Constructivism

Consistent with Dewey's theories of inquiry, constructivists, like Piaget, also view learning from the perspective of the individual interacting with the environment. Piaget, however, focuses on cognitive development that occurs through a dialectic process of assimilation and accommodation in response to an innate desire for individuals to achieve a state of equilibration (Olson & Hergenhahn, 2009; Phillips, 1981). Unlike Dewey, the state of balance or resolution to a problem that learners attempt to achieve, although based in experience, does not focus on an external situation but an internal cognitive state. Cognitive constructs, which Piaget refers to as schemata, are mental representations of learning from experience. The way individuals are able to deal with their environment changes as they grow older. For new interactions with the environment to occur, the schemata available to the individual must change (Olson & Hergenhahn, 2009; Phillips, 1981).

The process of responding to the environment in accordance with an individual's cognitive structure is called assimilation and it refers to a kind of matching between the cognitive structures and the physical environment. The cognitive structure that exists at any given moment sets the bounds on what can be assimilated by the individual (Olson & Hergenhahn, 2009; Phillips, 1981). As the cognitive structure changes it becomes possible for the individual to assimilate different aspects of the physical environment. For intellectual growth to occur, the individual's cognitive structure must undergo modification in response to the assimilation. This second process is referred to as accommodation and forms the basis for individual learning (Olson & Hergenhahn, 2009; Phillips, 1981). Events for which the individual has corresponding schemata are readily assimilated, but events for which the individual

has no existing schemata necessitate accommodation. Early experiences tend to involve more accommodation than later experiences because more and more of what is experienced will correspond to existing cognitive structures, making substantial accommodation less necessary as the individual matures (Olson & Hergenhahn, 2009; Phillips, 1981).

Another concept of Piaget's that differs from Dewey's is interiorisation. Interiorisation is 'the gradual decreasing dependence of a child on the physical environment and the increased utilisation of cognitive structures' (Olson & Hergenhahn, 2009, p. 287). As the cognitive structures develop, they become increasingly important in the adaptive process (Olson & Hergenhahn, 2009; Phillips, 1981). For example, elaborate cognitive structures make more complex problem-solving possible. As more experiences are interiorised, thinking becomes a tool in adapting to the environment. For optimal learning to take place, information must be presented that can be assimilated into the present cognitive structure but at the same time be different enough to necessitate a change in that structure. Unless the information can be assimilated, it cannot be understood. If it is completely understood, however, no learning is necessary (Olson & Hergenhahn, 2009; Phillips, 1981).

2.2.3 Social constructivism

Social constructivists view human knowledge as a social product embedded in experience and the development of human cognition as a social process as opposed to the mentalist conception which reduces cognition to a purely information-processing model (Forgas, 1981). Forgas, like Vygotsky, refers to cognition in the broader sense of all knowing and ideation. In this sense, he views knowledge and ideas about the world as being intrinsically normative, motivated and social.

Cognition, when taken as a domain concerned with all processes of knowing, is intrinsically, inevitably and profoundly social. Our knowledge is socially structured and transmitted from the first day of our life, is coloured by the values, motivations and norms of our social environment in adulthood, and ideas, knowledge and representations are created and recreated at the social as well as the individual level. (Forgas, 1981, p. 2)

If knowledge is viewed as a social product, then learning must be viewed as a social activity. Vygotsky (1978) believes that the social and cultural context in which a

child is located is significant for the child's cognitive development. As children interact with their environment and with more knowledgeable others, such as parents, they develop an understanding of the reality in which they live. This is a socially constructed reality mediated by available cultural tools, such as language embodied in semiotic signs and symbols (Vygotsky, 1978). In keeping with Piaget's concept of interiorisation, children develop cognitively when they are able to appropriate and internalise these tools for their own purposes. The internalisation of these tools is a necessary part of the problem-solving process and therefore leads to higher order thinking skills.

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals. (Vygotsky, 1978, p. 57)

Although Vygotsky was primarily interested in child development, the extension and application of his theories in recent times cover the full spectrum of ages and levels of learning. Vygotsky popularised the concept of a Zone of Proximal Development (ZPD) to conceptualise the scaffolded nature of learning. He viewed children as progressively moving from what is known towards knowledge or skill potential that is within their grasp through interaction with more capable peers or with the assistance of more knowledgeable adults (Vygotsky, 1978). Thus, children can achieve greater potential through interaction with significant others than they can alone. In tertiary learning, the lecturer or tutor often plays the role of the more knowledgeable other by scaffolding resources and tasks for learning and by providing instructive input and guidance. Peers can also contribute to knowledge construction by sharing their own knowledge and experiences with others. No one person has the same experiences and knowledge as another so such sharing has the potential to broaden, and perhaps deepen, the educational experience for all involved.

In summary, while Dewey focused on the experience of the learner and Piaget on the cognitive development of the learner, social theorists such as Vygotsky viewed learning from the perspective of the interaction between groups of individuals and their environment. For Vygotsky, individuals are embedded in the environment with which they interact. People construct their own representations of knowledge

through experience but interaction with others is an important aspect of their personal constructions. Rather than learners being passive receivers of a pre-determined body of knowledge, constructivists view the learner as active in the learning process, engaged in inquiry and discovery. For Dewey, interaction with the environment triggers inquiry to resolve problematic situations. For Piaget, interaction with the environment brings individuals to the realisation that gaps may exist in their present cognitive constructs that require assimilation and accommodation. For Vygotsky, interaction with the environment includes interaction with the cognitive constructs (or knowledge representations) of many individuals based on their personal experiences. This kind of interaction brings awareness that differences exist in people's interpretations of knowledge and experience. The contestation of these different interpretations or representations can promote further learning for the individual through determination of why these differences might exist.

2.2.4 Learning in community

Lave and Wenger (1991) progressed the social constructivist learning theories of Vygotsky and others to include situated cognition and communities of practice. They theorised and emphasised the situated nature of cognition; that individuals are situated in a socio-cultural context that directly impacts their cognitive development. They also developed the concept of the apprenticeship model of learning based on Vygotsky's Zone of Proximal Development but situated within communities of practice whereby learning becomes a process of social participation. This is a 'process of being active participants in the practices of social communities and constructing identities in relation to these communities' (Wenger, 1998, p. 4). This kind of social participation involves membership and belonging.

Lave and Wenger (1991) describe learning as an integral part of generative social practice in the lived-in world. 'Generative' implies that learning is an act of creation or co-creation; 'social' suggests that at least a portion of learning time occurs in partnership with others; and 'lived-in world' concerns real-world practices and settings that make learning more relevant, useful, and transferable (Brill, 2001). Cognitive apprenticeship practices are practical educational approaches that reflect a situated perspective by seeking to contextualise learning (Brown, Collins, & Duguid, 1989).

2.2.5 Communities of practice

While earlier theories viewed learning as an individual activity within a socio-cultural context but separated from other activities and the result of teaching, communities of practice assume that learning is an essential human activity that is ‘both life-sustaining and inevitable’ and that it is a shared social phenomenon embedded in everyday activity (Wenger, 1998, p. 3). Learning within communities of practice is ‘an integral part of daily life that becomes so informal and so pervasive that it rarely comes into explicit focus’ (Wenger, 1998, p. 7). Learning is ‘embedded in practice as doing; it is embedded in community as belonging; it is embedded in identity as becoming; and it is embedded in meaning as experience’ (Wenger, 1998, p. 5). These conceptualisations of learning align with Dewey’s pragmatist approach to learning and are supported by constructivist notions of learning.

With specific reference to this study, the university, as a community distinct from others in society, resembles a community of practice. The university context offers a variety of activities and experiences outside of formal learning arrangements, but through which learning occurs. A deliberate choice is required to become a participant in the university community. Participants play various roles which require some form of socio-cultural learning as an essential act of participation. Participation refers to a process of taking part and also to the relations with others that reflect this process. It suggests both action and connection (Wenger, 1998). According to Wenger, participation is,

a complex process that is both personal and social, and that combines doing, talking, thinking, feeling, and belonging. It involves the whole person, including people’s bodies, minds, emotions, and social relations (Wenger, 1998, p. 56).

Participants are apprenticed into roles by existing community members (Brown et al., 1989; Lave & Wenger, 1991; Wenger, 1998), forming their identity within the community, and can participate as fully or as minimally as desired or permitted by the community itself. Rogoff asserts that ‘learning occurs as people participate in shared endeavours with others, with all playing active but often asymmetrical roles in sociocultural activity’ (1994, p. 209). For students, participation in the academic community may involve learning how to search for and access relevant materials for assignment writing with the assistance of library staff, and then learning how to use

these materials and reference them according to academic convention. It may also involve learning how to write academic essays to a required academic standard. For lecturers, participation in the academic community may involve learning research practices in their respective fields, learning effective teaching and assessment strategies, or learning new policies and procedures.

As in any community, there will be dynamic processes that change the relationships between the members over time. Students may participate actively in a course of study or choose to participate minimally with associated consequences. Some may even challenge the ground rules that govern certain activities (Wenger, 1998). To remain an inclusive community, Renshaw (2003) suggests that certain degrees of freedom must be allowed to individuals to change their relationship to the community over time; and certain procedural safeguards need to be implemented to facilitate critical feedback and monitoring of community processes.

Participants join and leave the community at different stages and occupy different spaces but all contribute to its overall goals and development. According to Wenger (1998), learning drives practice, and practice represents the history of that learning.

As a consequence, communities of practice have life cycles that reflect such a process. They come together, they develop, they evolve, they disperse, according to the timing, the logic, the rhythms, and the social energy of their learning. Thus, unlike more formal types of organisation structures, it is not so clear where they begin or end. They do not have launching and dismissal dates. (Wenger, 1998, p. 96)

The discourse and practices of the community become familiar (practised) to participants over time (experience). The discourse and practices develop through the process of interaction. Interaction involves the processes of participation and reification. Reification refers to a process by which individuals project meanings into the world and then perceive them as existing in the world, as having a reality of their own (Wenger, 1998). The process of reification is central to every practice; it occupies much of people's collective energy and it shapes their experience (Wenger, 1998). Although seamlessly woven into practices, the complementarity of participation and reification is something used as a matter of course in order to secure some continuity of meaning across time and space (Wenger, 1998). It is through the various combinations of the interplay between participation and reification that a variety of experiences of meaning is realised (Wenger, 1998).

The negotiation of meaning takes place at the convergence of the processes of participation and reification in communities of practice (Wenger, 1998). It is the process by which individuals experience the world and their engagement in it that generates meaning (Wenger, 1998). Individuals do not simply make up meanings independently by living in the world and neither does the world simply impose meanings on the individual. The negotiation of meaning is a productive process that is historical and dynamic, contextual and unique. It involves interpreting and acting, doing and thinking, understanding and responding. It always generates new circumstances for further negotiations and further meanings and constantly produces new relations with and in the world. Therefore, meaning is always the product of its negotiation, existing neither in the individual nor in the world but in the dynamic relation of living in the world (Wenger, 1998).

Every community negotiates its own meanings through interactive processes. These meanings are embedded in and expressed through the discourses and practices of the community (Wenger, 1998). All universities, for instance, engage in similar practices and adopt similar discourses that are unique to the academic community and specific to roles within it. Thus, an experienced and practised student should make a seamless transition from one university community to another. The kind of learning that occurs at this level (to participate as a student in an academic institution) is less formalised and more generalised than, although an integral part of, the kind of learning required in a formal academic course of study. More recent theories have advanced community learning to a deeper and more engaged level of learning which is discussed in the next section.

2.2.6 Communities of formalised learning

As described above, communities of practice are the substance and structure of society. They are pervasive and complex involving multiple and overlapping memberships and, in many cases, informal learning arrangements. They are self-forming and self-governing. The participants of the communities create and use products for the benefit of the community and the broader society. Renshaw (2003) warns against the pitfalls in linking learning and community in that learning, in this regard, can be viewed as too pervasive and encompassing; this sort of community-based learning can refer to all kinds of experiences, only some of which we would

want to promote as educators. Communities of practice are embedded in real-life experience, negotiate shared meanings and identity formation and are useful for acquiring and developing life-long learning principles (Monaghan, 2007) but may not support cognitive development of an academic kind. Within the context of higher education, the term ‘learning community’ describes a learning event with fixed time limits and existing for a more or less specific purpose (Pedler, 1994). The design involves bringing together a group of people as peers to meet personal learning needs, primarily through a sharing of resources and skills offered by those present. More formalised learning arrangements, such as classroom teaching, university lectures and tutorial sessions, are required to support cognitive development (Pedler, 1994). For learning in community to become more purposeful, it should be intentional, active, focused and goal-oriented, and support shared cognitive development. The responsibility to meet learning outcomes lies with the individual learner in supportive collaboration with the group or community. These are the characteristics of a collaborative student-centred education and are explored more fully in the next section in conceptualising the cognitive development of learners in community.

2.2.7 Knowledge building communities

The theoretical notion of Communities of Practice, as espoused by Lave and Wenger, has been applied in recent years to the learning of organisational practices in companies more than to the educational practices of the classroom. The assumption is that learners are ‘acculturated’ into the practices of the classroom and school from an early age and that a different kind of conceptualisation of community is necessary to inform formal learning practices within educational settings. Knowledge Building Communities (KBC) as proposed by Scardamalia and Bereiter (1994) advocate learning through the co-construction of knowledge using inquiry-based practices as shared responsibility for attaining the learning goals of a specific learning community. It is a collaborative open-ended inquiry approach to knowledge construction that assumes learner agency and responsibility for the achievement of the learning goals. The notion of Knowledge Building Communities (KBC) developed out of Inquiry Based Learning (IBL) approaches in which learning is driven by a process of inquiry owned by the student. A Knowledge Building Community (KBC) is a group of learners which is engaged in advancing collective

understanding through collaborative efforts (Hewitt, 2001). Drawing its model from the research and development communities in universities or private organisations, the main focus of a KBC is to produce knowledge useful to the community (Scardamalia & Bereiter, 1999). Bereiter (2002) argues that by immersing students in a KBC, they can be acculturated into the modes of thinking and acting that will be needed for the knowledge society. In order to participate effectively in a KBC, learners require the characteristics of self-directed, self-regulated and autonomous learning but must also establish a sense of community and collaboration through engaged and active participation in group work. This section explores the learner characteristics of a knowledge-building community applicable to adult learners.

One of the key distinguishing characteristics between the way in which adults and children learn is autonomy. Autonomy is an important assumption underlying the idea of individual choice in the educational process (Moore, Houde, Hoggan, & Wagner, 2007). Autonomous or independent learning is not synonymous with self-instruction or learning in isolation; that is, it is not limited to learning without a teacher or peers (Little, 1994; Moore et al., 2007). Learner autonomy is essentially a matter of the learner's psychological relation to the process and content of learning (Little, 1994). Autonomy can be identified in a wide variety of behaviours as 'a capacity for detachment, critical reflection, decision-making and independent action' (Little, 1994, p. 81). Little argues that the various freedoms implied by autonomy are always conditional and constrained, never absolute:

As social beings our independence is always balanced by dependence, our essential condition is one of interdependence; total detachment is a principal determining feature not of autonomy but of autism. (Little, 1994, p. 81)

Thus, autonomous learners take responsibility for their own learning and for the achievement of learning outcomes, whether in isolation or in a community, but learners vary in their degree of autonomy within a community.

A pre-condition for autonomy is learning intent. Davies defines learner intent as 'a person's commitment and desire to learning what is expected of him or her when presented with a specific learning opportunity' (Davies, 2006, p. 9). It is a mental representation of commitment to learn separate from both motivation and effort (Bandura, 2001). Learner intent can be 'wholehearted or somewhat less sincere and

characterises individuals' aims and values as well as their reason and purpose for participating in the learning activity' (Davies, 2006, p. 9). Although motivation is important initially, it is learner intent that determines the quality of effort expended and, often, the quality of learning achieved (Davies, 2006). The focus of a contemporary university education is on learning as a social activity, an activity in which autonomous learners are seen to take responsibility for their own learning (Lea, Stephenson, & Troy, 2003).

In learning situations in which students are faced with conflicting intentions, often for learning activities not of their own choosing yet important to their general educational goals, trade-offs and compromises are made (Davies, 2006). The trade-offs and compromises students make are often situational (Davies, 2006) and relate to their commitment to the group or community of learners. Collaboration is viewed as having a positive influence on student commitment to the community processes of learning and their intent to learn. Collaboration has been attributed with enhancing retention, learner interest, participation, and critical thinking (Garrison, 1997; Gokhale, 1995; Hunter, 2006). Working within groups can provide enhanced support and motivation for learners by exposing them to multiple and diverse perspectives and to feedback that originates from the group support function (Moore et al., 2007).

Collaboration involves an active learning process that engages learners in interactive cognitive development. Active learning demonstrates an intent to learn by an individual. Bonwell and Eison (1991) popularised Active Learning as an approach to teaching which focuses the responsibility of learning on learners. One of the core features of Active Learning is problem-solving, which provides cognitive engagement, but adopting active learning does not mean following highly structured methods, as in Problem-Based Learning (PBL). In some cases, instructors develop unguided course activities and expect learners to learn from these experiences. While practice is useful to reinforce learning, problem-solving is not always suggested. Similar to Active Learning, Collaborative Self-Directed Learning (CSDL) is an exploratory learning model that combines autonomy (or self-directed learning) and collaboration. It requires individual engagement with the process and commitment to learning. This involves collaboration with other learners but does not assume that participants are working towards the same learning objectives or use the same

methods. Rather, it means that learners are working together to motivate, critique, share diverse viewpoints and reflect with each other on the material and the learning process.

Problem-Based Learning follows a structured process of problem-solving and is goal-oriented. Problem-based approaches to learning have a long history of advocating experience-based education. Problem-based learning (PBL), at its most fundamental level, is an instructional method characterised by the use of real-world problems as a context for students to learn critical thinking and problem-solving skills, and acquire knowledge of the essential concepts of a course of study. In collaborative PBL, students work in groups to identify what they need to learn in order to solve a problem. They engage in collaborative self-directed learning (CSDL) and then apply their new knowledge to the problem and reflect on what they learned and the effectiveness of the strategies employed. The teacher acts to facilitate the learning process rather than to provide knowledge (Hmelo-Silver, 2004). PBL accommodates the acquisition of life-long learning skills, which include the ability to locate and use appropriate learning resources for problem-solving.

The educational concept of Engaged Learning incorporates the characteristics discussed thus far in this section and also emphasises the importance of technology in actualising its aims (Jones, Valdez, Nowakowski, & Rasmussen, 1994). Engaged Learning aims to cultivate learners who can manage their own learning strategically, who are self-motivated and who can work collaboratively with others to solve problems (Jonassen & Strobel, 2006). These goals are achieved by setting complex and authentic problems that require learners in heterogeneous groups to co-construct knowledge (Jonassen & Strobel, 2006). Engaged Learning is student-centred and constructivist-oriented and results in meaningful outcomes for learners (Jonassen & Strobel, 2006).

In summary, the learner characteristics and instructional strategies examined in this section describe what is required for shared knowledge building endeavours. They reveal the fundamental notions that work towards desirable and meaningful outcomes in a formal student-centred educational setting. Desirable and meaningful outcomes include knowledge co-constructed from shared, or collaborative, problem-

solving processes involving active individual engagement to reach group consensus or resolution, and to meet personal learning objectives.

2.2.8 Community of inquiry

A community of inquiry incorporates many of the characteristics of learning covered in the previous sections. On various occasions, Garrison et al. (2000, 2001) mention two types of educational objectives: critical thinking, and deep and meaningful learning. In Inquiry-Based Learning approaches, knowledge is presented as problematic which involves an understanding of knowledge not as a fixed body of information, but rather as constructed and, hence, subject to political, social and cultural influences and implications. Multiple, contrasting and potentially conflicting forms of knowledge are represented both within the individual learners participating in the learning process but also in the instructional resources provided in the learning environment.

Knowledge is considered 'deep' or 'thick' as it concerns the central ideas of a topic or discipline because such knowledge is judged to be crucial to a topic or discipline (Biggs, 1999; Biggs & SRHE, 2003; Biggs, Tang, & SHRE, 2007; Laurillard, 1993, 2002; Ramsden, 1992, 1998, 2003). Deep knowledge occurs when relatively complex connections are established to central concepts. For students, knowledge is deep when they develop understandings of these central concepts (Biggs, 1999; Biggs & SRHE, 2003; Biggs et al., 2007; Laurillard, 1993, 2002; Ramsden, 1992, 1998, 2003). This is encouraged through a transactional process, which is a notion central to practical inquiry (Garrison & Anderson, 2003). While knowledge is a social artefact, in an educational context, it is the individual learner who must grasp its meaning or offer an improved understanding. Instead of being able to recite only fragments of information, students develop relatively systematic, integrated or holistic understandings. Mastery is demonstrated by their success in producing new knowledge by discovering relationships, solving problems, constructing explanations, and drawing conclusions.

The purposeful process of facilitating an outcome that is both socially and personally worthwhile lies at the core of the teaching and learning transaction (Garrison & Anderson, 2003). Thus, according to Garrison and Anderson (2003), an educational

experience has a dual purpose. The first is to construct meaning (reconstruction of experience) from a personal perspective (see 2.2.2). The second is to refine and confirm the understanding collaboratively within a community of learners (see 2.2.3). This transaction is common to all educational experiences, including online learning (Garrison & Anderson, 2003).

Acquiring and applying deep knowledge often involves higher-order thinking skills. Higher-order thinking requires students to manipulate information and ideas in ways that transform their meaning and implications. This transformation occurs when students combine facts and ideas in order to synthesise, generalise, explain, hypothesise or arrive at some conclusion or interpretation. Manipulating information and ideas through these processes allows students to solve problems and discover new (for them) meanings and understandings. Transformation, then, becomes the desired outcome of such learning.

2.2.9 Situated cognition and experiential learning

Situated cognition provides the conditions for learning to be transformative. Situated cognition recognises the pragmatic and experiential nature of learning advocated by Dewey. Collins (1988) defines situated learning as ‘the notion of learning knowledge and skills in contexts that reflect the way they will be used in real life’ (p. 2). Thus, situated cognition theory encourages educators to immerse learners in an environment that approximates as closely as possible the context in which their new ideas and behaviours will be applied (Schell & Black, 1997). However, some experiences are not possible due to expense, danger or other constraints such as location and time.

Simulated real-world experiences can provide learners with opportunities to engage in goal-oriented, cooperative, problem-solving activities that apply shared conceptual knowledge developed in a course of study. Garrison and Anderson (2003) emphasise that it is not only content and process that are important in the educational transaction, but also context such as that provided by the role-play scenario in the present study. According to Herrington and Herrington (2006), for an authentic experience, the context needs to be all-embracing, to provide the purpose and motivation for learning, and to provide a sustained and complex learning

environment that can be explored at length. It is not sufficient to simply provide suitable examples from real-world situations to illustrate the concept or issue being taught. It needs to encompass a physical environment which reflects the way the knowledge will be used, and a large number of resources to enable sustained examination from different perspectives (Brown et al., 1989; Herrington & Oliver, 2000; Hill & Hannafin, 2001; Honebein, Duffy, & Fishman, 1993). The combination of content, process and context in the transactional process provide the impetus for transformative learning (Garrison & Anderson, 2003).

Experiential learning is considered an essential aspect of many contemporary university courses: it allows the application of conceptual knowledge to real-world settings which is often achieved through field trips, field placements and practicums. Experiential learning is 'the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience' (Kolb, 1984, p. 41). Because of its innovative style, it alters the social behaviour of adopters. Experiential learning transforms the behaviour of both teaching staff and students. The lecturer's or tutor's role 'evolves from that of a knowledge fact provider to a knowledge theorist and manager' and the student changes from 'a passive knowledge acquirer to an active learner' (Celsi & Wolfinbarger, 2002, p. 69).

Students learn best when they engage in specific types of activities that are appropriate to their particular style of learning. Kolb (1984) defines four learning styles – divergers, assimilators, convergers, and accommodators – determined by how people perceive information (i.e., concrete experience or abstract conceptualisation) and process it (i.e., active experimentation or reflective observation). More current research has relabelled these learning styles as imaginative, analytic, common-sense, and dynamic (Brooks-Harris & Stock-Ward, 1999; McCarthy, 1990). Imaginative learners prefer activities that allow reflection on known information relevant to the topic. Analytic learners learn best from activities that integrate theory and factual information. Common-sense learners succeed when they are able to test theories and problem solve, whereas dynamic learners prefer to learn by implementing new knowledge in their daily lives (Brooks-Harris & Stock-Ward, 1999). Experiential learning provides the conditions that accommodate these

varied learning styles by situating learning in real world circumstances and by allowing learners a degree of autonomy in achieving outcomes.

In experiential learning, the student's active experience is the primary driving force from which learning comes. Dewey's view was that the meaning of a given experience is the result of the interaction between what the learner brings to the given situation and what happens there. He argued that learners work on a new experience to understand it based on knowledge and understanding derived from earlier experiences (Dewey, 1981). The experiences and knowledge shared by a group of students enhances the capacity for learning, particularly as each learner brings something different to the learning experience.

2.2.10 Transformative Learning

Collaborative learning involves transactional processes in which meaning is negotiated and where views, values and beliefs are challenged or affirmed. Transformative learning is generated by the transactional process but moves beyond the improvement of understandings brought about by transactional learning. Transformative learning involves processes that change an individual's views, values and beliefs based on a recognition that former views, values and beliefs were erroneous, invalid, irrational or inadequate when challenged by a problematic situation. In order to accomplish this transformation, learners must engage in critical reflection on their experiences. Conflict role-play scenarios, such as the one included in the course investigated in this study, can provide the conditions for such transformative learning.

This concept of transformative learning was first developed by Mezirow and is referred to as perspective transformation. Perspective transformation comprises: becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating and integrating perspective; and, finally, making choices or otherwise acting upon these new understandings (Mezirow, 1991, p. 167). As discussed above (see 2.2.1), Dewey was more concerned with the learner's capacity to transform the situation in which

the problem was introduced, more so than Mezirow's notion of the transformation of the learner's perspective.

According to Mezirow, learning is not truly transformational unless the final phase of changing actions or making new choices results from the change in perspective. His theory describes a learning process that is primarily 'rational, analytical, and cognitive' with an 'inherent logic' (Grabov, 1997, pp. 90-91). Mezirow distinguishes among three kinds of reflection – and reflection is key in the transformation process: individuals may reflect on the content or description of a problem, which is similar to Dewey's ideas on problem-solving (Cranton, 1996); process reflection involves thinking about the strategies used to solve the problem rather than the content of the problem itself – this is quite a rational and orderly kind of reflection that does not incorporate intuition; premise reflection leads the learner to question the relevance of the problem itself – the assumptions, beliefs, or values underlying the problem are questioned. These processes of reflection are distinct from problem-solving and can lead to transformative learning (Cranton, 1996). If reflection leads to an awareness of an invalid, undeveloped, or distorted meaning scheme or perspective and, upon revision, if the individual acts on the revised belief, the development has been transformative (Cranton, 1996).

Prosser and Trigwell (1999), Marton and Booth (1997), and Ramsden (1992) have demonstrated that students who adopt deep approaches to learning achieve better learning outcomes than those who adopt surface approaches. Deep approaches are characterised by an orientation towards understanding, personal sense making and active learning. The following is a summary of the learning theories covered thus far in the chapter that support the conditions for deep learning to occur:

Experiential: Learning results from the student's own experience of action in the real world, reflection on this experience leading to abstract conceptualisation, followed by experimentation with the new concepts so formed (Dewey, 1981; Kolb, 1984);

Constructivist: Learners actively build new knowledge by incorporating into their existing knowledge concepts derived from their educational experience (Bruner, 1966; Piaget, 1966; Vygotsky, 1978);

Situated: Learners acquire knowledge through participating with others in a community of practice and within an authentic context or learning environment (Brown et al., 1989; Wenger, 1998);

Transformative: Learners employ problem-solving strategies to transform the situation of their experience (Dewey, 1981) and to transform their perspectives in the process (Mezirow, 1991);

Collaborative: Learners collaborate in community to apply shared understandings to a situation in which problems need to be solved (Garrison & Anderson, 2003; Scardamalia & Bereiter, 1999).

Engaged: Learners take responsibility for their own learning using autonomous learning strategies (Little, 1994) and demonstrate an intent to learn (Davies, 2006) by adopting deep approaches to resolve authentic and meaningful problems (Jonassen & Strobel, 2006).

These theories of learning contrast sharply with the traditional, didactic educational paradigm, where knowledge is an object to be transmitted from the teacher to the student, usually in the form of lectures or a textbook (Kay & Dyson, 2004). Such a surface approach typically focuses on memorisation and the reproduction of knowledge, often characterised by a lack of personal engagement in the learning activity.

2.3 The role of computer technologies in supporting learning

The previous section has presented theories of learning and cognition that underpin the Community of Inquiry framework. The use of online learning technologies has been shown to assist in the adoption of deep approaches to learning. Computers and their networks offer technological affordance to the learning process by enabling the design and production of virtual spaces for learning, through the provision of shared resources and mediating tools for communication, interaction and collaboration. This section discusses the theories that underpin the use of technologies that curtail spatial and temporal distance for interactive and collaborative learning.

2.3.1 Computer-mediated communication

Computer-Mediated Communication (CMC) describes computer-based technologies that support communication across computer networks and includes many well-recognised forms of internet communication such as email, discussion forums, chat rooms, instant messaging (IM), the web and video conferencing (Spitzberg, 2006; Thompson & Nadler, 2002). These forms of electronic communication have been used either synchronously or asynchronously to create the capacity to combine both on-campus and off-campus learners within a single collaborative community. The development of LMS based on Web 2.0 technologies enabled the incorporation of many of these CMC technologies in a single web space. The possibility of incorporating distance education into a computer-based discussion group asynchronously ‘negates space and time as intervening variables in the education process’ (Thompson & Nadler, 2002) and allows the opportunity for students to work and interact together and to build and become part of a community of scholars and practitioners (Thompson & Nadler, 2002).

Online discussion forums and the web are important for both on-campus and off-campus learners to share and critique information, ideas and experiences. The aim of a discussion forum is to provide a more egalitarian, learner-centred process in which reflection and feedback become important for the learner community (A. Brown & Thompson, 1997). Hypertext and linking via the web combined with discussion forums is a useful communicative tool providing the impetus for interactive discussion on a given issue. Having access to information, and then collaborating in the reformulation of information sources, interpreting the connections, sharing new discoveries with others, and building further insights through feedback from tutor and peers, becomes the core of the production of knowledge online (Thompson & Nadler, 2002). The lecturer’s voice becomes only one of many possible voices in the exploration of a topic (Thompson & Nadler, 2002).

Numerous case studies provide evidence that students develop new and powerful habits of critical evaluation through discussion, irrespective of the medium (McCutcheon, 1981; Miller, 1999). As learners become aware of the multiple perspectives that are given ‘voice’ in a discussion forum, this awareness generates the need to consider conflicting possibilities and, in this context, learners are given

the means of choosing their orientation among them (Bahktin, 1981; Bruner, 1966). Even without face-to-face interaction (Miller, 1999), students can learn collaboratively via computer mediation to extend and question initial responses for themselves in ways that become socially valued in the class (Miller, 1999; Thompson & Nadler, 2002). They can be requested to: 'connect text and personal experience; question the text and each other; evaluate possible interpretations; identify difficult passages and generate plausible explanations; move back and forth from the landscape of actions to speculation about human intentions and consciousness; and create imagery, metaphor and dramatization to engender understanding' (Thompson & Nadler, 2002).

Research in distance education has for many years, and continues today, to investigate the use of online technologies to enhance and support learner activity and engagement (Spector, 2005). One key to success appears to lie in the design of learning environments that make effective use of the communications capabilities of technologies that can connect learners in meaningful ways (Goodyear, 2005; Laurillard, 2002). A number of models of learning have been proposed to provide ways of attracting and engaging learners. The preferred approaches are those that encourage and support deep rather than surface approaches to learning (Ramsden, 1992). As discussed in the first part of this chapter, the majority of these approaches are based on learning strategies that promote shared knowledge construction and include such forms as collaborative, self-directed learning, goal-oriented problem-based inquiry, and situated experiential learning.

As discussed in the first part of the chapter, collaborative relationships are particularly important for the implementation of higher-order, critical thinking skills that can lead to opportunities for transformative learning. The development of such relationships require the individual learner to move beyond the passive search for, and memorisation of, facts towards a more constructivist engagement in which learners comprehend, assess, and apply information in ways that lead to new insights and understanding. Thus students require a software environment that provides a way for them to work together on problems and to produce, as a group, some kind of cohesive deliverable result (Thompson & Nadler, 2002). Knowledge and meaning are socially constructed by formulating ideas and receiving feedback and evaluation

from peers (Harasim, Hiltz, Teles, & Turoff, 1995). Although such environments provide convenient and unlimited access to information, the value of online learning is in its capacity to facilitate communication and thinking, and thereby construct meaning and knowledge (Garrison & Anderson, 2003). Garrison and Anderson (2003) argue that it is the context and process of online learning that makes it unique and, if we are to achieve quality education, it is the context and process that must be attended to:

Technology differentially shapes our experiences and how we see the world. E-learning is not just another tool. It will change how we experience and view learning. Its value is not faster access to information. (Garrison & Anderson, 2003, p. 6)

The desired outcome of education becomes the construction of coherent knowledge structures that accommodate further learning, not the assimilation of specific bits of information. Ultimately, education must prepare students to be continuous learners for participation in the knowledge age (Garrison & Anderson, 2003).

2.3.2 Computer-supported collaborative learning

Computer technologies can allow for the design and use of tools for learner interaction and collaboration in the learning process. Virtual spaces can be designed that allow learners access to resources and tools to communicate and learn. These virtual spaces allow for the building of community and shared knowledge production, and provide the context and resources for the achievement of collaborative learning goals. Koschmann (1996) uses the term Computer Supported Collaborative Learning (CSCL) to encompass the rich and diverse new ways in which computers are being used to support collaborative student-centred learning. CSCL is based on social constructivist views of learning and incorporates the characteristics of communities of inquiry including problem-solving, engaged and active learning, and the situated learning of simulations. As Lundkvist argues:

In relation to how knowledge is created, one's actions only become meaningful in relation to the actions of others. What is subsequently produced is not a socially rational consensus but a sense of collective identity (Gergen, 2000). This view is fundamentally different from other perspectives (Grant, 1996; Nonaka & Takeuchi, 1995), where knowledge is individual and subject to being transferred, integrated or combined. (Lundkvist, 2004, p. 98)

CSCL relies on distributed cognition where the locus of knowledge can be found in resources, the learning environment, available tools or individual participants. Learning is mediated by cultural tools in that learners recreate knowledge for their own purposes and goals through interpretation, (re)construction and adaptation of existing knowledge. Cultural resources mediate thinking as distributed dynamically in interpersonal relationships among people, their artefacts, and their environments (Moll & Tapia, 1993; Pea, 1993). The distributed character of thinking is an essential characteristic of human beings. As Schrage writes:

Creating a shared understanding is simply a different task than exchanging information. It's the difference between being deeply involved in a conversation and lecturing to a group. The words are different, the tone is different, and the tools are different. (Schrage, 1989, p. 5)

However, as Cole and Engeström (1993) point out, 'precisely how cognition is distributed must be worked out for different kinds of activity, with their different forms of mediation, division of labour, social rules, and so on' (p. 42).

Perkins (1993) argues that genuine contexts of inquiry typically involve massive distribution of thinking and learning between the person and the surround, and that active thinkers assemble around themselves a rich intellectual environment and interact with it in subtle ways to achieve results that would be difficult for an individual person. He also argues that the loci of higher-order knowledge in itself is not important – whether in the surround or in the person. What is important is 'the access to the knowledge; that is, how transparently the needed knowledge is represented and how readily it can be retrieved' (Perkins, 1993, p. 103). In an online environment, the shared cognitive resources of the learning community are accessible as stored and retrievable resources. This form of computer-based collaborative sharing of knowledge is what Scardamalia and Bereiter (1994) refer to as Computer Supported Intentional Learning Environments (CSILE) and later termed Knowledge Forums. CSILE (and Knowledge Forums) enable the formation and development of Knowledge-Building Communities.

Computer-Supported Intentional Learning Environments (CSILE) were developed to provide the computer support necessary to capture the shared knowledge building experience of those involved in Knowledge-Building Communities (Scardamalia,

Bereiter, McLean, Swallow, & Woodruff, 1989). CSILE is a networked learning environment (Hewitt, 2001) with a communal database system in which learners are allowed to externalise their thoughts, mainly in the form of texts and/or graphics called 'notes' and then engage in collaboratively organising their knowledge as objects to advance their communal understanding as a whole (Hewitt, 2001; Oshima & Oshima, 2001). This communal database structure has been found to provide learners with opportunities to be involved in knowledge advancement through distribution of their expertise (Oshima, Bereiter, & Scardamalia, 1995; Oshima, Scardamalia, & Bereiter, 1996), and to eventually facilitate learners' conceptual understanding of complex scientific phenomena better than traditional instruction (Oshima & Oshima, 2001; Scardamalia et al., 1992). Empirical studies have shown that CSILE is a powerful tool for transforming learning activities into knowledge building (Oshima & Oshima, 2001).

2.4 Social presence

If a 'collaborative constructivist' view of teaching and learning, which recognises the inseparable relationship between personal meaning making and the social influence in shaping the educational transaction (Garrison & Archer, 2000) is accepted, then this unified process, comprising the interplay between individual meaning and socially redeeming knowledge, must be accounted for in a technologically mediated environment. Asynchronous online communication technologies place learners at a distance in time and space and so remove many of the social elements that are so important to collaborative constructivist learning. Social presence is an indicator of how much socialisation occurs within a computer-based communicative environment. It was first introduced with telephone communication but has advanced as a concept with the development of the enhanced communications environment of networked computer systems (Short, Williams, & Christie, 1976; Tu, 2000).

Online discussion forums were the primary form of communication and interaction between participants in the course under investigation in this study. They form discursive hyperlinked texts of written conversations recorded for others to view and respond to when ready. In this sense, the conversation does not follow the same real-time patterns of face-to-face interaction. Students cannot 'see' who is present and

participating online; nor can they predict what is going to be read and responded to or when. A thread of a conversation may lie dormant for a long period and then receive a flurry of attention.

Social presence can be defined as the ‘feeling’ of a sense of community. It is the awareness of existence of other people and their involvement in the communication process. The amount of social presence is the degree to which an individual feels access to other people (Tu, 2001, 2002). Because of the absence of visible presence, except where video conferencing is possible, participants in online communities rely on social presence, or telepresence, to ascertain an acceptable level of social inclusion or social continuance. A person may contribute a message to an online community, but if ignored may leave the community due to a feeling that other members are not interested or available. If individuals deem that there is sufficient useful communication between members of the community, even if their contributions have been ignored, they may stay and ‘lurk’ to read the contributions of others. In this case, if the community is active, they would still feel a sense of social presence. Social presence in this sense then relates to the degree of connectedness to an online community. Stuckey and Smith (2004) suggest that a sense of community depends significantly on an individual’s role or place in a community. People ‘near the core of a community experience the community features more readily, while people on the periphery may only see a looser network’ (Stuckey & Smith, 2004, p. 151).

Social presence is an important predictor of learners’ satisfaction in an online environment. A high level of social presence will create a warm, cooperative, and approachable learning environment (Aragon, 2003). It also helps to motivate and support learners and effectively engage them in the learning process. The instructional design of the online learning environment and the participatory facilitation of the lecturer are both instrumental in creating a sense of social presence.

Garrison and his team (2000) recognise three categories of social presence in online learning environments as evidenced in the Community of Inquiry model. Social presence in text-based communications can have:

- an *affective* element where participants in discussion forums express emotion or disclose personal information;
- an *interactive* element where participants refer to the content of others' messages or continue a thread of discussion;
- a *cohesive* element where participants use inclusive pronouns or refer to each other by name.

Garrison et al. (2000) also recognise four stages of cognitive development in online learning environments as evidenced in the Community of Inquiry model:

- a *triggering event* that leads to exploration of a topic;
- *exploration* that promotes discovery of differences of opinion, perspective, value, and meaning;
- differences that encourage *integration* where consensus is sought amongst the community;
- the process of consensus that leads to a final *resolution*.

One of the aims of this thesis is to explore the relationship between the cognitive and social elements, as espoused in the theories presented in this chapter, in advancing and applying shared learning in an online community of learners. Another aim is to understand how instructional design and teaching influence the experience of students in the learning processes. To this end, the next chapter explores pedagogical theories that underpin instructional design and organisation, and the relationship between teaching and learning to support effective educational outcomes.

Chapter 3

Theories of instruction and design

Chapter two explored the theories relevant to the Community of Inquiry framework and discussed the affordances provided by technologies to promote collaborative learning communities. This chapter introduces theories of teaching and explores their relevance to student-centred online learning environments which make use of specific technologies.

The discourse of ‘technology-mediated learning’ or ‘e-learning’ suggests that it is a unitary concept, but the research literature covers a wide range of views, which describe many different ways of ‘enhancing’ learning with the use of technology (Laurillard, 2008). These include ways to make the provision of education more flexible, the learning process more active, improving assessment, scaling up high quality interactions, and giving teachers interactive frameworks for designing lesson plans and learning activities (Laurillard, 2008). Laurillard (2008) proposes that the challenge to the use of technology is to make it possible to emulate the ideal conditions of the small group, practice-based tutorial in a large-scale, non-elitist higher education system. *Uni Technovation* had promoted itself as a large-scale, non-elitist higher education institution that was flexible in its course delivery options and responsive to students’ needs using student-centred pedagogies.

Specifically, this chapter presents the teaching theories of online learning and of instructional design that relate to the Community of Inquiry framework, and to principles of deep and meaningful collaborative learning as presented in the previous chapter. After a clarification of terms and a general introduction of the relation of teaching to learning, this chapter is organised into three sections based on Garrison and his team’s conception of teaching presence in web-based learning environments:

instructional design and organisation, facilitating discourse, and direct instruction (Garrison et al., 2000).

3.1 The use of the term ‘pedagogy’

Much debate has occurred over the distinction between pedagogy and andragogy. These terms derive from the Greek with pedagogy referring to the art and science of teaching children and androgogy referring to the art and science of teaching adults. Mohring (1989) makes a further distinction in that andragogy is derived from *aner*, meaning adult male and not adult of either sex, therefore excluding women. In view of efforts to purge English of sexist words, she proposed the use of a new term, *teliagogy*. Based on the Greek *teleios*, meaning ‘adult,’ it would include both sexes (Holmes & Abington-Cooper, 2000). While there are distinguishing characteristics between child learning and adult learning, ambiguities abound as to whether distinctions relate to learning, teaching or theoretical positions (Holmes & Abington-Cooper, 2000). Instead of insisting on distinctions between terms, I concur with Houle (1972) who preferred to view education as a single fundamental human process and believed that even though there were differences between children and adults, the learning activities of men and women were essentially the same as those of boys and girls (Holmes & Abington-Cooper, 2000). Therefore, this chapter, which provides the theoretical foundations for the notions of teaching and instructional design that inform the research reported here, employs the term pedagogy and its derivations to refer to the processes of human learning supported by formal instruction.

3.2 The relationship of teaching to learning

The connection between teaching and learning has been long argued:

Teaching may be compared to selling commodities. No one can sell unless someone buys. We should ridicule a merchant who said that he had sold a great many goods although no one had bought any. But perhaps there are teachers who think they have done a good day’s teaching irrespective of what people have learnt. (Dewey & Childs, 1933, pp. 35-36)

Dewey explained what he meant by this by outlining the responsibility of the learner and the role of the teacher as guide and director to incite learning. Pring (2001) suggests that to teach is to engage intentionally in those activities which bring about learning while Noddings (1995) describes teaching as a 'caring' relation, one to which both teacher and student contribute. Fitzmaurice (2010) suggests that, instead of using learn as a success word and teach as a task word, teachers can use teach in both senses when they say, 'I am trying to teach A to X', as this conveys both a sense of the task they are engaged in and a sense of what they are accomplishing and acknowledges the connection that Dewey insisted on (Noddings, 1995). Socrates believed that an education must help students to examine their own lives and explore the big questions that human beings have long tried to grapple with so that to teach is to provide opportunities for students to begin to engage with such questions. However, teaching is not just intellectual but is also relational: to engage the purposes and energies of those being taught, 'teachers must build relationships of care and trust' (Noddings, 2012, p. 196). Teaching involves creating and maintaining caring physical, cultural, intellectual, social and moral environments which induce learning (Fitzmaurice, 2010; Noddings, 1995, 2006). The goods internal to teaching are revealed in the course of trying to achieve such environments and contribute to human flourishing, and establish teaching as a distinctive human practice (Fitzmaurice, 2010).

At its core, teaching is a matter of human relations (Fitzmaurice, 2010). Skelton (2005) concluded in his study that the individual attributes of teachers, their ability to deal with complex human interactions and relationships, a concern for 'weaker' students, a commitment to student-centred methodologies and a commitment to ongoing professional development are very much part of what it means to be an excellent teacher. Teachers are the human point of contact with students, and teaching is both a relational and an intellectual practice. Being a teacher in higher education involves much more than just developing a repertoire of strategies and methodologies and involves not only the one who teaches, but also the person who is taught, the contextual conditions under which such learning and teaching take place, interwoven with what is taught (Walker, 2001, 2006).

Ramsden offers a negative spin on the relationship between teaching and learning:

[T]ruly awful teaching in higher education is most often revealed by a sheer lack of interest in and compassion for students and student learning. (Ramsden, 1992, p. 98)

This suggests that whether the relationship developed between teacher and student is relatively distant or intimately close can affect learning outcomes. A lecturer who prepares a lecture for hundreds of students cannot be expected to consider individual learning needs or individual purposes for learning. Assumptions are often made based on student enrolment in the course and how that course contributes to the goals of the overall degree program. The lecture is teacher-centred in the sense that a lecturer determines what body of knowledge is to be delivered and what structure and format it takes. The lecturer transmits this knowledge more often these days in a multimodal presentation. The delivery is one-sided in that generally the students are not permitted to participate actively in the lecture. They adopt a passive role in receiving the information and processing it individually. They are encouraged to take notes but not to ask questions.

The lecture is often followed by tutorial sessions. The student cohort is typically organised into manageable groups of 20 or less. The tutor helps the students to understand the readings and lecture through a series of tasks or exercises in a less formal format. Students are encouraged to actively participate, and to interact and ask questions to clarify their understandings. The knowledge that students acquire in a course is primarily tested through examinations or written forms of assessment. These are the typical teaching and learning arrangements of a traditional university model and are still in use today because they provide an efficient method of course delivery to a large mass of students. Halx (2010) acknowledges the value and effectiveness of traditional pedagogy and confirms that most institutions of higher education are still educating undergraduates as they did 40 years ago, even though the undergraduate students of today are not the same as they were 40, or even 20, years ago. Indeed, the course under investigation used such a model to teach 120 students per year until as recently as 2003. One lecture was scheduled for delivery each week to the entire student cohort on a topic of relevance. The students would then engage in tutorial discussions to help develop their conceptual knowledge throughout the semester. The tutorial sessions also provided a forum for the role-play of a conflict scenario.

3.2.1 Student-centred teaching

The desirability of ‘student-centredness’ underpins much contemporary discussion on teaching in higher education (Blackie, Case, & Jawitz, 2010). This is reflected in the literature on ‘conceptions of teaching’ where student- and teacher-centred approaches tend to describe the poles of a spectrum representing how teachers describe their practice (Kember, 1997). In the teacher-centred approach the focus is on delivery of material whilst the student-centred approach focuses on how the student understands the material (see 3.2). The vast majority of authors assert that the student-centred or learner-focused conception of teaching is the more effective conception of teaching (Åkerlind, 2003, 2004) which is evident in the findings of Prosser and Trigwell who report that ‘university teachers who focus on their students and their students’ learning tend to have students who focus on meaning and understanding in their studies, whilst university teachers who focus on themselves and what they are doing tend to have students who focus on reproduction’ (Prosser & Trigwell, 1999, p. 142).

Student-centred teaching is not just a different style of teaching; it requires that the academic really understands and appreciates the need to pay attention to the students and their learning (Blackie et al., 2010). The notion of student-centred learning originated from the work of Carl Rogers. For Rogers, a student-centred approach begins with the person of the student and aims to provide an environment where the student can become a mature, fully functioning member of society through engaging in learning. The detail of what is learnt is important, but it is secondary to this primary aim (Rogers, 1983). It involves a shift from measuring success as a teacher by how much of the syllabus is successfully covered to measuring success by how much the students actually learn and with what depth of understanding (Blackie et al., 2010). This requires the academic to be invested in the learning of the students, rather than in the transfer of information, and to be concerned about the actual process of learning happening in the students (Blackie et al., 2010). This distinction can be elaborated using Barnett’s (2008) notion of what he terms epistemological learning and ontological learning. He argues for a view of higher education which values the being of the student (ontological learning), over and above the ‘knowledge and skill’ based approach (epistemological learning). In his view, the process of

higher education should be more than an increase in a particular skill set or knowledge area. There should be a fundamental growth in the person of the student: ‘What matters supremely is their separate becoming, and their becoming requires the formation and the sustaining of their will to learn’ (Barnett, 2008, p. 170).

3.3 Teaching presence

The responsibilities of teaching in any context are multi-faceted. In a community of inquiry these responsibilities are shared among all the participants (Akyol & Garrison, 2011). The three categories of teaching presence in the Community of Inquiry framework are: instructional design and organisation, facilitating discourse, and direct instruction. The activities in the design and organisation category of teaching presence include building curriculum materials, re-purposing materials, and designing and administering group and individual learning activities. Facilitating discourse is critical to maintaining interest, motivation and engagement. It enables and encourages the construction of personal meaning as well as shaping and confirming mutual understanding. Direct instruction goes beyond that of a facilitating role by providing scholarly leadership and sharing timely subject matter knowledge with participants. This section will discuss theories that relate to each of these categories.

3.3.1 Instructional design and organisation

Instructional design maps the pedagogic bounds of teaching and learning in a formal course of study. The instructional design and organisation of the course represents the kind of curriculum planning a lecturer or tutor would normally undertake prior to the delivery of a course. University courses tend to adopt rather prescriptive curricula due to the structure of academic calendars. Courses are comprehensively planned on intended outcomes prior to students engaging with the course content and tasks. The Course Coordinator, as instructional designer, is generally responsible for the selection of resources, design of activities, development of teaching content, and the planning of assessable outcomes. Such instructional management suggests a strongly teacher-directed curriculum, although the curriculum can be open to negotiation and change once enacted. The curriculum is enacted in a suitable teaching and learning space, whether physical or digital.

The teaching and learning space

The formal practice of teaching and learning does not happen in a void; most often it occurs in a designated space. This space reflects time and place in relation to the participants (Bruce, 2004). A conventional face-to-face classroom is easily recognisable as a space for teaching and learning with seating arrangements for students and presentation technologies operated by the teacher at the front of the room. Many features of conventional teaching and learning practice have been translated to online environments. Online environments often use terms like online seminar room or course café to identify in a structural sense the functions of conventional school or campus spaces. In fact, many teaching institutions have replicated the buildings and classroom design of the real world into immersive three-dimensional worlds populated by avatars, such as in Second Life. According to Bruce (2004), online learning occurs in a space that is dynamic, situated, participatory and open to new possibilities. Rather than conceiving the classroom as home to a finished and tested technology, instead it can be seen as a place where members of a community come together to develop shared capacity and work on common problems (Bruce & Bishop, 2002). This place he calls a community inquiry laboratory (CIL) which is most importantly a concept, not a technology in the narrow sense. ‘Community’ emphasises support for collaborative activity and for creating knowledge that is connected to people’s values, history, and lived experiences. ‘Inquiry’ points to support for open-ended, democratic, participatory engagement. ‘Laboratory’ indicates a space and resources to bring theory and action together in an experimental and critical manner.

In comparing online learning with the conventional classroom, online learning becomes ‘not a thing with determinate consequences, but an environment in which participants create meanings’ (Bruce, 2004, p. 31). An analysis of the attributes of this new environment for learning in relation to those of the conventional classroom reveals a variety of distinctions with differential effects on participants. Changing the relations of time, place and participants for course attributes offers new possibilities, both positive and negative, for all involved. But none of these determines the overall learning experience. Teachers and students can make use of these differences in a variety of ways. Their re-creations of the technology involve the entire learning

experience, rather than the characteristics of one set of tools versus another. The larger question is how those tools can be used to achieve quality learning (Bruce, 2004).

The Learning Management System (LMS), *LearnIT*, developed in-house at *Uni Technovation* and implemented from 2000 to 2010, provided a teaching space and a generic set of ‘tools’ for mediated instruction for every course offered by the university. Course Coordinators became the instructional designers for their respective courses. They were required to make decisions about which tools to use and how to use them best to design the learning environment for their students to achieve the planned course outcomes. Burbules (2004) uses the navigational metaphor of the web to argue against one best way or method of teaching online. He argues that many view it as:

the panacea that will equalise opportunities, raise standards, lower costs, motivate unmotivated students and improve the links between education and the wider aims of preparing citizens and workers for adult life. (Burbules, 2004, p. 4)

For Burbules, education is more about:

optimizing than maximising, confronting trade-offs between competing goods that cannot be pursued at the same time. It is inherently imperfect, and imperfectible. Every new approach to education gains us some things at the expense of others; every advantage can be seen, from some point of view, as a disadvantage. (Burbules, 2004, p. 4)

Educational success for him:

entails the risk of failure, or more precisely, sometimes what appears to be a failure from one standpoint may turn out to be an educational success from another standpoint, and vice versa. Teaching and learning, like navigating, is about finding a way – and sometimes making a way – in an ill-structured domain. It isn’t a matter of ‘best practices’ but of better and worse practices, experimentation, learning from mistakes, and improvement along multiple axes of what constitutes success, one axis of which is maintaining a reflexively critical attitude toward what we are considering to be success. (Burbules, 2004, p. 5)

Burbules argues that the innovative use of technologies in teaching a course and promoting critical reflection about the technologies should be part and parcel of the course itself. The technologies are not simply a ‘delivery system’ for course content

‘since teaching is not about the delivery of information’ (Burbules, 2004, p. 6): it is much more than that.

There is concern about the constraints of technologies on teaching and learning: whether the development of online courses should follow technical instructional design rules (some of them implemented through the constraints of commercial courseware), which have the effect of standardising and narrowing the range of educational design options (typically based on the traditional models of classroom teaching and learning), or whether the capabilities of new information and communication technologies should be exploited in ways that support innovative and creative approaches to pedagogy that are different from traditional classroom teaching and learning.

If we simply transport syllabi, reading lists, lectures, and quizzes from the classroom to a digital format, a tremendous opportunity will have been squandered. (Burbules, 2004, p. 5)

Hannafin, Hannafin, and Gabbitas (2009) posit that web-based learning, per se, is not inherently student-centered in nature. Rather, it may be externally directed, student-directed, free-choice, or combinations of each. In student-centred online learning environments, once the course begins, the lecturer loses prominence as the director of learning as students are required to learn more independently; the teacher is no longer able to rely on the regulated learning controls and motivations that the traditional classroom offers (Davies, 2006).

The development, sequencing and control of content and activity suggest strong teacher direction in what is planned to be a student-centred or student-directed learning experience once the course begins. Having students accept responsibility for their learning is a crucial step in realising successful educational outcomes – both in terms of specific knowledge structures and in terms of developing the higher-order cognitive abilities that are necessary for continuous learning (Garrison & Anderson, 2003). The assumed responsibility of the instructional designer is for careful planning, but the instructional designer cannot foresee how students will behave within the environment or what they will produce in interaction with the planned materials and activities.

In relation to Garrison and Anderson's (2003) perspective on an educational transaction, the responsibilities of the lecturer are complex in that they create and shape the evolving learning environment. Lecturers create the cognitive and social conditions that will allow and encourage students to approach learning in a meaningful way. Setting up these conditions demands content expertise but it is what the teacher does pedagogically that determines the degree to which students assume responsibility for their learning (Garrison & Anderson, 2003). The act of simply providing quality instructional materials, online or otherwise, is not always enough to promote learning; students' intentions for the expected learning determine whether learning will occur and how long that learning will last (Osguthorpe, 2000). Davies (2006) proposes that 'the design and administrative practices of some online courses could facilitate, or even encourage, students to complete courses without necessarily learning anything' (p. 1). Promoting active learning is as necessary in the instructional design and organisation phase as in the implementation stage. Team-based learning is often used to promote such learning based on group dynamics.

Designing for cooperative learning: Team-based learning

Team-based learning (TBL) is an instructional strategy organised around team activities. The premise of TBL is to promote active and effective learning through small group interactions across a semester (Michaelsen, Knight, & Fink, 2002). Team-based learning (TBL) as defined by Michaelsen et al. (2002) extends the business-world practice of working in teams to the classroom (Gomez, Wu, & Passerini, 2010; Michaelsen et al., 2002). Working in teams deepens the learning experience and promotes active learning (van Offenbeek, 2001). In TBL environments, small student teams work together for the entire semester, use class time to discuss readings, solve problems, and apply concepts initially learned through individual reading assignments. TBL shifts the focus away from classroom lecturing by the teacher to the in-class application of principles by student groups. A key aspect of Michaelsen's TBL is that lecturing is completely eliminated from traditional courses, thus promoting student-centred learning (Gomez et al., 2010; Michaelsen et al., 2002).

TBL makes use of group dynamics. According to group theories (Hollander, 1971), there are two kinds of groups – functional group and grouping. A functional group

consists of people who share norms and are mutually involved in social interactions aiming at common goals. By contrast, people who only possess common features that can be used to describe them are considered a grouping or an aggregate. An aggregate is a special category of individuals who share similar characteristics but do not take collective actions. Group dynamics are collective activities of individuals that transform a grouping into a functional group. In recent years, group dynamics have drawn increasing attention, and university lecturers have started using them to meet challenges in teaching innovative courses (Black, 2002). Group dynamics are effective for combining talents and offering solutions to unfamiliar problems, particularly in situations where there are no established procedures (Li, Greenberg, & Nicholls, 2007). The wider base of skills and knowledge of a functional group has a distinct advantage over that of an individual (Li et al., 2007).

Courses that are suitable for TBL contain a significant body of information (content), which students need to understand and which involve problem-solving, answering questions and resolving issues through team activities. TBL is also suitable to large courses and can be used as an alternative to lecturing in large class settings. Most of the learning experiences occur when working in a team during in-class interactions (Michaelsen et al., 2002). Course materials are split into modules and the students are divided into teams following Michaelsen's guidelines. There is little to no lecturing with the instructor taking the role of a facilitator of teams that are formed at the start of the semester. In TBL, a semester-long course is typically divided into four to eight content-specific modules of one to three weeks in duration per module. Each module follows an iterative learning process which repeats a sequence of activities consisting of: (1) individual preparation through out-of-class reading of the learning materials, (2) readiness assessments through individual and team tests, (3) application of course concepts through multiple team activities, and (4) an (optional) end of module test.

TBL supports cooperative learning processes. Cooperative learning consists of instructional techniques that require positive interdependence between learners in order for learning to occur (Stahl, 1994). Cooperative learning requires a teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each

member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement (Stahl, 1994). Students work through an assignment or task until all group members successfully understand and complete it. Cooperative efforts result in participants striving for mutual benefit so that all group members: gain from each other's efforts; recognise that all group members share a common goal; know that one's performance is mutually supported by one's team members; recognise that the achievements of one member represent the shared achievements of the group (Cohen, 1994).

Researchers and practitioners have found that students working in small cooperative groups can develop the type of intellectual exchange that fosters creative thinking and productive problem-solving (Stahl, 1994). However, Stahl (1994) warns that merely because students work in small groups does not mean that they are cooperating to ensure their own learning and the learning of all others in their group (Johnson, Johnson, & Holubec, 1993). The emphasis on academic learning success for each individual and all members of the group is a key feature that separates cooperative learning groups from other group tasks (Slavin, 1990).

McInnerney and Roberts (2004) report the general confusion that exists in the academic literature between the use of collaborative and cooperative learning, and attempt a clarification of the distinction between the two terms. Collaborative learning implies working in a group of two or more to achieve a common goal, while respecting each individual's contribution to the whole. It is a learning method that uses social interaction as a means of knowledge building (Paz Dennen, 2000). Bruffee (1999) states that educators must 'trust students to perform in ways that the teacher has not necessarily determined ahead of time' (p.295), and further contends that 'collaborative learning therefore implies that [educators] must rethink what they have to do to get ready to teach and what they are doing when they are actually teaching' (p.72). Cooperative learning contrasts with collaborative learning in that tasks are divided up and completed individually (Paulus, 2005). Millis (1996) sees cooperative learning as a 'generic term used to describe a situation where students work together in small groups to help themselves and others to learn' while Johnson and Johnson (2001) describe it as 'the instructional use of small groups so that students work together to maximise their own and each other's learning'. The

characteristics of cooperative learning are the division of labour, task specialisation, and individual responsibility for part of the final product (Paulus, 2005). Therefore, the success of the group depends on each member of the group.

Designing for experiential learning: Role-play scenarios

The primary focus of the course under investigation is the application of learning to an International Relations (IR) simulation. IR simulations are a type of conflict simulation that present a problem-based scenario as a source of international conflict. Learners are required to role-play complementary and conflicting positions to negotiate a resolution based on their prior conceptual learning. Role-Play Scenarios (RPS) are a form of simulated experience based on situated cognition and experiential learning theories. Games, simulations and case studies have an important role in education and training in putting learning into an authentic context (Herrington & Herrington, 2006; Herrington & Oliver, 2000; Leemkuil, de Jong, de Hoog, & Christoph, 2003) (see 2.2.9). Simulations create an environment for learning, whether imagined or immersive, that situates learners in a life-like experience where decisions are made in an effort to solve a problem (Starkey & Blake, 2001; Walcott, 1980). Games and simulations provide students with a framework of rules and roles through which they can learn interactively through a 'lived' experience. They can tackle situations they might not be prepared to risk in reality, and they can experiment with new ideas and strategies. Simulations involve individual and group interpretations of given information, the capacity to suspend disbelief, and a willingness to play with the components of a situation in making new patterns and generating new problems (Jacques, 1995; Leemkuil et al., 2003). The simulation requires the application of often-expert knowledge and skills for success.

As already suggested, the modern world requires that individuals solve problems and make decisions, often using incomplete information (Shellman & Turan, 2003). Students gain a deeper understanding of international relations concepts and political processes by encountering such concepts and processes within a simulated environment (Shellman & Turan, 2003). Specifically, in IR simulations students actively engage themselves in the processes of multilateral crisis bargaining and conflict resolution. Students encounter concepts such as realism, liberalism, balance of power, alliances, deterrence, economic sanctions, intergovernmental and

nongovernmental organisations, terrorism, human rights, arms control, conflict, cooperation, international trade and globalisation, as well as the nuances and details of diplomacy (Shellman & Turan, 2003).

The simulation involves students applying learning in teams, which is a form of collaborative experiential learning (Davidson, 1990; Johnson & Johnson, 2001; Johnson & Johnson, 1994; Johnson & Johnson, 1994; Johnson & Johnson, 1994) but which, at the same time, can create competitiveness or encourage cooperation between teams. This kind of simulated experiential learning not only has the potential to reinforce concepts and processes encountered in the conceptual development stages of a course but also, and more importantly, it requires students to tackle international problems, make their own decisions, and cope with the ramifications of those decisions, informed by the shared conceptual understandings developed throughout a course. According to Shellman and Turan (2003), students should come away from the simulation not only understanding particular concepts and theories better but also with an informed awareness of the difficulties of achieving cooperation in an anarchic international system.

Designing for social participation

Since cognitive development in a community of inquiry is a collaborative social process, social considerations in instructional design are important. Considerations recommended by Garrison and Anderson (2003) in the design process that contribute to a favourable social presence include: a feeling of trust and being welcomed; a sense of belonging to a critical community; a sense of control; a sense of accomplishment; a willingness to engage in discourse; a conversational tone; and a questioning attitude. It requires that the instructional designer attend to the social spaces in the environment before considering the spaces for cognitive development since knowledge building is a shared cognitive endeavour in the learning environment. These social spaces should provide opportunities for the online tutor to build a rapport with the students and for the students to become familiar with each other before engaging in the tasks of the course. The tone should be set from the outset by the instructional designer in structuring and writing within the environment. The tone should be welcoming, encouraging, motivating, inclusive, inquisitive and goal-oriented to provide students with a sense of community and

purpose. The purposes of the course must be made clear from the beginning so that students can share responsibility for achieving those purposes. Students should be given the sense that the learning space is theirs and be provided with the necessary tools to create and develop within it. Once these provisions are in place, the role of the online tutor in encouraging both cognitive presence and social presence within the course continues with the facilitation of discourse and with direct instruction.

3.3.2 Facilitating discourse

Once the course commences, one of the primary roles of the instructor is to facilitate discourse within the web forums for the purpose of constructing meaning and confirming understanding by providing a climate that will precipitate and sustain participation and reflective discussion (Garrison & Anderson, 2003). Facilitating discourse, used in this sense, is a more generic concept of promoting conversation between participants in a web forum. Conversation is in written, rather than spoken, form, and involves both cognitive and social functions in the context of the online course. It forms the transactional processes of interactive learning. Social presence is intimately connected to cognitive presence in that ‘the subject and purpose of much discourse is of a cognitive nature and focused on understanding a specific curriculum’ (Garrison & Anderson, 2003, p. 84). The cognitive interaction expected in the learning environment, which is essential to the collaborative-constructivist educational experience, is predicated on, and sustained by, the social relationships and cohesion of the participating group (Garrison & Anderson, 2003).

Garrison and Anderson (2003) suggest the following to facilitate social presence and establish a community of inquiry: acknowledge and welcome participants as they enter a discussion; be encouraging, gentle and supportive while directing discussion; project your personality as a teacher and allow students to get to know you as a person to the appropriate degree (retaining professionalism); suggest students log-on at least three times per week; encourage students to acknowledge individuals when responding to specific contributions; laud contributions when appropriate; be conversational and not too formal in communications; encourage ‘lurkers’ to participate; express feelings but avoid flaming; be cautious using humour, at least until familiarity is achieved; encourage students to inform the teacher by e-mail of

tensions or anxiety. They argue that these suggestions to facilitate social presence will ensure that participation remains active and engaged, and that students are focused on achieving the goals established for learning.

The four phases of cognitive development, which constitute cognitive presence in practical inquiry learning experiences, follows the structure of: understanding an issue or problem; searching for relevant information; connecting and integrating information; and actively confirming the understanding. The role of the teacher is to manage the process and monitor the depth of understanding through facilitation and focusing of learner discourse, providing appropriate insights and information when needed, and seeking some common understanding and insight (Garrison & Anderson, 2003). Garrison and Anderson (2003) suggest two approaches to capture the attention of students and engage them in meaningful discussion. The teacher can provide one or two intriguing questions along with some associated readings or a case study to encourage exploration. This approach is inductive in nature. The second approach is to provide a model or framework with a challenge to the students: to gain some depth of understanding by testing the application in contexts familiar to them. This is a more deductive approach.

The online tutor should have content as well as context expertise to moderate critical discourse through the ensuing stages of learning (Garrison & Anderson, 2003). It is important for the online tutor to sustain constant discourse throughout the entire transactional process to stimulate and guide reflection. Garrison and Anderson (2003) advise that discussions should be conducted in small groups and be private, unless the facilitator is invited in, and that each group be expected to report back to the full class. This provides freedom for students to share their learning experiences and their attempts to construct meaning. Garrison and Anderson (2003) further propose that students collaborate to formulate a mini-resolution to report back to the main group. They recommend that small group discussion 'be used in all phases of practical inquiry to foster increased participation and develop responsibility to construct meaning' (Garrison & Anderson, 2003, pp. 86-87).

Cognitive presence considerations associated with facilitating discourse can be summarised as the need to: 'focus discussion on key issues; provide stimulating questions; identify puzzling issues arising from responses; challenge ideas and

precipitate reflection; moderate but not overly direct discussion; test ideas theoretically or vicariously through application; move on when discussion ebbs or has served its purpose; and facilitate metacognitive awareness' (Garrison & Anderson, 2003, pp. 87-88). These practical considerations aim to maintain student engagement and motivation throughout the course.

Akyol and Garrison (2011) emphasise the importance of the role of facilitating discourse in raising metacognitive awareness amongst learners. They define metacognition as the awareness and ability for learners to take responsibility and control to construct meaning and confirm knowledge. The search for meaning is at the core of any educational enterprise. In higher education this process requires high levels of critical thinking and inquiry. According to Tobias and Everson (2009), metacognition is 'a higher-order, executive process that monitors and coordinates other cognitive processes engaged during learning, such as recall, rehearsal, or problem solving' (p.108). Metacognition is seen to mediate between internal knowledge construction and collaborative learning activities. Discourse is necessary to reveal knowledge, misconceptions and learning strategies. Discourse critically reveals and collaboratively supports the development of metacognitive knowledge and strategies. As students find that their peers have different interpretations, they are forced to confront alternative perspectives and understandings and to negotiate personal understandings in collaboration with others (Wade & Fauske, 2004). Also, seeking help or using other forms of instructional support when a learning impasse occurs in a learning community indicate useful behavioural measures of metacognition because they suggest students' recognition that their learning is in need of repair (Tobias & Everson, 2009).

3.3.3 Direct instruction

The notion of direct instruction may seem inappropriate in what is planned to be primarily a student-centred learning experience but according to Garrison and Anderson (2003) the element of direct instruction is essential to the online educational experience. It is the responsibility of the lecturer to provide intellectual and pedagogic leadership. In higher education, it is the lecturer who is expected to set the intellectual climate, integrate research into the curriculum, model the

characteristics of an inquisitive scholar, and initiate students into the nuances of the subject (Garrison & Anderson, 2003). Challenges require direct intervention but with openness and integrity such that the student understands and has some choice in the transaction. Scaffolding (i.e., temporary support to develop higher cognitive skills) is an important component of most socially shared cognitive (i.e., collaborative constructivist) models of learning. But, warn Garrison and Anderson (2003), this is not accomplished with a *laissez-faire* or passive collective approach.

Teaching style can influence power and control relations in normal classroom educational transactions and a mismatch with student styles can exacerbate learning problems. Oxford, Massey, and Anand (2005) identify three teaching styles, in language classrooms in particular, and report on their effects on student styles of learning. They found that teacher-student style conflicts arose when the instructor's teaching style and the student's learning style were severely mismatched, and when there was no effort to bridge the style gap. The three teaching styles identified were autocratic or authoritarian teaching, *laissez-faire* teaching, and democratic-participatory teaching. In autocratic or authoritarian teaching, power was centred in the teacher, who 'deposited knowledge into the heads of the students', stayed distant from students, and was sometimes dictatorial or sarcastic, or, more rarely, outright sadistic. *Laissez-faire* teaching was marked by classroom chaos, large teacher-student social distance, and lack of power both for teachers, who were unengaged, disorganised, and uninterested, and for students, who were confused, lost, and often angry. Democratic-participatory teaching displayed strong involvement by the teacher, who shared power with students in a 'co-learning' situation and who offered both structure and flexibility. The first and last teaching styles in Oxford's study had many adherents, depending on students' learning styles and cultural backgrounds, but *laissez-faire* teaching was uniformly disliked (Oxford et al., 2005).

Although Oxford and his team's study was of language classrooms conducted in face-to-face settings, its findings could be significant for online learning. When applied to the present study, the pre-planning stages of an online course necessarily assume the strong teaching direction of the autocratic style since student participation is absent, yet considered or imagined in the planning process. It is the teacher who has the legitimate responsibility to define the curriculum and design the

educational activities, but this leaves no opportunity for collaboration with the learner community in the planning process. That is, the students have little input or influence in planning the process or expected outcomes of the educational experience. This creates the contradictory situation where the students are expected to assume responsibility for activities and an outcome over which they have little input (and for which they have little ownership) (Garrison & Anderson, 2003). The perceived availability (or teaching presence) of the online tutor once the course begins could be viewed as supporting a laissez-faire style to encourage student-centred or student-directed learning although controlled and directed by the pre-planned materials and in-built teacher-directed goals. It would have been interesting to ascertain the extent to which students viewed the overall experience of the course in this investigation as a democratic-participatory teaching style with sharing of power in the development of knowledge and understanding. Although of interest, this was beyond the scope of the study to determine.

Student moderation in online discussions can reduce the authoritative influence of a teacher and encourage freer discussion. However, student-moderated discussions lack a high degree of content expertise and, as a result, may not have the same ability to weave responses, add important information, and encourage critically reflective comments as accounted for in a ZPD model. Student moderation can be a very valuable experience for students but should have some guidance and oversight from the online tutor (Garrison & Anderson, 2003). Encouraging students to monitor and manage their learning (i.e., to be self-directed), and thereby assume responsibility and appropriate control of the learning experience, is the primary means of increasing metacognitive awareness and learning how to learn. Autonomous or self-directed learning may well be the ultimate goal and measure of a quality educational experience (Garrison & Anderson, 2003). Therefore, considerable attention needs to be directed to increasing metacognitive awareness for higher-order learning outcomes to give students an idea of what critical thinking is and how it is done. Williams and Ryan (2006) describe higher order learning as the highest levels of learning in the cognitive domain of Bloom's taxonomy (Bloom, 1956): analysis, synthesis and evaluation. Higher-order learning involves engaging students in authentic tasks requiring higher order thinking skills such as analysis, synthesis,

evaluation and creation. Metacognitive awareness provides a cognitive map of the complexities of critical thinking and discourse. It can be a guide for the teacher and students in progressing through the phases of critical thinking and analytical discourse (Garrison & Anderson, 2003).

Affording students control in the transactional processes of student-centred education raises more complex issues in relation to collaborative cognitive development in web-based learning environments. According to Hill and Hannafin (2001), 'a digital resource's 'meaning' is influenced more by the diversity than the singularity of the perspectives taken' (p. 40). In effect, the potential for increased and largely unregulated resources alters the predictability of cognitive demands associated with resource access and use (Hannafin et al., 2009). Designers are unable to account for individual cognitive demands in advance since the context of learning is often spontaneous, and the availability and use of resources evolving continuously. In addition, the evolved cognitive constructs and design principles have been based on directed-learning models where the learning requirements are determined by external agents, not individual students (Hannafin et al., 2009). Direct instruction, then, becomes a necessary mediating influence in the transactional process to support learning outcomes.

While on the surface it might seem that direct instruction would diminish social presence, it may well have the opposite effect. As argued earlier in this chapter (see 3.2), cognitive and social presence issues are inseparable from teaching presence in an educational transaction. Regardless of the cognitive challenges facing teachers and students, education is a collaborative and, therefore, social engagement. In learning situations in which students are faced with conflicting intentions, often for learning activities not of their own choosing yet important to their general educational goals, trade-offs and compromises need to be made (Davies, 2006). Social presence considerations of direct instruction are presented in the form of interventions to allay negative influences among student interactions. Social presence considerations associated with direct instruction offered by Garrison and Anderson (2003) are to: shape discussion without domination; provide feedback with respect; be constructive with corrective comments; be open to negotiation and providing reasons; deal with conflict quickly and privately.

The virtual presence of an instructor does not diminish the central role of teaching. Garrison and Anderson (2003) note that one of the most common functions of the teacher in any educational experience is responding to questions. In an educational context, this may require more than simply responding with another question in a Rogerian argumentative fashion (see 3.2.1). While not answering a question directly may be an appropriate technique in some situations, there are many more times when students need specific information or direction. They may need immediate answers for good cognitive reasons or because of time constraints and the need to expedite the educational process. Garrison and Anderson (2003) argue that ‘a formal educational experience is designed to provide both an efficient and effective approach that goes beyond a totally self-directed learning experience...[since] purpose and direction are guiding principles’ (p. 89).

As a content expert, explaining questions or clarifying misconceptions are not only constructive but important teaching responsibilities. Consequently, a knowledgeable tutor has a responsibility to either frame the content or direct attention to specific concepts that could form the basis of an organising framework for shared knowledge construction. In this way, students have, or can construct, the schemata that provide the foundation to facilitate continuous knowledge development. Regardless of the approach, this will necessitate appropriate intervention and, perhaps, direct instruction. The teacher’s role goes beyond a neutral weaving of participants’ contributions. It is to validate the framework or matrix where students’ contributions may have some connection. It is then the responsibility of the students to reflect upon this and share their insights for confirmation or extension of the knowledge framework. This takes the learner beyond assimilating facts and information (Garrison & Anderson, 2003).

This direct instruction should be approached with the intent of taking the learner to higher levels of cognitive development than they might have otherwise reached if they had operated independently (see 2.2.3 for Vygotsky’s ZPD). This can be achieved by implementing, monitoring and ending a range of learning activities and tasks that have specific learning objectives in mind. It requires direct instruction and solicitation of formative feedback. Higher-order learning depends on diagnosing misconceptions and on other means of formative evaluation that the teacher can use

to intervene directly. These are crucial forms of direct instruction (Garrison & Anderson, 2003).

It is important that direct instruction remains relatively unobtrusive to the students' collaborative endeavours. Garrison and Anderson (2003) advise that 'lecturing' and dictating values and viewpoints is a misuse of the technology and perhaps of the educational process. Too much direct instruction can reduce interaction and limit critical reflection to the detriment of higher-order learning outcomes. For students to have the opportunity to contribute and develop their ideas, a delicate balance is required in the educational transaction. At times, the situation calls for teacher participation, while at other times the discussion may need direction or to be brought to a close. Direct instruction may be used to oblige students to look deeper into a topic (Garrison & Anderson, 2003).

Summarising discourse segments at the end of a course is also considered a crucial direct intervention from both a cognitive and social presence perspective. At these points it is often appropriate to extract key concepts and direct students to further learning challenges. Cognitively, it can create a sense of accomplishment and provide an evaluation of the course. Socially, it is an opportunity to have some closure and bid others farewell (Garrison & Anderson, 2003).

Cognitive presence issues associated with direct instruction can be summarised as the lecturer's need to: 'offer alternative ideas and perspectives for analysis and discussion; respond directly to and elaborate on inquiries; acknowledge uncertainty where it exists; make connections among ideas; construct frameworks; summarise discussion and move the learning on; and provide closure and foreshadow further study' (Garrison & Anderson, 2003, p. 90).

Garrison and Anderson (2003) argue that if students are to become lifelong learners, then they must be cognisant, not only of the goals, but also the purpose of learning activities. Through this awareness they can manage and monitor their activities and responses to make them congruent with the goals so they can begin to judge the success of their learning strategies and tactics. That is, students can begin to be aware of their thinking in order to regulate that thinking. According to Garrison and Anderson (2003), 'this has to be the basis of critical questioning of both self and

others, and the foundation for the construction of meaningful and worthwhile knowledge' (p. 87).

3.4 Criticisms of the Community of Inquiry framework

The Community of Inquiry framework conceived by Garrison et al. (2000) provides a framework for both designing and implementing an online community of inquiry, and for understanding and reducing the complexities of online interactions in asynchronous discussion forums for content analysis. As such, it is both a pedagogical tool for instructional design and teaching purposes, and a methodological tool for research purposes. The model achieves these purposes by identifying and categorising the dimensions of the teaching and learning relationship in order to capture the essence of the learning experience for students in such environments, that is, the extent to which students experience various aspects of the course, individually and collectively. Critics of the model, such as Xin (2012), admit that the simplicity of the model is an attractive feature for many researchers of online discussions but argue that the model does not account adequately for the complexity of communication and that it is not sufficiently specific to online communications. Xin (2012) argues that communication is inherently social and does not see the need for a separation between cognitive and social presence, or even the need for the notion of 'presence' at all. She further argues that communication is a much more complex undertaking than Garrison and his team's model suggests. Her concerns are both pedagogical and methodological.

Whilst I concur with Xin's (2012) arguments about the nature of communication, the primary use of the model in this study is as a methodological tool to provide a framework for the content analysis of both the online learning resources and the online discussion transcripts: to reduce volumes of text to essential and analysable units. This is supported by other forms of analysis to substantiate and deepen understandings of the students' experience in the course. In terms of cognitive and social presence in communicative acts in formal courses of study, Garrison et al. (2000) view a functional distinction between the two; social presence has affective, interactive and cohesive functions that do not include the cognitive functions

contributing to the formal learning process. The cognitive functions of communication are staged and goal-oriented. Although separated in the Community of Inquiry model, Garrison and his team acknowledge an explicit interrelationship between each presence, as discussed in this chapter.

Another concern of Xin's (2012) is that the timing of communications has been ignored in the model but constitutes an important function in analysing such communications. This has been addressed in the present study with the use of web activity logs to support the content analysis. Xin's methodological concerns are addressed in greater detail in the next chapter which introduces the methods used in this study for the collection and analyses of various sources of data.

Chapter 4

The design and methodology of the study

This chapter begins with a brief overview of the study. As presented in Chapter 1, this study investigated how students engaged with the pedagogical processes of an online course to meet its learning outcomes. The student experience was explored through a case study of a second-year undergraduate course at an Australian university over a 15-week period. Within the case study, 11 students were selected as individual cases for further investigation and comparison with the groups in which they participated. The study has a pragmatic orientation as the aim was to understand the educational experience of learners participating in a new technological environment in which neither face-to-face contact nor real-time contact was possible. A pragmatic approach within an interpretivist orientation (see 4.1.5) allowed the use of a range of tools including surveys, interviews and logs of student activity to address the research questions. A qualitative content analysis of the data using the Community of Inquiry model (see 2.1) assisted in exploring the educational experience of both individuals and groups of learners. Triangulation was used to ascertain whether the different data sources were in agreement.

The participating students represented a range of ages and life experiences and were drawn from a variety of academic programs across the institution. A pilot study was conducted a year earlier with a focus on one stage of the course to inform planning for the principal study. During the principal study, 40 students, the Course Coordinator and one online tutor were involved. Prior to the commencement of the course, students were invited to participate by email. The Course Coordinator used the responses to organise students into six seminar groups to ensure 60 per cent representation by students who gave consent in at least three of the seminar groups. The eight non-consenting students and late consenting students were allocated to the three remaining groups to avoid interference with the results. Mid-way through the course, students were randomly allocated by the Course Coordinator to 20 country forums for the role-play scenario stage of the course, as was the usual practice. The

six seminar groups continued in tandem with the 20 country forums of the role-play scenario for the remainder of the course.

Data collected for investigation in the study included the instructional materials for the course, as well as the survey responses, logs of student activity and transcripts of web forums generated by the students and the online tutor. Together, these texts and data files formed the dataset. The data were matched from the various sources and de-identified for collation and analysis. The instructional materials and the web forum transcripts were coded and analysed with indicators developed for the Community of Inquiry model using a qualitative research software application. The logs of student activity and the survey responses were collated and analysed using descriptive statistics in a quantitative research software application. The data relevant to the instructional design and teaching in the course are discussed in Chapter 5. Individual student experience represented by quantitative data is compared to group experience and discussed in Chapter 6. Narrative syntheses of 11 selected individual cases in the course were produced and are reported in Chapter 7 to connect the analyses of the various data sources.

Due to the relatively low numbers of students participating in this study, seminar groups 1, 2 and 3 were chosen for analysis based on the high percentage of representation in each group. Of the 34 research participants in seminar groups 1 (n=11), 2 (n=12) and 3 (n=11), 11 individual cases were chosen based on the number of datasets that each offered. Those selected had posted to seminar group forums, country forums, and the *Noticeboard and Information* forum, and had responded to at least one of the two online surveys. The country forums were selected based on representation of these 11 individual cases. One of the selected country forums, Turkmenistan, was used for comparison based on a relatively high percentage of representation (n=4 of a possible six or seven per group) and the amount of words produced. Most of the participants in each of the forums selected produced a substantial number of words for coding and analysis.

This brief overview of the study is elaborated in the remainder of the chapter. The chapter is divided into three broad sections: methodology; data collection: sources, tools and methods, and; data management, representation and analysis.

The following two flow charts outline the data collection procedures for both the pilot and the principal study:

Data collection procedures: Pilot study

Pilot study focused on role-play scenario (October to December 2005)

- Students were invited to participate by email sent to course email list
 - Consent forms were to be returned to a collection box placed in a central and secure location on one of the University's campuses
 - Modifications made to consent form return process after poor response – email response invited
 - 32 consents received by return email for use of web forum transcripts
 - Students invited to participate in first online survey – 26 respondents
 - Students invited by email to participate in second online survey – 18 respondents
 - Students invited to participate in face-to-face interviews – four 20-minute interviews conducted
 - Data sources were matched and de-identified by a third party and made available to the researcher at a secure network location
 - Course Coordinator (who was the sole online tutor for 2005) was interviewed
 - Data were collated and analysed using suitable software applications
-

Data collection procedures: Principal study

Principal study focused on whole course (July to December 2006)

- A decision was made to focus on the course as a whole
 - A decision was made to use qualitative content analysis using Garrison and his team's model
 - Changes were made to the online questionnaires to reflect the shift in focus from one part of the course to the entire course
 - Students were invited to participate by email sent to course email list
 - 40 consents received by return email for use of web forum transcripts
 - Course Coordinator organised the 40 consenting students into the six online seminar groups to provide reasonable representation in at least three of the six groups
 - Students invited to participate in first online survey – 39 respondents
 - Students invited by email to participate in second online survey – 28 respondents
 - Students invited to participate in face-to-face interviews – none responded after several invitations
 - Data sources were matched and de-identified by a third party and made available to the researcher at a secure network location
 - Data were collated and analysed using suitable software applications
-

4.1 Methodology

4.1.1 A case study

The research problem focused on how an online text-based learning environment met specific pedagogical goals, how the learners engaged with the course to attain those goals, and how students perceived the experience. The nature of the investigation and the research questions suited a qualitative case-study methodology. A case study is ‘a specific instance that is frequently designed to illustrate a more general principle’ (Cohen, Manion, & Morrison, 2007, p. 253). It provides a unique example of real people in real situations (Cohen et al., 2007). Stake (1994) explains that not everything can be defined as a case. In case study research, a case can be simple or complex but should be identifiable by its specific and ‘bounded’ nature. It should be an integrated and functioning system (Stake, 1994, 1995). In this sense, the undergraduate course selected for this study can be viewed as an acceptable case. The course was selected because it had been implemented at *Uni Technovation* as one of several exemplary models for other academics to emulate using the newly designed Learning Management System (LMS), *LearnIT*. The course was bounded by a timeframe with a cohort of enrolled students. The course had a code and name that identified it among other courses offered at the institution. It was located and delivered online as a functioning integrated system within a broader institutional and social context. Stake (1994) emphasises the significance of the boundedness and behavioural patterns of the case to identify it within a broader environmental context. In this sense, the participants in the course could also be identified as individual cases. The purpose of studying individual patterns of behaviour is to reveal characteristics of the parts that make up the whole (Stake, 1994).

Case study research is concerned with how things happen and why (Anderson & Arnsenault, 1998). It arises out of a desire to understand complex social phenomena and allows the researcher to retain the holistic and meaningful characteristics of real-life events (Yin, 1994). A case study approach to the course made possible a comprehensive research strategy since it generates a variety of evidence – documents, transcripts, survey responses, interviews and artefacts – relevant to the case (Yin, 1994). According to Yin (1994), a case study is ‘an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when

the boundaries between phenomenon and context are not clearly evident' (p. 13). In this particular situation, the phenomenon was the construction and application of shared knowledge and the context was the course as it existed in an environment which co-located participants separated by time and space. The online learning environment attempted to draw the broader contextual activity of the course into a focused collaborative effort. The educational context within which the course existed was of significance to its design, content and implementation. The complementary learning arrangements of the two stages of the course were also of significance; to analyse one stage without the other would provide only a partial understanding of both the opportunities for learning and the actual learning that took place during the course. A case study is both the process of learning about the case (Stake, 1994; Yin, 1994) and the product of our learning (Stake, 1994): these understandings applied to the case study reported here.

4.1.2 A multi-methods case study

A comprehensive research strategy implies the use of multiple methods of data collection depending on the type of data required to address the research questions. Gillham (2000) refers to the case study as a *main* method consisting of different sub-methods that form a multi-method approach. This study adopted both qualitative and quantitative research methods combined with triangulation techniques. Triangulation is the process of approaching an issue from various standpoints to find agreement. Triangulation of data collected in case study research is common practice and employs multiple methods in the processes of collection and analysis (Stake, 1995). Quantitative methods assume a (post)positivist orientation preferred in experimental research that reduces data into quantifiable, measurable results, while qualitative methods assume a constructivist tradition or critical orientation preferred in empirical research that categorises data for rich interpretive or critical analysis (see 4.1.4).

4.1.3 A mixed methods approach

A mixed methods case study approach does not subscribe to any particular worldview since it adopts research strategies that can be of both a quantitative and qualitative nature. Stake (1995) argues that 'as a form of research, case study is defined by interest in individual cases, not by the methods of inquiry used' (p. 236).

This does not absolve case study researchers from providing a rigorous, well-planned research design that is informed by an epistemological stance. A case study approach arises out of a desire to understand complex social phenomena and allows the researcher to retain the holistic and meaningful characteristics of real-life events by employing comprehensive research strategies that generate a variety of evidence (Yin, 1994).

Mixed methods research developed out of the debates between positivist and constructivist research traditions, culminating in the ‘paradigm wars’ of the 1970s and 80s, into a viable third paradigm for scientific research. Mixed methods developed from triangulation techniques but, unlike triangulation, they are not simply a combining of qualitative and quantitative data to provide multiple perspectives on an issue (Creswell, 2003; Teddlie & Tashakkori, 2003). A process of data transformation must occur so that what is regarded as qualitative data becomes quantitative in nature or vice versa. A mixed methods approach can be used in a multi-method case study as generating one form of data for triangulation. Consistent with a case study approach, mixed methods research provides more comprehensive evidence for studying a research problem than either quantitative or qualitative research alone (Creswell, 2003; Teddlie & Tashakkori, 2003). Researchers are given permission to use all of the tools of data collection available rather than being restricted to the types of data collection typically associated with qualitative or quantitative research (Creswell & Plano Clark, 2007).

4.1.4 Qualitative content analysis

Qualitative content analysis formed the primary method of investigation for this study using Garrison et al.’s Community of Inquiry model as a framework (see Figure 2.1). The model provided indicators for the coding of qualitative data, which were transformed into numerical values to identify areas of significance for further qualitative investigation in the study. This transformative process represents a mixed method. Triangulation of data from other sources was then undertaken to corroborate the findings.

Content analysis is often used when researching the relationship between learning and the use of information and communication technologies in educational settings (Rattleff, 2007). The comprehensive strategies of case study research require a

method of systematising and reducing large quantities of data for purposeful analysis. Content analysis provided a method that enabled me to sift through large volumes of data with relative ease in a systematic fashion (GAO, 1996). The process involved the coding of data in primarily written communications to reveal patterns and themes. Content analysis differs from thematic analysis in that the latter involves an inductive process common to grounded theory approaches. In this investigation, a model derived from such a process was applied to the data set in order to interpret and deduce understandings of the students' learning experience in the course. An initial criticism of this approach was that, in its early stages of development, it reduced rich and significant meanings to quantities without much appreciation for the quality of the data collected for analysis. According to Henri (1992), in the early days of research based on the discussion transcripts of online learning environments, the emphasis was on gathering quantitative data about levels of participation. However, these quantitative indices about numbers of student contributions could not reveal the quality of the interaction (Meyer, 2004). This led to the adoption of qualitative content analysis as a technique for analysis of the information captured in transcripts of asynchronous discussion groups (De Wever, Schellens, Valcke, & Van Keer, 2006). This study adopted a qualitative approach to content analysis in an effort to address this criticism and ensure that the nature and quality of teacher communication and student interaction in the online environment were retained.

Henri (1992) calls Computer-Mediated Communication (CMC), the term used to describe interactions using internet-based communications technologies, a 'gold mine of information concerning the psycho-social dynamics at work among students, the learning strategies adopted, and the acquisition of knowledge and skills' (p. 118). Researchers have often used the transcripts of online discussions to investigate the process of the social construction of knowledge (Gunawardena, Carabajal, & Lowe, 2001; Gunawardena, Lowe, & Anderson, 1997) or critical thinking (Bullen, 1998; Newman, Webb, & Cochrane, 1995). In general, the aim of qualitative content analysis is 'to reveal information that is not situated at the surface of the transcripts' (De Wever et al., 2006, p. 7). In-depth understanding of the online discussions was needed to provide persuasive evidence about the learning and the knowledge construction that took place (De Wever et al., 2006; Schrire, 2006). In addition to the

analysis of student transcripts in this study, qualitative content analysis allowed the analysis of the teaching contribution to the course. This provided an in-depth investigation of the complete educational transaction involving lecturer and students in the construction and application of knowledge.

Various models of content analysis have been devised to attribute significance to the quality of the communication to be analysed. However, many of these models focus on student interaction without acknowledging the full educational experience of the learner within the learning environment. De Wever et al. (2006) reviewed 15 content analysis schemes that analysed transcripts of online asynchronous discussion groups in educational settings. The studies of Rourke, Garrison and Anderson account for three of the 15 schemes reviewed. Their schemes form different components of a larger model, known as the Community of Inquiry model (see Figure 2.1), which was selected as a framework for analysis in this study. The three interrelated components of cognitive presence, social presence, and teaching presence allow for the holistic content analysis of an educational experience in an online learning environment. Most other schemes reviewed concentrated solely on learning processes and cognitive development without taking full account of the social and teaching dynamics involved.

The three studies of Rourke, Garrison and Anderson (referred to in De Wever and his colleagues' review above) were independent studies conducted to test the validity and reliability of the indicators they had developed for coding schemes for each of the target variables of cognitive presence, social presence, and teaching presence. The set of procedures used in their content analyses included identifying and defining a target variable, collecting samples of representative text, and devising reliable and valid rules for categorising segments of the text. This process culminated in descriptive or inferential conclusions about the target variable. Garrison and his team's model of Community of Inquiry was selected as a qualitative framework for content analysis for this study because it recognises the fullness of the educational experience within the case study by capturing the qualitative nature of cognitive presence, social presence, and teaching presence in a range of online documents and transcripts. The model also provides coding schemes that have been tested for

validity and reliability for each of the target variables. (For explanations and examples of the indicators used for coding in this study, see Appendix C.)

Thus the focus of the study – the educational experience of the students in the online course – comprised the Course Coordinator’s pedagogical design, including the content and organisational structure of the course in its online format, and the participation of the students and the online tutor, captured in the form of online discussion transcripts. Garrison and his team’s model (2000) provided a way to undertake a comprehensive content analysis of cognitive presence, social presence, and teaching presence by coding the transcripts of the online discussions and the documents that constituted the instructional resources provided in the online course. The pre-designed instructional materials prepared by the Course Coordinator provided content for the analysis of teaching presence. The transcripts of the online tutor’s participation also provided content for the analysis of teaching presence. The transcripts generated by students who consented to participate in the study across the various discussion forums provided content for the analysis of both cognitive and social presence. The evidence provided by the content analysis was then corroborated with other data sources (web data logs and online surveys) to triangulate the findings.

4.1.5 The research orientation

As stated earlier, with reference to case study approaches, mixed methods researchers should not be dismissive of their metaphysical stance in relation to the reality under study (see 4.1.3). In fact, according to Teddlie and Tashakkori (2003), a failure to make the philosophical stance clear represents one of the main criticisms of mixed methods research. The study employed multiple methods of data collection for triangulation consistent with both case study research and with mixed methods research. Case study and mixed methods researchers often adopt a pragmatic approach in relation to the research questions. Consistent with case study research and qualitative content analysis, pragmatism is foremost concerned with the most suitable techniques for investigating the research questions rather than with the metaphysical positioning of the approaches taken. This study adopted a pragmatist approach but with an interpretivist orientation. An interpretivist orientation views the

reality under investigation as complex and social in nature with social interactants the focus. Interpretivists aim to understand the complex world of lived experience from the point of view of those who live it. This goal is variously spoken of as:

an abiding concern for the life world, for the emic point of view, for understanding meaning, for grasping the actor's definition of a situation. The world of lived reality and situation-specific meanings that constitute the general object of investigation is thought to be constructed by social actors. (Schwandt, 1994, p. 118)

4.1.6 The selection of course as case

Important considerations for me as researcher in the selection of a suitable course for investigation were that: it should be offered entirely online; it should include a simulated computer-based experience as a component of the course; and its instructional design should incorporate innovative pedagogical practice. The situational context of the course was also important in that the course had to be located in an Australian higher education institution that represented the progressive changes brought about by global, technological and government transformations to the Australian higher education sector during the early to mid-2000s. The course, *Learning to Resolve Global Conflicts 201*, in its structural, spatial and temporal context, fulfilled these requirements and provided the educational experience to be investigated. Although the field of study was not significant to the selection of course, the course was more or less typical of an undergraduate political science course offered at an Australian university.

4.1.7 Researching in a digital environment

As a researcher, my involvement was inextricably embedded in the context being investigated. Although the focal course was offered in a different faculty to my own and my methods for collecting data, detailed in the next section, distanced me from any live observation of or personal contact with any of the participating students, my academic position at the institution required me to design pedagogically innovative online courses for my own students using the same LMS. This meant that I was familiar with the kinds of educational experiences students might have in such courses. However, the online nature of the course and the unobtrusive methods of data collection provided some distancing for me from the participants. Krippendorff (2004) recommends content analysis as one example of unobtrusive methods for data

collection. Consistent with my familiarity with the educational experience of online courses at *Uni Technovation*, he also recommends that the more informed the researcher is about the participants and the setting, the more useful artefacts may be identified and the more easily access may be gained to those artefacts.

The affordances offered by the digital environment of the institution selected as the site for research were used to advantage in the design of the study and in the data collection procedures. Without direct contact with students enrolled in the online course, computer-mediated communications were necessary. The email system provided simple and convenient contact with all students enrolled in a particular course at the university. This facilitated contact with the students in *Learning to Resolve Global Conflicts 201* to inform them of the study and to invite their participation in various aspects at different stages. Downloadable electronic course lists allowed me to record consent from students for my use of their contributions to the course. The completed course list was emailed to the Course Coordinator for organisation of participants into online seminar groups and was also used by a third party to match data from various sources before de-identification. All student activity in the online course environment was recorded in various digital formats for later collation in a centralised location. All instructional materials were made available in digital format for download. The survey tool of the LMS, *SurveyIT*, was used both to generate the two online surveys and to view collated results. The collated data from all sources were matched and de-identified in a centralised location by a third party before being made available to me on a secure network site. Thus, the networked technologies inherent in the corporate online management system of the university provided the means for simple and unobtrusive data collection methods for research and analysis.

4.2 Data collection: Sources, tools and methods

Various sources of data were initially selected to answer the main research questions. The sub-questions (see 1.4.1), listed in the first column of Table 4.2.1, seek to provide specific answers to the main research questions, and are linked with the corresponding sources of data in the second column, and methods of analysis in the

third column. These data sources were selected for both the pilot study and the principal study.

Main questions:

1. How does the design of an online course create a flexible student-centred learning experience?
2. How do undergraduate university students at an Australian university experience such an online course, both collaboratively and individually?

Table 4.2.1: Methods of data collection

Research question	Source of data	Method of analysis
What are the distinctive features of the instructional design of the online course?	Lecturer-produced instructional materials including contributions to web forum transcripts	Content analysis
How do students engage in learning during the course?	Student-produced web forum transcripts	Content analysis
	Web data logs	Quantitative analyses for triangulation
To what extent do learners follow planned processes?	Student-produced web forum transcripts	Content analysis
	Web data logs	Quantitative analyses for triangulation
If deviation occurs, why and what are its consequences in terms of meeting the planned learning outcomes?	Student-produced web forum transcripts	Content analysis
	Student survey responses	Quantitative and qualitative analyses for triangulation
How much (and what kind of) knowledge do individuals contribute to the shared learning experience?	Student-produced web forum transcripts	Content analysis
	Web data logs	Quantitative analyses for triangulation
How important are social and teaching elements in facilitating and progressing cognitive processes?	Lecturer-produced instructional materials including contributions to web forum transcripts	Content analysis
	Student-produced web forum transcripts	Content analysis
	Student survey responses	Quantitative and qualitative analyses for triangulation

4.2.1 The pilot study

Before collecting data for the principal study, a pilot study was conducted to test the instruments for data collection and to inform the planning and organisation of the principal study. A pilot, or feasibility study, is a small experiment designed to test logistics and gather information prior to a larger study, in order to improve the latter's quality and efficiency (Lancaster, Dodd, & Williamson, 2004). Yin (2003) recommends conducting a pilot case study as a final preparation for data collection in order to help refine the data collection plans with respect to both the content of the data and the procedures to be followed. The pilot study proved a useful research strategy that informed the careful planning and efficiency in the organisation and implementation of the principal study. The pilot study revealed deficiencies in the design of the proposed research and assisted with the refinement of the research instruments. These concerns were addressed before expending time and resources on the larger scale study.

My original research focus was the investigation of cultural, social and linguistic concerns experienced by international students in multimedia or immersive real-world simulated learning environments. After two unsuccessful attempts to secure a site for the research, the research focus shifted to an investigation of a more generic experience of online learning that included a role-play scenario (see 1.1.1). The pilot study was conducted in late 2005 with a focus on the latter stages of the course since my original intention was to research only the role-play scenario. Five weeks of web forum transcript data were collected from 32 consenting participants as well as responses to two online surveys from a smaller number of participants. Four in-depth face-to-face interviews were conducted with students who gave consent and an interview with the Course Coordinator who designed and taught the online version of the course. Due to its relatively small size in comparison with the principal study only limited information could be provided on the sources and magnitude of variation of response measures. Further details about the pilot study are provided below.

The pilot study informed the principal study in the following respects:

Design and scope

The web forum transcripts produced by interacting participants were limited. These text-based discussions occurred in 20 country forum groups, each consisting of six to eight members. The 32 participants were spread across the 20 country forum groups. This spread resulted in limited access to the ‘conversations’ of each group. It restricted the study of interaction and collaboration within and amongst groups. The data revealed important connections between the seminar group discussions initiated in the first stage of the course and the country forum discussions of the second stage of the course. However, only the final contributions to the seminar discussions were recorded since the course was drawing to a conclusion. This led to my decision to analyse the course in its entirety in the principal study so as to include the richness and comprehensiveness of the learning experience. It also led to logistical changes in the organisation of data collection in the principal study.

The interviews and online surveys were helpful in understanding some of the attitudes and frustrations that the students experienced as they participated ‘in isolation’ in an online environment. Students had no sense as to how many people were online at the same time as them and therefore lacked the sense of a ‘real’ community; it seemed to them more of an ‘imagined’ or ‘virtual’ community with its inherent dislocation of time and distance. This highlighted the importance of social presence as an indicator of perceived community. The surveys also captured some of the characteristics and differences amongst the participating students. The corroboration of attitudinal data with patterns of participation and actual student interaction proved useful as a form of triangulation to assist the interpretation of results. It also formed a triangulation of methods in that the quantitative results informed the qualitative interpretations. For example, it helped verify the perceived differences in collaborative effort for group assessments in the course. For these reasons, I considered it important to include interviews and surveys in the principal study, but the online surveys were redesigned and better organised to reflect the two different stages of the course rather than just the one stage (see Appendix D). Having two surveys, one in the middle of the course and one towards the end, also helped highlight changes in attitude.

Four students participated in interviews in the pilot study and provided detail and explanations that were not evident in any of the other forms of data collection. The interviews allowed students to communicate freely and to respond to open forms of questioning. Those interviewed were mature-age with life experience relevant to the course. They were committed to the course and generally enjoyed its content and organisation. Their primary concerns about the course were students' lack of commitment and the study load required relative to other courses. As the interviews yielded useful insights, they were deemed an important aspect of the research and were retained as a data collection instrument for the principal study. The responses in the pilot study interviews informed the development of the survey questions and provided a focus for the analysis of results in the principal study.

The interview with the Course Coordinator provided insight into decisions that were made in the design and organisation of the course, as well as her views of student performance, this being the third cohort to participate in the online version. The interview was conducted after the course had finished and student evaluations had been processed. It was not considered necessary to interview the Course Coordinator a second time for the principal study.

The web data logs provided a useful overview of student activity within the course. They provided evidence of students entering the course website and viewing particular documents. They demonstrated the frequency of student participation, even if no active contributions were made to online discussions. A passive form of learning from the contributions of other students was possible but would have remained invisible to the observer except in the web data logs. The instrument proved useful to corroborate evidence collected in other formats.

The recruitment of participants

The recruitment of participants is essential to the collection of a useful set of data for analysis. The initial plan to recruit for the pilot study was to use printed consent forms, stapled to an information sheet about the study, to be signed and returned to a secure central location on campus (see Appendix A and Appendix B). This was trialled in the pilot study over a two-week period but only four consent forms were returned out of a possible 120. Email consents were then trialled after minor

amendments to the consent process were approved by the Monash Standing Committee on Ethics in Research involving Humans (SCERH) resulting in a much higher return rate. Based on this success, the same process was followed in the principal study.

Another logistical problem emerged in the pilot study. Students who consented to participate in the study were spread across a large number of groups resulting in limited information about a target group's participation patterns. This was difficult to avoid with the 32 participants spread across 20 country forums. The decision to include the knowledge-building seminar groups from the first stage of the course was an attempt to address this issue because the participants were included in a smaller number of groups (only six). But recruiting more participants for the principal study would have resulted in better access to the country forums. Participant contributions could then be tracked through both stages of the course from beginning to end to reveal the nature of their participation in the learning process and to highlight any changes in their learning development.

A decision was also made to invite participation in the research more than a month before the course commenced so that the Course Coordinator, who agreed to this process, could organise research participants into seminar groups to ensure at least 60 per cent representation in three of the six groups. At the request of the researcher, the Course Coordinator placed the non-consenting students into three of the groups with the least representation to avoid interference in online interactions between consenting and non-consenting students. For the second stage of the course, the students were reorganised into country forums without consideration of representation to avoid 'over-staging' the research process or interfering with possible outcomes. The research methods were designed to be unobtrusive and so meddling in the processes seemed opposed to the intentions of these methods.

The methods used for analysis

The pilot study proved useful in determining the types of analysis to be employed in the principal study. In the pilot study, only cursory analysis of the data was conducted because collation of the data provided relatively meaningless results. The data collected in the pilot study were relatively small discrete units of student interactions. Discourse Analysis (Gee, 2005; Paltridge, 2006) was initially

considered since it is used to reveal meanings hidden in the text of student contributions, but the interpretation of these meanings in the pilot study was limited to individual participation in the role-play scenario and revealed little of the overall educational experience of the participants in the course as it was designed for interactive processes and collaborative outcomes. Similarly, Conversation Analysis (Have, 2007; Liddicoat, 2007) was considered but found to be relatively ineffectual in the pilot study due to the lack of access to continuity of conversations between participants in groups. By extending the study to include more than simply the interactions of the participating students to a more holistic analysis of the educational experience within the course in its entirety, neither form of analysis was deemed suitable. Content Analysis (Krippendorff, 2004), which reduces large quantities of data to meaningful units of analysis (see 4.3.3), was considered a more effective approach because it allowed the inclusion of not only the transcripts of student participation but also the lecturer-designed teaching materials and her interview.

Concluding remarks

With the change in nature of my research due to the limited opportunities available for data collection at the time, the pilot study was valuable as it informed the organisation and logistics of the principal study and helped determine the most suitable forms of analysis for the project. As discussed above, qualitative content analysis would allow me as researcher to discover and describe the focus of individual and group participation in a community of learners engaged in the shared construction and collaborative application of knowledge. It would allow inferences to be made which could then be corroborated with other methods of data collection (Weber, 1990).

4.2.2 The principal study

This section describes the data sources, data collection tools and methods for data collection used in the principal study.

Recruitment of research participants

As described in the section above, students enrolled in the course were contacted by email one month prior to the commencement of the course to invite them to participate. The message provided a brief introduction to the study and included as

attachments the Information Form (see Appendix A) and Consent Form (see Appendix B) as approved by SCERH. The message invited all students to indicate their willingness or otherwise to participate. It was made clear in the invitation that their participation in the study required nothing further than their participation in the online course. Since students enrolled in the course up to and including the first week of the semester, new enrollees would not have received the first email invitation. So the invitation was repeated at fortnightly intervals until the course commenced. The responses were recorded in a spreadsheet. Of the 133 students enrolled in the course in 2006, 40 students (30%) gave permission for the use of their web forum transcript contributions and web data log records in the research. The transcript contributions of research participants were extracted from the online course database by a member of the *Centre for Online Learning* (COL) at the conclusion of the course.

Instructional documents

The instructional documents for the course were downloaded from the course website in their prescribed organisational format prior to the commencement of the course. Only minor administrative changes such as date changes to assessment submissions and changes to teaching arrangements were made to the instructional documents by the Course Coordinator from 2005 to 2006; those for 2006 were used in the principal study. The instructional documents included those for the seminar groups and those for the role-play scenario as well as general instructions and guidelines. The nature and structure of these documents in relation to the instructional design of the online course is introduced in Chapter 5. All instructional documents were in text-based HTML format and were imported into the QSR nVivo software application for coding using the teaching presence indicators from Garrison et al.'s (2000) Community of Inquiry framework (see Appendix C and Appendix G). The statistics produced from the coding were imported into Microsoft Excel for further collation and analysis and for the generation of charts. This followed a mixed methods approach to quantifying data from qualitative processes.

Web forum transcripts

Web forum transcripts were produced primarily by students in group interactions with minimal involvement from the online tutor. Each seminar group and country forum produced one transcript of threaded discussion by interacting participants. The

transcripts reflected the cognitive and social development of each group in collaborative efforts to learn and to apply the learning. As discussed earlier (see 4.2.1), the pilot study provided only limited access to the interactions of students in discussion forums. In response to this understanding from the pilot, I asked the Course Coordinator to organise consenting students to seminar groups prior to the commencement of the course to allow significant representation of group interactions. The table on the following page shows the resulting distribution of participants for the principal study as compared with the pilot study:

Table 4.2.2: Allocation of consenting participants to online discussion groups

Seminar groups	Number of participants Principal study	Number of participants Pilot study	Country forums	Number of participants Principal study	Number of participants Pilot study
Group 1	11	6	Azerbaijan	2	1
Group 2	12	4	Baltic Coalition	N/A	2
Group 3	11	4	Belarus	1	1
Group 4	1	2	Bulgaria	N/A	1
Group 5	2	4	China	N/A	2
Group 6	3	5	Czech Republic	N/A	2
Group 7	N/A	6	France	2	1
			Georgia	3	
			Germany	1	2
			Greece	1	1
			Hungary	2	1
			Iran	1	
			Ireland	N/A	1
			Italy	1	1
			Kazakhstan	4	
			Moldova	N/A	2
			Romania	N/A	1
			Russia	2	2
			Slovakia	N/A	1
			Spain	1	1
			Sweden	N/A	1
			Turkey	3	
			Turkmenistan	4	2
			Ukraine	1	3
			United Kingdom	1	1
			USA	4	1
			Uzbekistan	1	1

Although numbers in the pilot study overall were higher as compared to those in the principal study, only one or two contributions for each participant appeared in the seminar group forums in the pilot study as the discussion related to the development of conceptual knowledge was concluding. Of the 32 participants in the pilot study, only one contributed to the *Noticeboard and information* forum throughout the role-play scenario, leaving 31 participants in the remaining forums interacting minimally.

The pre-organisation of consenting participants into discussion forums before the commencement of the course in the principal study resulted in fuller representation of more complete discussions in the seminar groups. Further, contributing to the complexity of interaction in the pilot study was the formation of coalitions. Most countries seemed to form alliances at some stage during the role-play, amongst them a European Union, an alliance between China and countries of the former Soviet Union, and a Baltic Coalition.

In the pilot study, the Course Coordinator was the only instructional participant, designing the online instructional materials and acting as online tutor. However, in the principal study, the Course Coordinator was on maternity leave for the duration of the course and so an online tutor was employed as a substitute. Having someone new to the course, who was not involved in the visioning of the instructional design or its implementation, may have affected the transactional dynamics between tutor and students in the educational experience of the course in the principal study. Fewer coalitions were formed during the role-play scenario in the principal study than in the pilot and the participation of the online tutor throughout the course was minimal. These issues are explored further in Chapters 5 and 8.

The web forum transcripts were accessed by a staff member at the *Centre for Online Learning* (COL) at the conclusion of the course and, based on the spreadsheet of students who gave consent, only their contributions were extracted from the online course delivery database. The online tutor's contributions were also extracted. The transcripts were imported into Microsoft Excel spreadsheets for analyses of student activity (see Figure 6.1 and Figure 6.2) and for the narrative synthesis used in Chapter 7 (see 4.3.2). The transcripts were also imported into the QSR nVivo software application for coding using the indicators for cognitive presence, social presence, and teaching presence from Garrison and his team's (2000) Community of Inquiry model. The statistics produced from the coding were imported back into Microsoft Excel for collation, calculation of aggregate units, and for the generation of charts. The process followed a mixed methods approach of quantifying data from text (see 4.3.2).

Online surveys

Two online surveys were designed to provide attitudinal information on the two stages of the course in the principal study. The surveys used a mixed methods approach with the generation of both quantitative data, in response to 24 likert-scale questions, and qualitative data, in response to two open-ended questions. The questions in the first survey were designed to ascertain the importance students attached to the course and to online learning, how much students felt they had learned from the course, and how prepared they felt to participate in the role-play scenario. It also tried to establish the significance students placed on the role of social interaction in learning and on the role of the online tutor. The questions in the second survey were designed to ascertain how much students valued the online experience of the role-play scenario, how well students contributed and how well they collaborated with others, and the significance they placed on the role of the online tutor and other participants. The questions in both surveys related to each of cognitive, social, and teaching presence. Both surveys also allowed a student to respond openly about favourable and unfavourable aspects of the course, which, to a limited extent, compensated for the lack of interviews in the principal study (see Appendix D for the principal study survey questionnaires).

Informed by the surveys and interviews in the pilot study, the two surveys were re-designed to account for attitudinal information on each stage of the course in the principal study. The surveys were created and published using an online tool, *SurveyIT*, in the LMS. The surveys required secure access for participation. In the principal study, the first was designed to provide participant comment mainly on the first section of the course, while the second was designed to provide participant comment mainly on the second section. Invitation to participate in each of the online surveys was by email to the collective course email list. Potentially, any student in the course could have responded as participation in the surveys was not restricted to the students who had already consented to participate. In the email, it was stated clearly that participation in the survey gave consent for me to use the survey responses.

In the principal study, the first survey was opened for two weeks prior to the mid-semester break to provide comment on the first stage and the second survey was

opened in the final two weeks of the course to provide comment on the second stage. Thirty-nine students participated in the first survey and 28 in the second survey. Twenty-four of the 39 survey participants in the first survey were students who had already consented to participate in the research and 21 of the 28 in the second survey. The complete survey results for both online surveys in the principal study were downloaded from the *SurveyIT* site as a spreadsheet after the completion of the course. The individual survey responses of students who had consented to participate in the research were extracted by the COL staff member from the *SurveyIT* database and matched to other data sources before de-identification.

Web data logs

Web data logs are records of student activity in the online environment of the university. The web data logs for the course under investigation were isolated to provide information about patterns of student activity within the online environment that constituted the course. These records assisted in determining the frequency and amount of individual and collective posts and views of discussion entries. They provided data to corroborate with other data sources. The web data logs were extracted from the LMS database by the COL staff member on completion of the course and matched to other data sources before de-identification of the data sources.

Interviews

Students were invited by email at the commencement of the pilot and principal studies and encouraged during the course to participate in a 20-minute face-to-face interview on completion of the course. In the pilot study, four students consented and participated in interviews, but in the principal study, after repeated invitations and encouragement, no students consented. The interviewees in the pilot study consented to participate in the research but did not disclose information that would identify them in other data sources. Therefore, it was not possible to match them to other data sources without identifying their contributions in those sources. The interviews from the pilot study were not transcribed as the information disclosed could not be used in the principal study but the content of the interviews was considered useful for providing background information based on in-depth comment and reflection on aspects of the course that none of the other data sources were able to provide. The information provided in the open-ended survey questions (Questions 33 and 34 in

both surveys) allowed similar comment and focus. The Course Coordinator was interviewed after the pilot study but the interview was not transcribed or used in the principal study.

4.2.3 Selection of groups and participants

The course, *Learning to Resolve Global Conflicts 201*, consisted of six seminar groups in the first stage of the course and 20 country forums in the second stage of the course. Groups consisted of individual participants who differed in motivation, patterns of participation, personality, intelligence, learning style, attitudes, and a range of other factors. Individual participants also took on different roles during the role-play scenario which influenced their contributions to the group discussion. This is consistent with the ways in which individuals participate in communities of practice (see 2.2.5). The constraints and purposes of the group require individuals to participate in particular ways to achieve the goals and outcomes for which the group formed (Wenger, 1998). This is significant in that groups with similar purposes require comparison and individual participation within the groups requires analysis. Participants were allocated to groups by the Course Coordinator before the commencement of the course, but specific groups and participants were selected for closer analysis after the collation of data once the course was over.

4.2.4 Selection of groups

Seminar groups were selected for investigation based on both the total number of words generated by the participants and by the number of participants per group to allow for significant representation based on active participation. The number of words was determined by filtering the database entries for each seminar group and importing the content to a word document to perform a word count. The following table lists the number of words produced in a group and the number of participants in the group responsible for their production.

Table 4.2.3: Word production in seminar groups

Group	Number of words generated by participants	Number of participants
Seminar Group 1	23,111	11
Seminar Group 2	23,389	12
Seminar Group 3	24,486	11
Seminar Group 4	2,720	1
Seminar Group 5	4,247	2
Seminar Group 6	7,930	3

The following table shows the number of participants and the word count for each of the country forums. The same process was followed as for seminar groups. Here the selection process for deciding the country forums for coding and analysis proved more difficult and complex than for the seminar groups. It was decided that the triangulation of data from various sources to support interpretation of the results was more important than selection based on the numbers of words and participants alone and so patterns of participation from the web data logs and the completion of the two online surveys had some influence over the decision for the selection of individual participants within country forums for coding and analysis. The selection of individual participants in the next section (see 4.2.5) reflects this.

Table 4.2.4: Word production in country forums

Country forum	Number of words generated by participants	Number of participants	Selected
Azerbaijan	2,068	2	Yes
Belarus	4,111	1	No
France	2,716	2	Yes
Georgia	2,557	3	Yes
Germany	1,443	1	No
Greece	624	1	No
Hungary	993	2	No
Iran	9,874	1	No
Italy	2,238	1	Yes
Kazakhstan	10,461	4	Yes
Russia	4,094	2	No
Spain	3,701	1	No
Turkey	7,823	3	Yes
Turkmenistan	14,776	4	Yes
United Kingdom	9,973	1	No
USA	7,374	4	Yes
Uzbekistan	1,082	1	No

In addition, the forums for *Noticeboard and Information, All Countries (General Discussion)*, and *Country Position Statements* were selected because they involved contributions that were significant to all participants. The *Noticeboard and Information* forum included interactions between participants from the entire course, regardless of assignment to particular seminar and country forums. It also included interactions between the online tutor and the participant cohort. The *All Countries (General Discussion)* forum allowed inter-group discussions between students for information sharing and negotiation purposes during the role-play scenario. The *Country Position Statements* represented the collective and collaborative outcomes of each country forum. Teacher contributions to these forums were also selected for analysis to identify the nature and amount of teaching presence within the country forums and associated groups.

4.2.5 Selection of participants

Participants were selected based on their overall contribution to the course and their degree of participation in the research. Those participants who contributed to the

most forums and responded to both surveys were selected for analysis, but only those within the selected groups above. The following table indicates that the selected participants were included in the groups identified above and responded to most, if not all, of the components that constituted the investigation.

Table 4.2.5: Student participation in research

Participant ID	Seminar group	Country forum	All countries	Country position statement	Noticeboard and information	Survey 1	Survey 2
P1	Group 1	Azerbaijan	Yes	Yes	Yes	Yes	Yes
P5	Group 2	France	Yes	Yes	Yes	Yes	Yes
P11	Group 2	Georgia	Yes	Yes	Yes	Yes	Yes
P17	Group 1	Italy	Yes	Yes	Yes	Yes	Yes
P18	Group 2	Kazakhstan	Yes	Yes	Yes	Yes	No
P19	Group 3	Kazakhstan	Yes	Yes	Yes	Yes	No
P25	Group 2	Turkey	Yes	Yes	Yes	Yes	Yes
P28	Group 2	Turkmenistan	Yes	Yes	Yes	Yes	Yes
P29	Group 2	Turkmenistan	Yes	Yes	Yes	Yes	Yes
P30	Group 3	Turkmenistan	Yes	Yes	Yes	Yes	Yes
P36	Group 3	USA	Yes	No	Yes	Yes	No

This process of selection resulted in a reduced, but still comprehensive, dataset for coding and analysis of the educational experience of individual participants comparative to collective group experience throughout the course. Chapter 6 discusses the findings of student contribution to the research process by analysing: the web data logs of group and individual student activity within the course website; the indicators of cognitive and social presence of group and individual contribution to the web forum transcripts; the survey results from the two online surveys. The analyses from the various data sources have been combined for selected individuals in narrative form in Chapter 7 to provide a richer summative qualitative analysis.

4.3 Data management, representation and analysis

This section explains how data were collated, coded and managed in preparation for interpretation and analysis. It includes an explanation of how software was used to code and represent data and explains and justifies the techniques for analysis.

4.3.1 Procedures for accessing and organising the data

The data required for the study were stored in various formats in different locations on the COL server. A systematic process was required to retrieve and relate the various forms of data. SQL (Structured Query Language) is a database computer language designed for managing data in relational database management systems. A relational database allows relationships to be formed between various datasets. All research-relevant data sources were stored and accessed in electronic format across computer networks, and collated and organised in electronic format using computer software. The consents and refusals for participation in this study were received by reply email and entered into a spreadsheet of enrolled students in the course, supplied by the Course Coordinator. The staff member at the COL, who had agreed to extract the research data from the database stored on the course delivery server, received the list of participants who had given consent with their student network IDs as a spreadsheet. At a meeting with the COL staff member, I discussed the arrangement and relationships between nodes of data and how I wanted the data to be represented. This discussion did not include the viewing of actual data but of database headings to determine relationships between them. Once the students had completed the two surveys and satisfied the requirements of the course, the COL staff member used the student network IDs of those who had consented to participate in the study to extract data relevant to them. These data were then de-identified by replacing student names and network IDs with an Arabic numeral system (1-40) and made available to me via a secure network link. The data were later transferred to DVD and given to me for secure storage. The participants in the study are referred to as P1 to P40 (Participant 1 to Participant 40).

4.3.2 Management and representation of the data

Computer software applications provide an effective tool for the management, collation and representation of large quantities of data in different formats. The data were provided in a common database format – SQL (Structured Query Language). There were three main data sources: student and lecturer contributions to the various online course discussions, web data logs, and survey responses. The data were imported into a spreadsheet so that they could be manipulated using data filters to prepare for export to other software applications. Apart from these data, with Course

Coordinator consent, all lecturer-generated documents were downloaded from the online learning environment for coding, providing a fourth data source.

Research software products are available for quantitative and qualitative analyses of unstructured data. Qualitative research software products, such as QSR nVivo, are different to statistical or quantitative software, such as SPSS (Statistics Package for the Social Sciences), which analyse data in numerical format. QSR nVivo software provided me with a tool to access, manage, shape and analyse detailed textual information. It provided a sophisticated workspace with purpose-built tools for efficiently working through volumes of information, including classifying, sorting and arranging information. It allowed the exploration of trends and investigation of meanings to locate sites of significance in the data. The software reported the results of coded data in percentages of text coverage based on assigned units of analysis and as charts. Both Microsoft Excel and SPSS offered a selection of tools for descriptive statistical analyses and associated representation in various table and chart formats.

The web data logs were imported into SPSS and Microsoft Excel so that histograms of frequencies could be produced showing the number of times a research participant entered the course environment to view or read information without posting a contribution over the time span of the course, and the number of contributions made by research participants over the time span of the course. The histograms represent students' patterns of activity during the course (see Figure 6.1 and Figure 6.2). Of particular interest were the patterns of activity for the selected individual participants compared with the total group patterns. As theorised in Chapter 2, individuals play unique roles within a community to achieve shared purposes through interaction with others (see 2.2.5). Comparison of individual patterns of behaviour to group patterns of behaviour identified the extent to which individuals deviated from group norms. This comparison between individuals and groups was performed for the content analyses of cognitive and social presence and for the attitudinal responses of both surveys for the purposes of triangulation.

The *SurveyIT* online survey tool presented the complete results of the surveys in chart format in a secure section of the *SurveyIT* website. Each question generated a chart showing the number of responses (y-axis) to each number on the likert scale (x-

axis) (see Appendix J and Appendix K). The complete results for the survey were also available in downloadable spreadsheet format. The survey responses assigned to individual participants in the research by the COL staff member were made available with the SQL dataset of matched source data. Microsoft Excel was used to represent the data in numeric and chart formats for comparison. Of particular interest were the responses of the selected individual participants compared with the total group response (see the previous paragraph for explanation). The open-ended questions of study participants were exported to a word processing application for collation and analysis using a grounded theory approach of thematic analysis. Most data are represented quantitatively and compared in Chapter 6 (see 6.3.2) while the selected participant responses were used to corroborate evidence from other data sources using a narrative synthesis approach and inform the individual participant summaries in Chapter 7.

Frequencies of positive and negative response were calculated for each question in the two online surveys and for each of the selected research participants to determine levels of student satisfaction (see Appendix F). Neutral responses were disregarded in the process and only positive and negative values were totalled. Strongly Disagree and Disagree were viewed as negative while Agree and Strongly Agree were viewed as positive. The responses for negatively worded questions, indicated by bold text in the tables in Appendix F, were reversed so that the frequencies were accurate. A ratio between the positive and negative responses was calculated and reported in Chapter 8 of the thesis as (P:N) where P is the positive response and N is the negative response. Overall student satisfaction was calculated by adding the positive values from the two surveys and the negative values from the two surveys to give an overall ratio of positive to negative responses. Those participants with the highest positive difference between the positive and negative values were regarded as the most satisfied with their experience of the course, and those with the highest negative difference between the positive and negative values were regarded as the most dissatisfied.

The data for the student contributions to online discussion groups were exported from filtered data in a Microsoft Excel spreadsheet to a word processing application and stored in separate group discussion files. These files were imported into QSR

nVivo software for the coding of data for qualitative content analysis. In addition to these files, the online course documents generated by the lecturer and the discussion contributions of the lecturer were also imported into QSR nVivo software for coding and analysis. Once coding was completed for group transcripts, the individual student records were extracted from the group discussion files to create individual participant files for comparative purposes as well as triangulation with other data sources. The extraction was done after coding to retain the original coding in order to avoid duplication of processes and potential coding errors. Of particular interest were the activities of the selected individual participants compared with the total group activity (as explained above). Group responses are presented and compared in Chapter 6 (see 6.3) while the selected participant responses were used to inform the individual participant summaries in Chapter 7.

The coding of instructional documents and online tutor contributions were collated and coded using the same process as student contributions to the web forum transcripts. Once coded, reports of both student and online tutor activity were generated using QSR nVivo software which provided the percentage of coverage for each indicator within each category of cognitive, social, and teaching presence (see Appendix C and Appendix G). These percentages were exported to Microsoft Excel for collation, representation and analysis. The coding results for instructional documents and teaching contributions that related to the online seminar groups were collated and analysed separately to those related to the role-play scenario and country forums. Comparison of cognitive, social, and teaching presence was not possible because the total number of words generated for a group was not known; only the total number of words generated within groups collectively by participating students was known. Also, the units of measurement for coding were different for each of the presences as discussed below. However, comparisons for both cognitive and social presence could be made between individual student participation within a group and the group as represented by the collective contributions of student participants. Teaching presence could be analysed in terms of the degree of contribution to and nature of involvement in the educational experience of the course by the Course Coordinator and online tutor.

Due to the relatively low number of participants in this study, it was decided that the nature and use of the statistical information from the survey and from the content analysis of transcripts required only basic statistical representation. Statistical information (means and aggregate units) was used to identify areas of interest for further analysis. The statistical information and qualitative information presented and discussed in Chapter 6 were connected using narrative synthesis in Chapter 7. Narrative synthesis is used primarily in the health sciences, but also in the social sciences, to relate analyses from multiple studies. In this study, I have used narrative synthesis to present analyses of individual cases from multiple data sources. This is consistent with multiple case study research and with mixed methods research involving content analysis.

Although the number of participants selected in this study was small, the number of words produced and the amount of data produced for analysis was substantial. Content analysis proved an effective method of reducing the amount of information to manageable levels but resulted in small amounts of data for reliable statistical analysis. A *qualitising* approach (Sandelowski, Voils, & Knafl, 2009), a process of converting numerical data to narrative description, in the form of narrative synthesis proved an effective solution to combining the data in a fashion that complemented the statistical presentation in Chapter 6 and integrated a method for triangulating the various sources of data. Triangulation involved a comparison of students' perceived experiences with their actual experiences. Thus, a mixed methods approach helped me to synthesise various forms of data analysis to reveal the underlying experience of individual students in the course through qualitative descriptions.

The techniques for coding of web forum transcripts and instructional documents for analysis are described in greater detail below.

4.3.3 Coding and reporting of transcripts for analysis

Content analysis in this study involved the assignment of *a priori* codes, in the form of the indicators developed and tested in Garrison and his team's studies (Anderson, Rourke, Garrison, & Archer, 2001; Garrison, Anderson, & Archer, 2001; Rourke & Anderson, 2002; Rourke, Anderson, Garrison, & Archer, 1999), to segments of text in the teaching documents and the web forum transcripts (see Appendix C and Appendix H). For ease of comparison and triangulation, the assignment of codes to

text resulted in coverage of specific indicators as a percentage of the total word count for the unit being analysed. This process of converting text to numerical values is referred to as *quantising* in mixed methods research (Sandelowski et al., 2009). This process is supported by a number of researchers. The ‘not-numerical data’ that they refer to in their research are typically segments of text in the form of written transcripts or field notes produced from interviews or participant observations that were themselves formed to accommodate the analyses planned (Emerson, Fretz, & Shaw, 1995; Poland, 2002; Sandelowski et al., 2009). The method most researchers use to accomplish this process has usually been a variation of content, constant comparison, or domain analyses (e.g., (Charmaz, 2006; Hsieh & Shannon, 2005; Spradley, 1979), whereby *a priori* and/or data-derived codes are attached to segments of text and numerical values are then assigned to those codes.

The Community of Inquiry model of content analysis used to analyse the web forum transcripts transforms required coding text into numerical values for comparison between units, and for triangulation with other data sources. This quantitising process allows the reduction of the large amounts of information obtained in case study research to identify areas of interest for further investigation. Miranda and Saunders (2003) note that numbers and statistics can be seen as ways of clarifying meanings and shared realities. Data that are conceived as qualitative in nature can then be used to provide a rich ‘fine-grain’ analysis to interpret the meanings discovered in a deeper way. As Schrire (2006) rationalises, by performing a ‘fine-grained’ content analysis of the discourse in each discussion group within the broader context of the case itself (the course as a whole), it is possible to move from one level of explanation to another, and to arrive at an understanding of the learning processes that is both analytic and holistic. It is also possible to gain additional understanding by doing a cross-case comparison of the selected individual participants and discussion groups at the interpretive level. In this way, it is possible to perform quantitative analysis on discussion protocols but to go beyond such analysis by working within a qualitative methodology. This mixed methods approach provided a thorough investigation of the case whereby the mainly quantitative analyses presented in Chapter 6 are synthesised into a detailed qualitative analysis of the various data sources to provide summarised accounts of individual cases in

Chapter 7. The method is explained further in the introduction to Chapter 7 and supported by appendices.

The instructional teaching documents and the web forum transcripts using qualitative content analysis techniques based on Garrison et al.'s Community of Inquiry model was central to the investigation as it allowed examination of the educational experience of participants in a web-based learning environment. Each of the elements in the Community of Inquiry model of cognitive presence, social presence, and teaching presence are composed of various phases and/or elements, each with a range of indicators, developed and tested by Garrison and his team for validity, that were used to code the text (see Appendix C and Appendix I). The indicators were only used to determine the stage and/or element within each category for analysis and so analysis did not occur so much at the level of the indicator. The indicators determined the categorisation of each of the presences in the model as follows:

Table 4.3.1: Coding of data using indicators of presence

Category	Phase	Element	Indicator
Cognitive presence	Triggering event	Evocative	Recognising the problem Sense of puzzlement
	Exploration	Inquisitive	Brainstorming Divergence within a single message Divergence within the online community Information exchange Leaps to conclusions Suggestions for consideration
	Integration	Tentative	Connecting ideas, synthesis Convergence among group members Convergence within a single message Creating solutions
	Resolution	Committed	Defending solutions Testing solutions Vicarious application to real world

Social presence	Affective	Expression of emotions <i>Frustration at lack of response or participation</i> <i>Offering reassurance</i> Self-disclosure Use of humour
	Interactive	Asking questions Complimenting or expressing appreciation Continuing a thread Expressing agreement <i>Offering advice</i> Quoting from others' messages Referring explicitly to others' messages <i>Requesting comment or feedback</i>
	Cohesive	Addresses or refers to the group using inclusive pronouns <i>Apologies</i> Phatics, salutations Vocatives
Teaching presence	Instructional design and organisation	Clarifying procedures Designing methods Establishing netiquette Establishing time parameters Setting curriculum Utilising medium effectively
	Facilitating discourse	Assess the efficacy of the process Drawing in participants, prompting discussion Encouraging, acknowledging or reinforcing student contributions Identifying areas of agreement or disagreement Seeking to reach consensus or understanding Setting climate for learning
	Direct Instruction	Confirm understanding through assessment Diagnose misconceptions Focus the discussion on specific issues Inject knowledge from diverse sources Present content or questions Responding to technical concerns Summarise the discussion

* *Italicised indicators are my own to account for indicators not explicit in Garrison and his team's coding scheme, but which elicited specific attention in the coding of transcripts.*

Units of analysis

Units of analysis are the measurable objects of a researcher's study. They must be countable, measurable or describable, and locatable (LeCompte & Schensul, 1999).

For social science research, LeCompte and Schensul (1999) suggest that the unit of analysis be a person, or a group of people since people are most commonly the objects of analysis in a study. As a case study, the focus of this research was on individuals in interaction within groups to comprise the educational experience of the online course, *Learning to Resolve Global Conflicts 201*. Thus, selected individual students, together with the Course Coordinator and online tutor, were viewed as units of analysis within the context of their group participation they comprised the educational experience of the course.

Units of measurement

Student participation in the online course was evidenced in the production of messages posted to web forums. The messages formed written transcripts of student participation. Similarly, the participation of the online tutor appeared in the form of messages in web forum transcripts. The Course Coordinator, as instructional designer, produced the webpages that formed the instructional content of the online course. The content analysis of student experience in the course using Garrison and his team's indicators for cognitive, social, and teaching presence required the breaking down of these transcripts and webpages into manageable units for the application of coding. The choice for the unit of measurement affected the accuracy of the coding and the extent to which the data reflect the true content of the original discourse (Hearnshaw, 2000).

A lack of clarity in the definition of a unit of measurement is reported in studies of content analysis of web forum transcripts, and an argument for choosing a specific unit of measurement is rarely provided (De Wever et al., 2006). The most frequently reported units are a message, a 'unit of meaning' and the sentence. According to Strijbos, Martens, Prins, and Jochems (2006), choosing a unit of measurement can be guided by 'accepted practices', but they advise that the unit be clearly defined and that 'unit boundary overlap' be limited and computed.

As this study applied the categories of cognitive, social, and teaching presence developed by Garrison and his team for use in the Community of Inquiry model, the notion of 'accepted practices' required consideration of Garrison et al's definitions of units. When employing their cognitive presence model to analyse an online discussion group, Garrison et al. (2001) chose the entire message as their unit of

measurement mainly because messages are easiest to identify and occur naturally in discussion environments. Because a message may contain indicators for multiple phases or stages in each category of their model, they developed two heuristics for deciding which messages fall into which categories: code down and code up. Coding down commences with the largest units and works towards the smallest units in assigning codes whereas coding up is the reverse. In their study of social presence, thematic units were used as the units of measurement. The authors claim that the units have the reliable identification attributes of syntactical units (Rourke & Anderson, 2002; Rourke et al., 1999). In their study of teaching presence, the team opted for the message as the unit of measurement, but allowed 'for the possibility that a single message might exhibit characteristics of more than one category' (Anderson et al., 2001, p. 11).

The purpose and nature of Garrison and his team's studies differed from this study in that his team had developed indicators for the different categories or phases in their models of cognitive, social, and teaching presence to test independently for reliability of coding. By contrast, my study applied all three categories of presence in the Community of Inquiry model to a single educational experience to better understand the nature of that experience. Nevertheless, consistency in definition of the units of measurement and their application has been carefully considered in this study.

In the Community of Inquiry model, cognitive presence consists of a four stage developmental process of initiation, exploration, integration and resolution. A message may be too broad a category for a unit of measurement as it may contain indicators of more than one stage of cognitive engagement. In light of this, the code down technique has been used to determine the largest possible unit within a message, if not the entire message, as a unit of measurement for the coding of cognitive presence. The identifiable unit is no smaller than a paragraph but could contain several consecutive paragraphs within the message.

In the Community of Inquiry model, social presence consists of three categories of indicators: affective, interactive and cohesive. As indicators of social presence refer to units as small as a punctuation mark or emoticon, or to the capitalisation or

italicising of a word or phrase, semantic units were selected as the preferred unit of measurement. This required the coding of the semantic unit of text associated with the punctuation mark or capitalisation. A coding up process was used to identify the semantic unit, working from the smallest element of a single word upwards to include all meanings associated with a particular indicator. The largest identifiable unit was an independent clause (or sentence). Although the boundedness of the semantic unit was retained in coding and overlap of semantic units avoided, social presence, unlike cognitive presence, does not consist of developmental stages. Therefore, social presence indicators commonly overlap producing a layering effect. This layering effect provides some significance to social presence as a category in the Community of Inquiry model for comparative purposes because the unit of measurement is much smaller than those of the other two categories of cognitive and teaching presence.

Teaching presence consists of three elements: instructional design and organisation, facilitating discourse, and direct instruction. The first element was contained in the pre-prepared instructional materials while the other two elements were contained within the web forum transcripts. Teaching presence was coded in a similar fashion to cognitive presence, that is, primarily at the level of the document in the case of pre-prepared materials since each document tended to have a specific purpose or focus. However, in some instances, paragraphs (or sections) were coded with unit boundaries maintained and the avoidance of overlap. In the case of teaching presence in online discussion transcripts, the online tutor comments were coded with appropriate indicators throughout the discussion transcripts as teaching presence.

The structure of documents for the coding in the content analysis is shown together with the indicators used for each of the presences in Table 4.3.1 and in Appendix I.

4.3.4 Issues of validity

Validity refers to the interpretation of the meaning of measurements used in researching a phenomenon (Stake, 1995). Positivist traditions, which assign measurable quantities to data for reliable analysis, have long established methods of assuring validity. Not only do measurements need to be accurate, but also their interpretation needs to reflect a certain trustworthiness or reliability. Unlike positivist traditions, interpretivism relies on understanding the meaning of measurements used

in researching a social phenomenon. Whether qualitative research can be viewed as both valid and reliable is a contested issue. Lincoln and Guba (1990) offer the following set of criteria as a reconceptualisation of traditional quantitative validity concepts: credibility as replacement for internal validity; transferability as replacement for external validity; dependability as replacement for reliability, and confirmability as replacement for objectivity. Above all, the aim in qualitative research should be for quality in research design (LeCompte & Schensul, 1999).

According to Yin (2003), three categories of validity can be applied to case study research: construct, internal and external. Yin (2003) views reliability as a fourth category of validity, but it is dealt with separately below. Construct validity refers to the establishment of correct operational measures for the concepts being studied. In this case, the reality under investigation was the educational experience of students learning online. The experience constitutes a social activity comprising social interactants, which conforms to an interpretivist orientation and a pragmatist approach. The methods and tools for the collection and analysis of data are consistent with interpretivist and pragmatist positions and reflect the nature of the experience being investigated. Of the three tactics offered by Yin (2003) to ensure construct validity at the phase of data collection for case study research, two were used in this study: multiple sources of evidence and an established chain of evidence. The multiple sources of evidence were applied to both the pilot study and the principal study so that the outcomes of both could be corroborated to some extent. Evidence was supplied by interviews with the Course Coordinator and research participants in the pilot study, and by the two online surveys, the online course documentation, and the online transcripts of student participation in both studies. Only the data from the principal study were used for analysis and reporting of findings; however, the multiple sources of data in each study provided a chain of evidence through their inherent interrelatedness and through the deliberate associations established by myself as researcher, as illustrated in Figure 4.4.1 below.

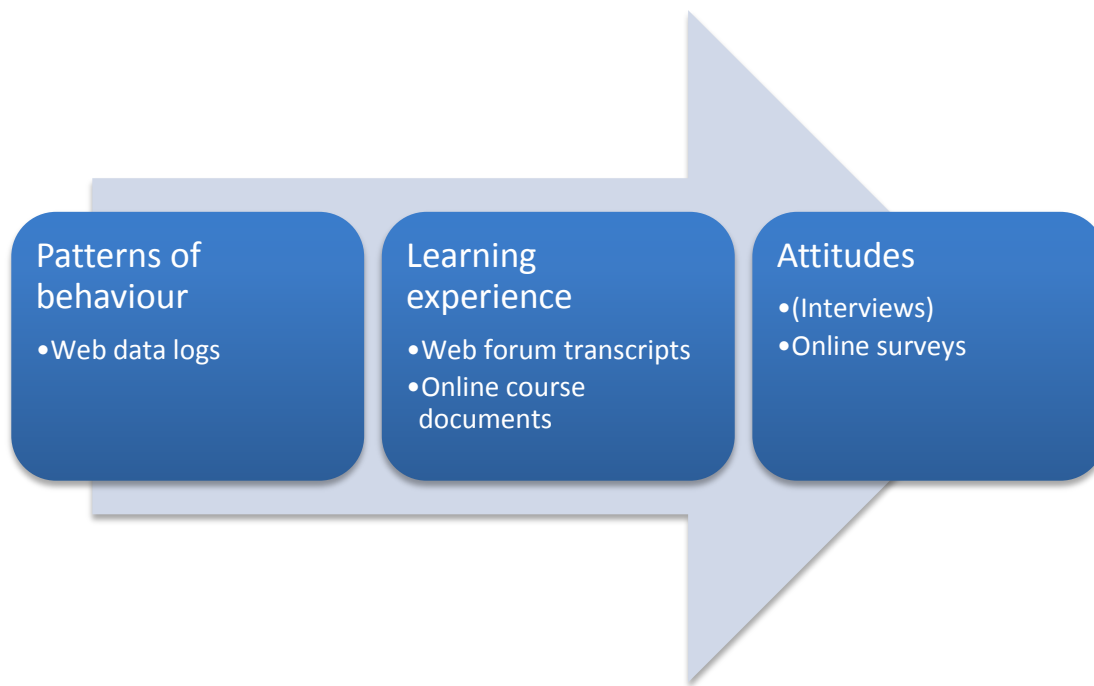


Figure 4.1: Chain of evidence from multiple sources

Internal validity refers to the establishment of causal relationships, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships. Internal validity applies to explanatory or causal studies, not descriptive or exploratory (Yin, 2003), and operates in the phase of data analysis. It involves pattern-matching, explanation-building, addressing rival explanations and using logic models. The models applied to the analysis of data in this case study research incorporated these tactics, particularly through the processes of triangulation. Survey results allowed attitudinal data to be matched with the actual learning experiences adduced from the content analysis of the web forum transcripts and online teaching documents. The patterns of student behaviour in the online environment as revealed in the analysis of the web data logs were also matched with the actual learning experiences adduced from the content analysis of the web forum transcripts. These results were compared to the course design and expectations as revealed in a content analysis of the documents that constituted the online learning environment. Interviews and open-ended survey responses informed the interpretation and analysis of the other sources of data. Thus, the multiple sources of data and the multiple methods used for data analysis strengthen the requirements for internal validity. These processes were described in section 4.2.2 and illustrated in figures in the appendices (see Appendix E to Appendix M).

External validity refers to the establishment of the domain to which a study's findings can be generalised. A common criticism of case study research is that a case provides little basis for scientific generalisation (Yin, 2003). Yin's (2003) response is that case studies are 'generalisable to theoretical propositions and not to populations or universes. In this sense, the case study [...] does not represent a 'sample', and in doing a case study, your goal will be to generalise theories (analytical generalisation) and not to enumerate frequencies (statistical generalisation)' (p. 10).

The tactic used for external validity relates to the use of theory in a single-case study and operates at the phase of research design (Yin, 2003). As the research represents only one case, the question of generalisability needs to be considered. Wolcott (1995) argues that 'each case study is unique, but not so unique that we cannot learn from it and apply its lessons more generally' (p. 175). The theories that informed this research allow for an explanation of the case to provide insights into pedagogical processes and associated learner experiences for the benefit of online course designers and instructors operating in similar higher education settings. The case was specific to the institution in which the LMS was in operation to inform the potential design, development, and operation of literally thousands of similar undergraduate courses still on offer at the institution.² Thus, the immediate domain for external validity, or generalisability, is the institution in which the case resides. However, similar online courses are offered in higher education institutions around the world, particularly in the fields of Business, International Studies and Political Science. The study may offer insights into the design and teaching of such courses. The study may also advance methods for researching the effectiveness of such courses in terms of how they are experienced by students.

4.3.5 Reliability

The goal of reliability for a case study is not replicability of the study but the minimisation of errors and biases (Yin, 2003). The focus of this study was on the educational experience of the students participating in the online course as represented by the web forum transcripts produced by the students and the tutor

² Over 3,000 courses were on offer for 2012 including undergraduate, graduate entry and postgraduate, with the majority being undergraduate, each with its unique online learning space.

while the course was in progress. The application of the Community of Inquiry model provided a relatively holistic analysis of the educational experience of the students as represented by the web forum transcripts, the online course materials, and the teaching contribution of the online tutor. A qualitative case study allows inclusion of a fuller range of documents relevant to the case for content analysis than simply the web forum transcripts, as well as inclusion of data collected by other means for purposes of triangulation. In this way, the analysis was fuller than the application of the Community of Inquiry model alone, improving the reliability and validity of the study. The inclusion of a pilot study to inform the design of the principal study and to corroborate the analysis also ensured greater reliability.

Issues of reliability

Content analysis of online transcripts

The purpose of Garrison and his team's studies was to test the set of indicators developed for coding schemes for each element of their Community of Inquiry model based on agreed units of analysis. Issues of reliability were reported in their studies. Garrison, Cleveland-Innes, Koole, and Kappelman (2006) note that content analysis is a difficult process under the best of circumstances. In relation to the coding of cognitive presence, they argue that it is challenging to ask coders to determine, based on manifest transcript evidence, which of four latent critical-thinking phases a student is operating in. It has also been argued that inter-rater reliability is invariably low in these types of studies because of the 'latent projective' nature of what is, in essence, an internal cognitive process (Potter & Levine-Donnerstein, 1999). In the case of Garrison and his team's studies, coders underwent three training sessions in the use of the model before their coding was applied and inter-rater reliability tests were conducted. The kappa value reached of $\kappa=.74$ is below the range of .80 to .90 chance-corrected reliability figures generally reported in content studies. However, Riffe, Lacy, and Fico (2005) note that this criterion applies primarily to categories and coding systems that have been used extensively. They add that 'research that is breaking new ground with concepts that are rich in analytical value may go forward with reliability levels somewhat below that range' (p. 131).

Addressing issues of reliability

My study was a small-scale study that could not afford the time, cost and complexity of training coders to test for inter-rater reliability of coding, particularly given the low rates of inter-rater reliability reported in the studies of Garrison and his team. To ensure the highest levels of reliability in the application of the model to the present study, taking account of these limitations, the coding process was followed meticulously and the coding of data was cross-checked through a set of systematic processes. For example, the QSR nVivo software used for the coding process displays coloured vertical coding stripes in the right margin as a visual representation of what has been coded as the coding progresses. The vertical length and the colour of each stripe provides an instant verification of which indicators have been applied and to which units of analysis (see Appendix H). A secondary process for cross-checking the coding applied was that, once a source document had been coded, its coding nodes were automatically collated into separate documents. By opening individual node documents, the content for a particular indicator relating to a certain descriptor could be checked to ensure that the content conformed to the description of the indicator. This secondary validation process was completed for all indicators in the node documents.

4.3.6 Ethical considerations

Compliance to ethical standards for research is an important practice to protect the rights of those who agree to participate in research studies. This study has adhered to ethics protocols approved by the Standing Committee on Ethics in Research involving Humans (SCERH) at Monash University (the name of the committee is now MUHREC—Monash University Human Research Ethics Committee). These protocols include the provision of an approved information sheet that provides details of the research and an approved consent form. All participants were informed by email of the nature and purpose of the study using the information sheet provided (see Appendix A) and were invited to participate by reply email using the consent form provided (see Appendix B). Although several invitations for participation were sent out, care was taken not to coerce people into participating. Students were given my contact details and were assured they could opt out of the research at any stage. Separate invitations were given for consent to use the web forum transcripts and web

data logs, to participate in each of the online surveys, and to participate in a face-to-face interview.

The study involved unobtrusive methods for the collection of data, and used a third person to establish the relationships between the multiple sources of data and to de-identify the data before it was viewed by the researcher for collation and analysis. According to Cohen et al. (2007) a research subject is considered anonymous when the researcher or another person cannot identify the participant from the information provided. Due care was taken to ensure that all data were de-identified prior to the researcher viewing the data. Despite the measures taken to ensure anonymity, given names were commonly used in the content of web forum messages. These names referred to a person within the discussion groups other than the participant who typed the message. These names have been deleted when reported in the thesis to ensure that no-one can be identified. Furthermore, pseudonyms have been used for the course, the institution, the LMS and its resources to ensure a greater level of anonymity for the participants in the study.

This chapter has introduced the methodology, the methods for selecting participants, and for collecting, coding and analysing the data. It addresses issues of validity, reliability and human ethics. The next chapter presents the analysis and discussion of teaching presence based on a content analysis using the indicators from the Community of Inquiry model. It also includes an introduction to the analysis and discussion of the course's instructional design.

Chapter 5

Teaching presence: A content analysis

This chapter begins with an overview of the course that provided the focus of the investigation. It then presents the findings from the content analysis of teaching presence in the course. The analysis draws on the teaching principles discussed in Chapter 3 and follows the methodological principles explained in Chapter 4. The chapter is organised around the three main categories of teaching presence as espoused by Garrison et al.'s (2000) Community of Inquiry model: instructional design and organisation, facilitation of discourse, and direct instruction.

The instructional design and organisation of the course was the responsibility of the Course Coordinator who had years of experience in teaching, assessing and revising the course. Her role included the selection, design and structure of the instructional resources and activities within the online environment. Due to maternity leave arrangements, a sessional staff member who was not as experienced or familiar with the online course as the Course Coordinator, took responsibility in 2006 for the facilitation and direct instruction of the course. Unlike the Course Coordinator, the sessional staff member, who acted as online tutor, was only available to students for two hours per week on Friday mornings.

Although the analysis presented in this chapter is of the instructional components of the course, it reflects the perspective of the students participating in the course. This is consistent with the Community of Inquiry model which locates the online learning experience of students at the nexus of cognitive presence, social presence, and teaching presence. In this sense, teaching presence represents the amount of instructional presence available to students while participating in the course. Consequently, I have reported the volume of words allocated to teaching presence as a percentage against the total number of words produced in relation to a forum. This contrasts teaching presence against cognitive presence and social presence within the online course environment.

Indicators for instructional design and organisation, as devised and tested by Garrison and his team (2000), were applied to the coding of the text on webpages in the online course environment that formed the instructional materials written by the Course Coordinator. Hyperlinks to readings were coded using the indicators for teaching presence but not the readings themselves. Indicators for the facilitation of discourse and direct instruction were applied to the coding of the text in the transcripts of web forum messages written by the online tutor. The findings are discussed in the sections that follow.

5.1 Instructional design and organisation

Wenger (1998) writes that ‘Learning cannot be designed. Ultimately, it belongs to the realm of experience and practice. Learning happens, design or no design’ (p. 222). However, in formal learning settings, instructional design is important. It creates the pedagogic bounds within which learning occurs, and scaffolds a pathway to guide learners to the achievement of the learning goals. It provides the impetus for learning, the scaffolds, tools and artefacts for learning, and the tasks for learning. It outlines the rules or guidelines of engagement and the focus to achieve the anticipated outcomes of learning (see 3.3.1).

It is salutary to begin with a description of the course’s organisational structure and key components as located within the semester schedule of university planning. The course was offered in the second semester of every year, and had an average cohort of about 120 students. Prior to its online adaptation, its face-to-face delivery mode consisted of weekly lectures and a series of tutorials that employed a lecturer and a number of tutors. As an online course, the structure and organisation were similar but the teaching required the involvement of only one academic staff member. The course was offered not only to students within the bachelor degree program in which it resided, but also as an elective to any interested undergraduate student across the university. The table below illustrates the range of enrolment.

Table 5.1.1: Range of degree programs in which students were enrolled

Single Degrees	Double Degrees
Bachelor of Arts	Business Double Degree
Bachelor of Arts (International Studies)	Bachelor of Commerce, Bachelor of Business (Commercial Law)
Bachelor of Arts (Journalism)	Bachelor of Business (International Business), Bachelor of Arts (International Studies)
Bachelor of Commerce	Bachelor of Management, Bachelor of Arts (International Studies)
Bachelor of Business (International Business)	Bachelor of Management (Marketing), Bachelor of Arts (International Studies)
Bachelor of Management (Marketing)	Bachelor of Management (Marketing), Bachelor of Arts (International Studies)
Bachelor of Construction Management and Economics	Bachelor of Arts (Journalism), Bachelor of Arts (International Studies)
Bachelor of Applied Science (Occupational Therapy)	
Bachelor of Physiotherapy	
Bachelor of Psychology	
Master of Psychology (Specialisation)	

Design occurs within contextual constraints. The organisation of the course had to take place within an 18-week university semester which included periods of teaching and assessment. The teaching period in the second semester of an academic year comprised an eight-week block, a two-week mid-semester break, and a final five-week block before the final three-week assessment period. The two stages of the course – the seminar groups for shared conceptual knowledge building and the country forums for the role-play of the international relations conflict scenario – had to be organised within the 13-week teaching period. The Course Coordinator achieved this by including six topics, each spanning a fortnight, to cover the content of the seminar groups. The role-play scenario was introduced prior to the mid-semester break, and then ran alongside the seminar groups for five of the remaining weeks of the course. This is illustrated diagrammatically in Figure 5.1.

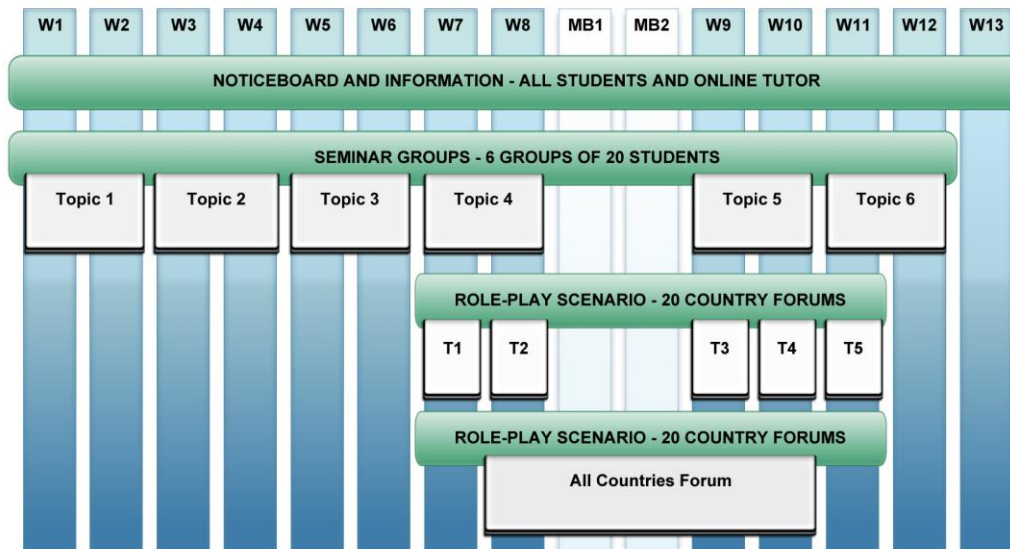


Figure 5.1: Course organisation

The online course, *Learning to Resolve Global Conflicts 201*, was delivered over one semester of 13 teaching weeks in the same format from 2003 to 2006. In Figure 5.1, W1-W13 represent teaching weeks one to 13, while MB1 and MB2 represent the two-week mid-semester break. Although instruction was possible for the full 15-week period in an online course, students were enrolled in other courses which were not offered online, and the mid-semester break provided them with a non-teaching period during which they could work on course assignments. A full-time study load required enrolment in four courses of 4.5 unit value per semester, of which *Learning to Resolve Global Conflicts 201* was only one.

Students were allocated to seminar groups as described in Chapter 4 (see 4.2.2) with an equal distribution of 22 students in each group. Students were allocated to country forums in week 6 with six to seven students in each. In Figure 5.1, T1 to T5 represented tasks one to five in the role-play scenario. Task one required participants to introduce themselves, read information on their allocated country, and assign a country leader who would participate in the *All Countries Forum* and post the *Country Position Statement* which formed the assessable task for each country team. Tasks two to four involved developments in the escalating conflict to which country teams were expected to respond. Task five was the posting of the collaboratively developed *Country Position Statement* for each country team (due at the end of week 11). The *Noticeboard and Information* forum spanned the entire course, and

provided a forum for raising issues relevant to the course expectations and for asking questions of the online tutor to clarify tasks and expectations.

The seminar groups and country forums represented a teaching and learning space or virtual classroom whereas the *Noticeboard and Information* forum represented a consultative space or virtual office. The *Noticeboard and Information* forum was used to clarify tasks, clarify assignment due dates and expectations within the course, and address technical issues. The online tutor was available in this space for two hours per week on a Friday morning. Apart from this time and space, there was no indication of the availability of teaching staff. The online tutor posted 2,202 of the 5,015 words contributed to this space by the research participants (who accounted for 40 of the 132 students enrolled in the course). The online tutor's contribution to this forum represented about 44 per cent of the total contribution, and was, in most cases, in direct response to questions asked or concerns raised by participating students. The information provided covered all aspects of the course including clarification of non-contact time during the mid-semester break and expectations on resumption of studies after the break. The contributions by the online tutor to this space were coded for all aspects of teaching presence even though this was identified or considered a consultative space rather than a teaching and learning space. Reference was made in this space by the online tutor and by students to sections of the pre-designed online course materials and to email messages that were sent and received by the online tutor. Email messages, both group and individual, were not included in this study for investigation.

By contrast, the online tutor posted 1,930 words as compared to the 24,486 words contributed to Seminar Group 3 by the 11 research participants allocated to that group (about 7% of total contribution) and 142 words compared to the 2,068 contributed to the country forum Azerbaijan by the two research participants allocated to that group (about 6% of total contribution). Thus, the teaching spaces where facilitation of discourse and direct teaching were to occur, received relatively little attention by the online tutor. However, what the online tutor did contribute to the seminar groups was regular and engaged facilitation of discourse and direct teaching for groups of students and individuals. This was not the case for the country forums which received minimal input in every group. The different purposes of the

two stages of learning in the course accounted for the differences in the nature of involvement of the online tutor in the seminar and country forums, but not the amount of involvement. A cursory comparison of the involvement of the Course Coordinator as online tutor in the pilot study in 2005 revealed differences in the level of engagement with that of the sessional staff member employed on an hourly basis as online tutor in the principal study in 2006.

The Course Coordinator used the tools of the LMS to design the course structure within the online course environment. The course structure, as illustrated in Figure 5.1, was outlined in the *Semester Schedule* document in the *Course Overview* section of the website. The website layout for this course was consistent with website layouts for all courses designed with the LMS. The website layout comprised a three-frame layout that included a course banner in the top frame, a structured listing of contents in the left frame, and a large main display frame for content beneath the top banner and to the right of the contents listing frame. Figure 5.2 below illustrates the general layout and features that were consistent for all courses in the university that made use of the LMS, but includes the welcome page in the main content frame of the course investigated in this study:

Uni Technovation Logo Learning to Resolve Global Conflicts 201 Study Guide and Course Information 2006	
Site Map — <u>Welcome</u> — Course Content and Organisation — Course eReader	<p>Welcome</p> <p>This course, <i>Learning to Resolve Global Conflicts 201</i>, is part of the International Studies program. The course is being offered totally online.</p> <p>The theme of the course this year is: ‘the international community – challenges and opportunities to bridge the divide’. This theme provides an underlying framework for analysis of the central topics of the course. There are a number of concepts which need to be understood in order to be able to analyse and critically evaluate some of the complex issues which face the international community today. This year we are looking at a divided world, identity, nationalism, human rights, global justice and sovereignty, and prospects for global challenges. The course will take an international and intercultural perspective in discussing a number of related issues. Details of the topics, seminar discussion questions and readings are included in this guide.</p> <p>Readings for the course are available online. The online readings are divided according to the topics and will complement the main concepts being discussed in the interactive seminars and online discussion. In addition you will find some useful additional resources online. A print friendly version of the course information booklet is available online.</p> <p>The online seminars are interactive and lead on to the online discussions. There are also online tasks which are based on an online scenario and role play which will provide an interesting and stimulating learning environment and bring the concepts being discussed in this course to life.</p> <p>I hope that you will enjoy the semester!</p> <p>Course Coordinator Name</p> <p>Online Tutor Name</p>

Figure 5.2: Generic online course layout

The course organisation as illustrated in Figure 5.1 was described, and to some extent replicated, in the left contents spine of the online course layout in Figure 5.2. The contents spine was an organised list of hyperlinks to webpages in HTML format that appeared in the main content frame. This is illustrated in the layout above with the Welcome hyperlink presented in bold and underlined text to indicate that it had been selected. The corresponding content to the hyperlink is then displayed as shown in the main content frame. The *Course Content and Organisation* section in the contents spine was italicised to indicate that it had been substituted for what actually appeared in the course website. The actual content, presented in a detailed hierarchical organisation, has been included as an appendix (see Appendix P).

The five main organisational headings substituted by *Course Content and Organisation* were: Course Information, Interactive Seminars, Scenario and Role Play, Assessment, and Resources. These organisational headings included the

instructional documents that formed the guidelines, expectations, instructional materials and resources, and assessment tasks for the online course. The seminar group discussions were included under the Interactive Seminar section, and the country forums for the role-play scenario were included under the Scenario and Role Play section. Each discussion group and country forum had a similar layout to that illustrated in Figure 5.2. Instead of contents listed in the left spine, topics of messages (with date of post) were listed as hyperlinks. When clicked on, the content of a message was displayed in the main content frame. The hyperlinked topic to replies of messages appeared under the message as an indented hyperlink with 're:' in front of the message title. All discussion forums were empty on commencement of the course. The content of the discussion forums represented primarily the contribution of the students to the course, while the instructional documents in the form of webpages within the website represented the main teaching contribution to the course.

The content analysis of teaching presence involved the application of indicators developed by Garrison and his team (see Appendix C) using the units of measurement selected for coding (see 4.3.3) within the online instructional materials and the web forum transcripts. The coding and analysis were performed using QSR nVivo software to identify the nature and relative importance of categories of teaching presence in the pre-designed instructional materials, and in student online interactions and collaborations. For this process, every webpage in the online course website, excluding hyperlinked reading materials, was imported into a word processor for a word count and then imported into nVivo for coding and analysis. The online tutor's contributions to seminar group discussions and country forum discussions followed the same process.

The number of words within the instructional documents, excluding online reading materials, totalled 26,823 words. The majority of these words (n=15,271 or 57%) were contained in the instructional notes for the six topics of the interactive seminar groups. Also of significance was the number of words contained in the instructional notes of the role-play scenario (n=7,577 or 28%). This is illustrated in Figure 5.3 below.

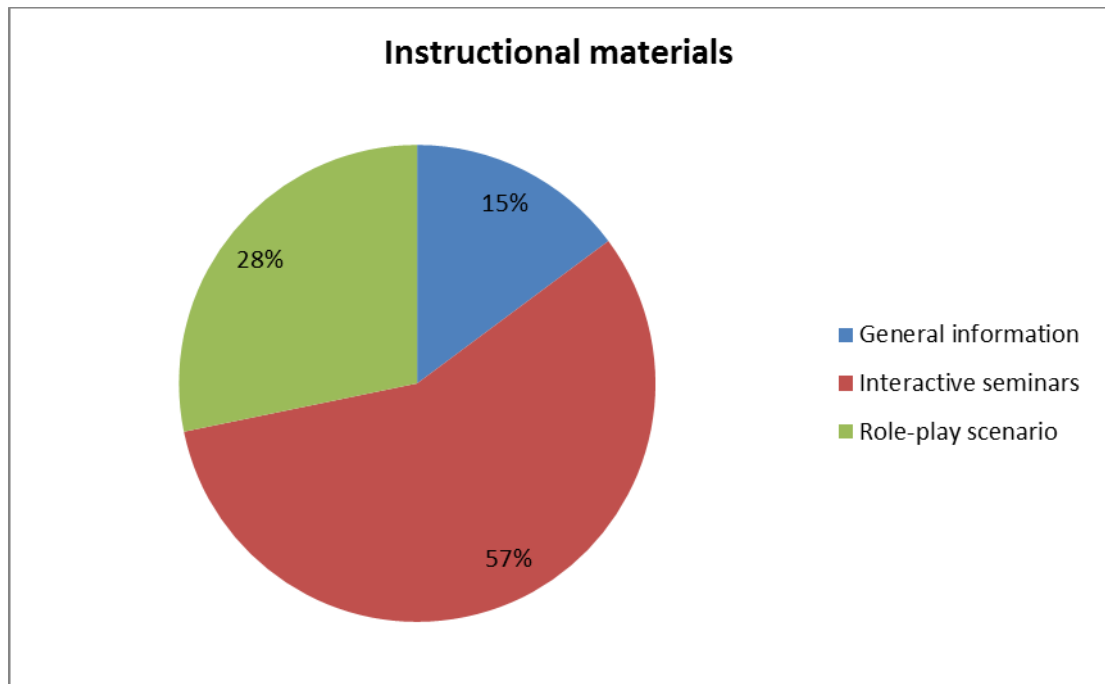


Figure 5.3: Proportion of instructional materials for different areas of learning

The indicators for teaching presence under the category of instructional design and organisation, when applied to the pre-designed online instructional materials, categorised the content as in the figure presented in Appendix O.

Every webpage written by the Course Coordinator within the online course environment is presented along the x-axis of the figure in Appendix O. The vertical bars illustrate the number of words allocated to each of the indicators for instructional design and organisation under teaching presence in the Community of Inquiry model. The most prominent activity is the setting of curriculum, followed by designing methods as illustrated in Figure 5.4 below:

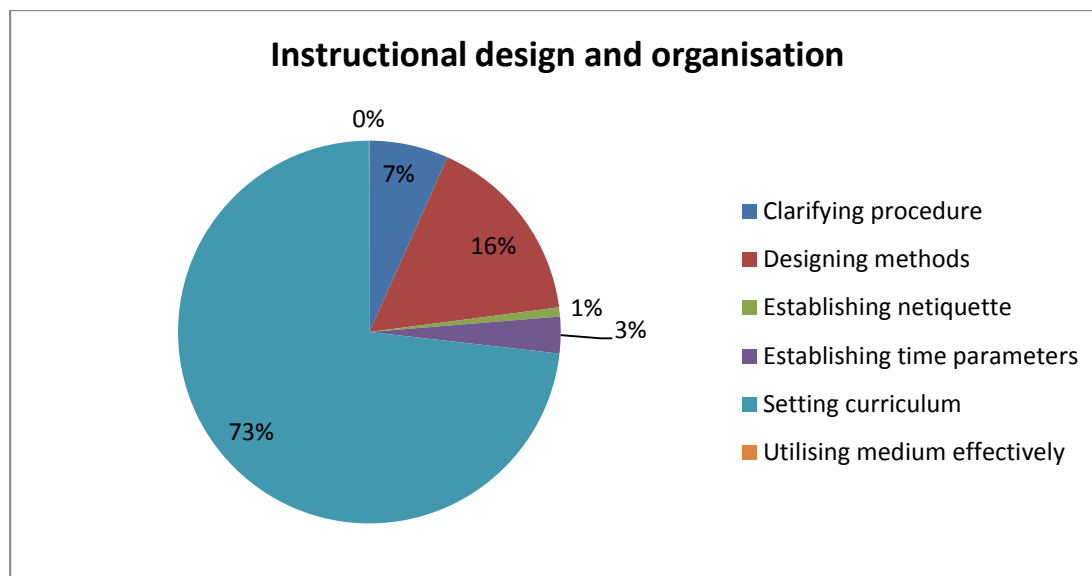


Figure 5.4: Proportions of instructional design and organisation

The setting of curriculum relates to *what* the students would learn when the course commenced whereas designing methods relates to *how* they would learn. It seems obvious that a course of study focused on the shared cognitive development of learner participants would present primarily what was to be learned with some instruction on how it should be learned. Although of importance, given the volume of words provided, the establishment of time parameters and the use of netiquette as well as instruction on effective use of the medium barely registered in Figure 5.4.

The use of netiquette was stated emphatically in the *Seminar Instructions* and within a couple of the forums, but was no more than a sentence in each:

Please make sure that you treat the views and opinions of other students with respect and consideration. (dot-point on the *Seminar Instructions* webpage)

Please keep in mind that an essential aspect of these forums is ensuring that you treat the views and opinions of other students with respect and consideration. (Azerbaijan country forum)

...however do keep in mind to keep it 'clean' (+polite) in the 'dirty' world of politics. :) (Seminar Group 3)

A whole document, *Semester Schedule*, was coded for establishing time parameters, but it comprised a table with few words. Other comments regarding time were either published on the pre-designed webpages or posted as comments to the discussion forums:

Please note that the scenario was updated. Please make sure that by the end of this week as part of online task 2 for the role play the country leader has posted a reaction to this change on the general discussion site. (posted to the country forums by the online tutor)

Students should visit the online study guide at least each week. (*Course Expectations* webpage)

Topic modules will be posted every two weeks (see semester schedule for a weekly breakdown). (*Course Expectations* webpage)

Online office hours will be every Friday morning at 11am. (*Course Expectations* webpage)

This activity will not commence until week 7 (see Course Schedule for overview of structure). (*Course Expectations* webpage)

The volume of words dedicated to teaching in the instructional design suggests a cognitive load relative to the anticipated student input and in keeping with the expectations of a second year undergraduate course of study.

In relation to instructional design and organisation, (Anderson et al., 2001) advise that students have a sense of the ‘grand design’ of the course and reassurance that participating in the learning activities will lead to attainment of their learning goals. In order to gain a sense of the grand design of an online learning environment, the teacher’s task is ‘to create a narrative path through the mediated instruction and activity set such that students are aware of the explicit and implicit learning goals and activities in which they participate’ (Anderson et al., 2001, p. 6). Macro-level comments about course process and content are thus an important motivation and orientation component of this category of teaching presence. The Course Coordinator provided a sense of grand design by reiterating the instructions and guidelines with different levels of specificity within the design of the course website. An overview of the course in general that outlined both stages of the course was given in the *Welcome* document which was the first page to appear on the screen as students entered the course website. The overview can be viewed in Figure 5.2 above.

In relation to what the students should learn in the first stage of the course, the Course Coordinator wrote instructional notes on each seminar topic that introduced set readings on each topic, and raised questions for reflection on the readings for response in the seminar discussions. This is consistent with the principles of Team

Based Learning (see 3.3.3) and the initial evocative stage of learning in a community of inquiry (see 2.2.8). In terms of how the students should learn, the instructions were outlined after a brief introduction in a document entitled *Instructions* under the *Seminar Discussion Sites* within the *Interactive Seminar* section of the website. It included comments on the use of netiquette and the establishment of time parameters:

Some points to keep in mind:

- it is expected that you will submit at least one posting per topic
- there is no need for a very formal response, a conversational style is acceptable
- no more than 3 dot points
- try to follow the discussion threads
- please make sure that you treat the views and opinions of other students with respect and consideration
- the discussion forum is an assessable component of the course

Interactive seminars for each of the topic modules will be posted on the Monday of the designated week. That Monday will also be scheduled as reading time only and no postings to the discussion forum need be made on this day. It is expected that comments posted to the discussion forum will be made by the Friday of the second week designated for the particular topic module.

The instructions were concise and clear, and were organised logically within the structure of the course website. The expectation was that students post in a concise dot-point manner, and they were encouraged to follow threads of discussion. This latter point encouraged interactivity within the seminar group on each topic but was offered more as a suggestion than as an expectation. Posting in dot-pointed text suggested a concise and formal practice that focused on the content of the response and provided relative social distance. The interactivity that was to follow may have been intended to reduce social distance and encourage greater social cohesion as students explored responses to the topics in greater depth.

In the second stage of the course, the students were reorganised into smaller groups to participate in country forums while continuing in their allocated seminar group. The allocation to a specific country forum was communicated by email and resulted in a mix of participants from various seminar groups in each country forum. Similar to the first stage of the course, the instructions for the role-play scenario were

outlined in a document entitled *Objectives* within the *Instructions* section of the *Scenario and Role Play* section of the course website. The structure of the *Scenario and Role Play* section was outlined in the document entitled *Introduction*. Again, clear and concise instructions were given in relation to expectations:

What are we trying to achieve?

This online simulation exercise has been created to link the online tasks with the main topics covered as part of this course. The scenario itself incorporates elements of ethnic conflict, nationalism, human rights concerns, and the challenge of engaging the international community in negotiation and decision making.

Each student has been assigned to one of the listed countries. Check your email to see which country you have been assigned to. You will be required to work in small groups to research the background to your country's stance on the international crisis – **Chechnya revisited: independence?** You may wish to delegate one person to act as the 'head of state' and be responsible for the sharing of information with other countries, the posting of the position statement, and negotiating and voting in the final session in week 11.

The outcome will be the formation of a draft resolution on the above question.

The outline of the simulation is as follows:

Week 7 – online task is to become familiar with the scenario and role play, to meet other members of your country team, and to start work on background research to the international crisis in Chechnya, due end week 7.

Week 8 – the online task will be to start working on your country position statement and to react to any unforeseen developments in the scenario, due end week 8.

Week 9 – the online task will be to continue working on your country position statement and again to react to any unforeseen developments in the scenario, due end week 9.

Week 10 – the online task will be to continue working on your country position statement and again to react to any unforeseen developments in the scenario, due end week 10.

Week 11 – you will now be required to post your country position statement and vote on the resolution, due end week 11.

These expectations were detailed with more specific instruction in five separate documents entitled *Online Task 1* through to *Online Task 5*, and were contained within *Online Tasks* under the *Scenario and Role Play* section of the course website. The escalating crisis to which students were expected to respond was contained in four separate documents under *Scenario* within the *Scenario and Role Play* section

of the course website. All of the *Country Profiles* and *Role Play Discussion Sites* were also included within the *Scenario and Role Play* section of the course website, along with the *Country Position Statement* submission forum. The expectations in this stage of the course were not very prescriptive in terms of how students engaged in the online discussions. The expectations referred more to the collaborative achievement of set objectives, but guidelines were outlined in the *Communications* document under *Instructions*:

Role play necessitates effective communication.

Discussions with Moderator

- The moderator can view the discussion groups, and will intervene as necessary.
- Should any problems arise, please remember that you can email the moderator at any time.

Communication within groups

- To communicate and collaborate within a group (country) a discussion forum has been created. This will allow you to share documents in draft form and determine the way your country will draft its position statement. This area is private to your country and the moderator.
- Within your group you might want to assign specific tasks to individuals and select one person to act as the 'head of state' – the individual who will post the position statement in week 11 and negotiate on behalf of the team for the final vote in week 12.

Discussions between groups

- As these discussions are part of a larger emergency forum set up by the United Nations to deal with the crisis, a general discussion group has also been set up and should be used to meet other country representatives and potentially negotiate shared positions.

As discussed, the narrative paths formed at different levels throughout the course website under logically organised sections offered the students a sense of grand design.

In Chapter 3 (see 3.3.1), it was noted that Garrison and Anderson (2003) recommend that certain considerations be addressed in the design process that contribute to a favourable social presence. These include: a feeling of trust and being welcomed; a sense of belonging to a critical community; a sense of control; a sense of accomplishment; a willingness to engage in discourse; a conversational tone; and a

questioning attitude. The course website adopted an inclusive and motivating discourse from the outset. The tone was relatively formal and authoritative (e.g. *'Students should visit the online study guide at least each week to ensure that they stay informed'*), consistent with the professional relationship between student and lecturer, yet at times more amiable and personable (e.g. *'I hope that you will enjoy the semester!'* and *'here you find each of the online tasks outlined in detail'*). The sense of belonging to a critical community was developed through the guidelines and objectives for the online seminar groups and the role-play scenario. The establishment of guidelines for the use of netiquette and the assignment of roles within the role-play scenario also provided a sense of community participation. The Course Coordinator provided the students with a sense of control by assigning them assessable group tasks and collaborative objectives that placed the onus of responsibility for learning on the students. The course was designed to be a student-centred learning environment once the course began. A questioning attitude was developed through the reflective questions asked of the readings in the seminar notes – questions such as *'Why is security of central concern to states?'* and *'Why have different understandings of identity emerged, moving away from national identity to a more global approach?'* The selection of readings, the notes written by the Course Coordinator, and the questions asked of the readings offered the students a sense that they were engaging in discourse with the Course Coordinator as much as with the other students. In fact, the first responses to the questions in the seminar groups directly addressed the Course Coordinator as the initiator of the discussion. Once some messages had been posted to the discussion forum on a topic, students could then respond to each other.

5.2 Facilitating discourse

Garrison and Anderson (2003) describe the function of instructional design and organisation as both managerial and organisational, whereas facilitating discourse is primarily a social function. The practice of facilitating discourse engages the lecturer as an active participant in the community of inquiry. The term 'discourse' is preferred by Garrison et al. to 'discussion' to highlight the focused and sustained deliberation that marks learning in a community of inquiry (Garrison et al., 2000).

The practice involves the lecturer in regularly reading and commenting on student postings, constantly searching for ways to support the development of the learning community (Garrison et al., 2000). Therefore, facilitating discourse during the course is critical to maintaining the interest, motivation, and engagement of students in active learning.

In the course under investigation, the Course Coordinator ordinarily assumed the role and responsibility of instructional designer of the online course environment, manager and facilitator of the learning process, and direct instructor and assessor of learning outcomes. This was the case during the pilot study conducted in 2005. However, due to maternity leave arrangements, the Course Coordinator employed the services of a sessional staff member to act as online tutor in the principal study in 2006. This may have influenced the extent to which the online tutor assumed responsibility for active involvement in facilitating discourse within the online learning community. As raised earlier in this chapter (see 5.1), the only formal commitment to the cohort of students was the availability of the online tutor for two hours on a Friday morning to answer questions about the course in the generic *Noticeboard and Information* forum – a consultative space. It is possible that the online tutor was paid an hourly rate to participate minimally in the online course and to assess student participation as was common practice within the university, but one comment in the *Noticeboard and Information* forum suggested that an assessor was employed to mark assignments. Introductory comments by the online tutor in the *Noticeboard and Information* forum confirm these arrangements:

[*Course Coordinator's name*] is on leave, however I (as your online tutor) will be available to help with all the queries you might have.

Please note to submit your major essay to NIHR (under [*Course Coordinator's*] name) pigeon hole or email them to [*assessor's email address*]. Thus, if you have any queries about any of the questions, please email [*assessor's name*].

If you have any queries about the feedback or grades please email [*assessor's email address*].

The online tutor's primary role was to motivate and engage students in the online tasks and to assess the online contributions to the seminar groups. The following chart shows the proportion of each indicator that I allocated to the online tutor's contributions to facilitating discourse:

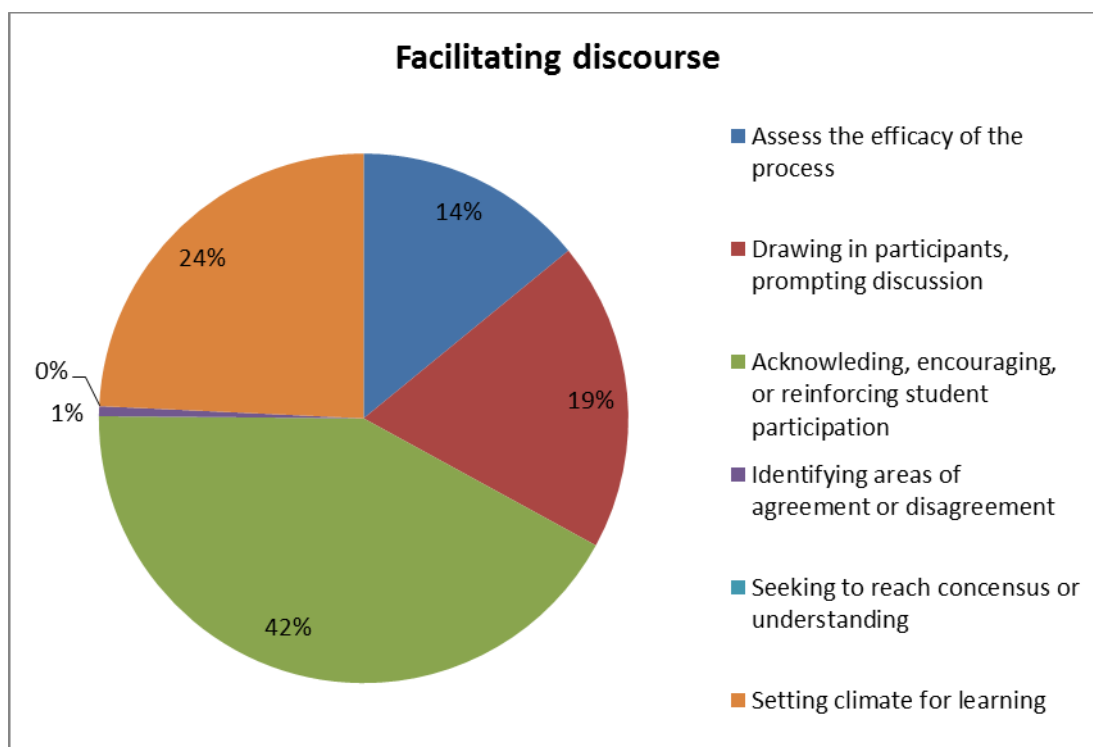


Figure 5.5: Proportions of facilitation of discourse

This figure illustrates that the online tutor primarily encouraged student participation and set the climate for learning. The more advanced roles of identifying areas of agreement or disagreement and seeking to reach consensus or understanding appear to have been largely neglected and left to students to sort things out for themselves. Closer examination below provides some evidence that the online tutor contributed regularly to the six online seminar groups in a facilitative manner.

As stated earlier in this chapter (see 5.1), the number of words contributed to the *Noticeboard and Information* forum by the online tutor totalled 2,202 out of a total of 5,015 contributed by 40 research participants to the *Noticeboard and Information* forum, an average of 122 words per participant. By comparison, the online tutor contributed 1,950 words to Seminar Group 3 and only 200 words to the country forum Turkmenistan (the highest contribution to a country forum). This provides evidence that the online tutor was highly active in contributing to the *Noticeboard and Information* forum and to the seminar group forums, but minimally to the country forums. This could be attributed to the different purposes of each forum and the fact that the seminar group contributions were assessed whereas only the final collaborative contribution to the role play scenario – the country position statements

– were assessed. Some students adopted the role of online tutor in *Noticeboard and Information* forum when the online tutor was unavailable or took time to respond:

The readings for the course are under resources and then under that, there are e-reader links. There is no reader that you have to buy. Also, I emailed [*Course Coordinator's name*] and I received an out of office reply that said that she was on leave until January 2007. I hope this is not the case. I would appreciate some clarification³.

I was just wondering if you were all aware that we should be introducing ourselves in our online groups, which can be found under the 'interactive seminars' menu option. I wasn't sure if people knew this, as it is already half way through week two and i was the only person from Group 1 to have posted anything. Anyway, just wondering...hope everyone enjoys the course.

The online tutor offered clarification in the *Information and Noticeboard* forum when students were unclear about directions, instructions or expectations and took out their frustration on the course:

Student comment: Hi everyone, I'm [*student name*] and i'm 2nd year international studies student. I as yet have not received an email regarding online groups and i think that i'm not the only one. But others seem to have so whats going on people?? I hate online courses, they're just confusing and run poorly! Hope someone can shed light on the situation.

Online Tutor response: Hi [*student name*], you are required to go through the interactive seminar notes for each week and the readings, then place your comments and/or questions in your group. Cheers [*online tutor's name*].

Garrison and Anderson (2003) regard the teacher's role as more demanding than that of other participants in the teaching and learning space, as it carries with it higher levels of responsibility for establishing and maintaining the discourse that creates and sustains social presence. Consequently, the teacher should share responsibility with each individual student for the attainment of agreed upon learning objectives. The teacher should also support and encourage participation by modelling appropriate behaviours, commenting upon, and encouraging student responses, drawing in the less active participations, and curtailing the effusive comments of those who tend to dominate the virtual space (Garrison & Anderson, 2003). This requires time and sustained effort.

Facilitation of discourse within the seminar group discussions and the country forums was minimal compared to individual student contributions. Many of the

³ I recorded the extracts as written by the research participants and did not correct errors in them.

contributions of the online tutor were general comments to praise student contributions and to introduce new topics for discussion. These were duplicated from group to group. There is some evidence of online tutor engagement with individuals but not in the sense of the sustained facilitative discourse recommended by Garrison. Seminar Group 3, as reported in the next chapter, appears to have been the most active of seminar groups, with a total contribution of 24,486 words by the 11 research participants allocated to that group. At the conclusion of Topic 3, the online tutor praised the group as the most actively engaged with the course of all of the seminar groups and encouraged participation by those who had not contributed as actively within the group. She also clarified her expectations of participation in what she referred to as a virtual classroom:

Dear all,

Again I am MORE THAN very pleasantly surprised by the effort and an excellent analysis provided by all of you (that participated in posting of topic 3 :)).

I must admit (whilst risking to potentially spoil you :)) that you are the best and the most interactive group in the entire *[COURSE CODE]* UNIVERSE. So do shout each other beer when you meet :).

Nevertheless, by 'writing this' I would still like to urge those that do not interact to do so. Answer you colleagues questions! You would do this if we were in a classroom setting, so there should be no difference between that space and this of a 'virtual classroom'.

The country forum Turkmenistan was the most active in the role-play scenario with 115 posts amongst 4 research participants which amounted to 14,776 words. The online tutor again made a similar comment, parts of which seem to have been copied and pasted:

Dear all,

I just wanted to note that I am MORE THAN very pleasantly surprised by the effort, research and an excellent analysis provided by all of you (that participated in these delegation processes so far :)).

I must admit (whilst risking to potentially spoil you, and I have done it before in the seminar discussion groups :)) that you are one of the best and the most interactive group in the entire *[COURSE CODE]* UNIVERSE (the role play galaxy).

For those members that are a bit shy to interact I would like to urge to start doing so.

Keep up the excellent work!

Garrison and his team (Anderson et al., 2001; Garrison & Anderson, 2003) provide examples of how the facilitation of discourse might occur. As discussed in Chapter 2 (see 2.2.2), from a Piagetian perspective, cognitive development requires that individuals encounter others who contradict their own intuitively derived ideas and notions, and thereby create cognitive conflicts. It is the resolution of these conflicts that results in higher forms of reasoning. Thus, teachers may be required to help students find congruent linkages when two seemingly contrary opinions are being expressed. Similarly, helping students articulate consensus and shared understanding, when these are already implicit in the discussion, is also useful (Garrison & Anderson, 2003).

There is evidence of the online tutor assisting students to articulate consensus and helping students find congruent linkages when two seemingly contrary opinions were being expressed. The online tutor encouraged discussion amongst students which resulted in disagreement with her own views. After a particularly long response, more than 1,000 words, by one of the students participating in the debate, the tutor's next post was a general comment to the group in capitalised letters to keep messages concise. So what seemed like facilitative discourse resulted in a general reprimand that might have stifled discussion rather than encourage it.

excellent discussion so far...keep up the interaction and enthusiasm...p.s. I am glad that the middle ground on 'multiculturalism' vs. 'assimilation' debate was reached :)...However, do keep in mind... Now I am interested in 'hearing' about some of the factors that HAVE impacted on (particularly) London bombing (in terms of identity, belonging and nationalism)? Any takers?

PLEASE KEEP YOUR POSTINGS MORE CONCISE! Thank you :)

Finally, according to Garrison and Anderson (2003), the teacher's facilitation tasks include assessing the efficacy of the process. Computer conferencing has become associated with large time commitments from teachers and students. Thus, Garrison and his team (Anderson et al., 2001) have developed an indicator for when the teacher is 'moving the discussion along' and ensuring effective and efficient use of

time. One comment was published on the seminar *Instructions* webpage that related to using the medium effectively:

It is hoped that this will make the discussion a little more manageable.

This comment referred to the organisation of students into groups of manageable size to enable effective interaction and discussion.

5.3 Direct instruction

Direct instruction provides the pedagogical, intellectual, and technical support for learners. Lecturers should provide intellectual and scholarly leadership, and share their subject matter knowledge with students (Garrison & Anderson, 2003). Davies (2006) writes that the instructor must be able to set and communicate the intellectual climate of the course or seminar, and model the qualities of a scholar. The students and the lecturer have expectations of the lecturer communicating content knowledge that is enhanced by the lecturer's personal interest, excitement, and in-depth understanding of the content (Garrison & Anderson, 2003). The cognitive apprenticeship model espoused by Brown, Collins and Duguid (1989) and Lave and Wenger (1991), Rogoff's (1994) model of apprenticeship in thinking or Vygotsky's (1978) scaffolding analogies (see 2.2.3 and 2.2.4) illustrate an assistive role for teachers in providing instructional support to students from their position of greater content knowledge (Garrison & Anderson, 2003). Although many authors advocating student-centred learning recommend a 'guide on the side' approach to moderating student discussions, this type of *laissez-faire* approach (see 3.3.3) misinterprets a fundamental element of peer collaboration models. A key feature of such social cognition models is the adult, the expert, or the more skilled peer who scaffolds a novice's learning (Garrison & Anderson, 2003).

The chart on the following page illustrates what aspects of direct instruction were significant.

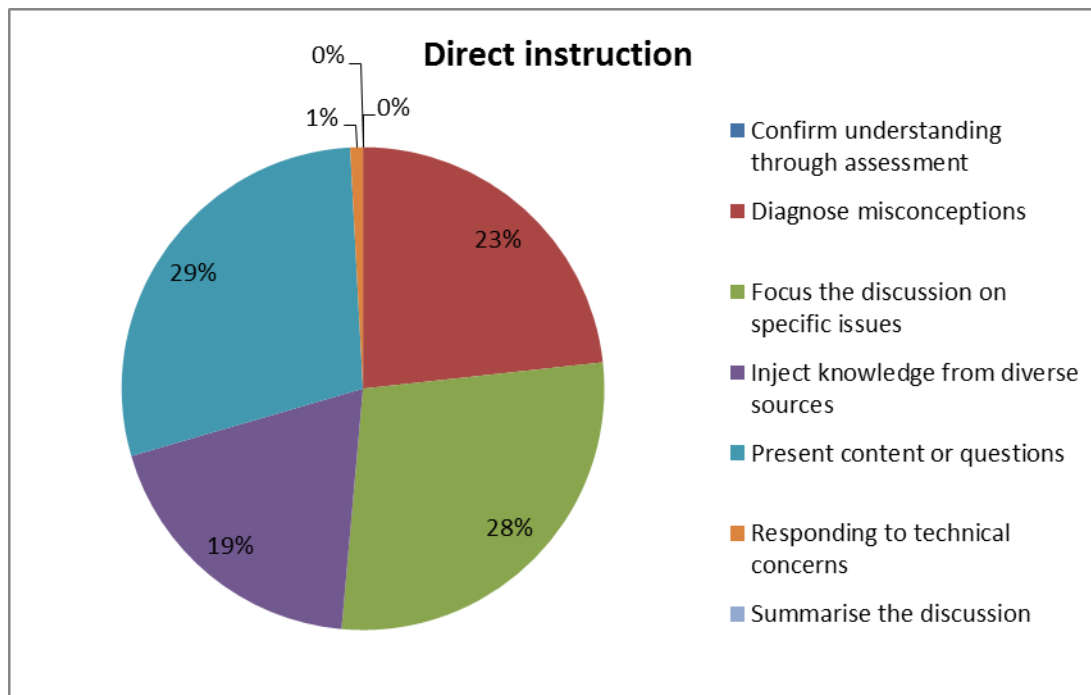


Figure 5.6: Proportions of direct instruction

The online tutor primarily diagnosed misconceptions, focused discussion on specific issues, injected knowledge from diverse sources, and presented content and questions. The online tutor's role was not to confirm students' understanding through assessment. Formal assessment was given in the form of a case study, an essay, and the country position statements. Assessable feedback was not provided in the online course environment. Responding to technical concerns was minor since few technical concerns arose. The online tutor did not summarise the discussion in any explicit or formal sense. This was left to a debrief session on the role-play scenario once the course had finished.

Although her views were challenged by students in Seminar Group 3, evidence suggests that she was respected as a content knowledge expert by participants in the group. One student made reference to the online tutor's PhD thesis to which the online tutor responded by encouraging the group to read it as it related to the topic under discussion:

Thank you [*student name*] for putting me on the spot :).

Anyway, I suggest my thesis as a useful additional reference. It explores the possibility for universal human rights, whilst at the same time criticising both culturally relativist and (the currently in place) universalist discourses as these two have (I argue) the most detrimental consequences on women's rights.

I enjoyed writing this thesis I hope that you will enjoy reading it (if you do at all :)).

Presentation of content and directing questions to the group or to individual students is an important, traditional role for the teacher. Teachers also provide focus to the discussion by directing attention to particular concepts or information that is necessary to frame or pursue knowledge growth. A widely documented problem in computer conferencing is the difficulty of focusing and refining discussions so that conversation progresses beyond information sharing to knowledge construction, and especially application and integration. Garrison and Anderson (2003) argue that this stalling of the discussion at the lower levels of the critical inquiry process occurs when there is inadequate teaching presence in the online discussion. The teacher's summary of knowledge growth also should not simply be a neutral 'weaving' of the previous postings, but should serve to develop and explicitly delineate the context in which knowledge growth has taken place (Garrison & Anderson, 2003).

Examples of the online tutor presenting content and directing questions to the group to provide focus to the discussion and frame knowledge growth include the following:

I am looking forward to your brainstorming on the issues in the context of: (1) Minority rights (particularly useful for your upcoming Case Study) and; (2) The movement of people across borders and the notion of forced migration.

In the final chapter of 'our journey' we approach the topic of global challenges. I am looking forward to your reflections on questions including: Has our understanding of the term 'security' changed in recent times? Why is it then that governments seem unable to win the fight against transnational threats? Can we have 'global governors'? Who should this be? On the basis of which values should global governance be enforced? Is cosmopolitanism possible? Have we reached the cosmopolitan stage?

Any suggestions on how to combat 'the compassion fatigue'? Or do we just recongise its existence and are comfortable with it?

Now I am interested in 'hearing' about some of the factors that HAVE impacted on (particularly) London bombing (in terms of identity, belonging and nationalism)? Any takers?

Direct instruction also takes the form of statements that confirm understanding through assessment and explanatory feedback. Assessing student comments is time consuming and requires higher levels of knowledge than that commonly held by

student participants. Often a small component of the formal course assessment relates to student participation in the web forum, but in addition informal and timely teacher assessment and feedback is especially useful, and often valued by students (Garrison & Anderson, 2003). The online tutor formally assessed the contributions of students to the seminar groups but the criteria for assessment were not made available to me nor clarification offered as to whether individual feedback was given to students. There is evidence that the online tutor provided some informal assessment and feedback in the seminar groups:

Hi [*student name*], I would just like to note that there is also another side to your argument, especially in the Human Rights Debate. Afterall , the entire idea of discussing human rights should be based on the premise of enhancing our humanity.

Diagnosing misconceptions is another critical task of the online tutor. Often students hold misconceptions that impair their capacity to build more correct conceptions and mental schemata. The design of effective learning activities leads to opportunities for students themselves to uncover these misconceptions, but the tutor's comments and questions as direct instruction are also invaluable (Garrison & Anderson, 2003). The following illustrate some of the misconceptions addressed by the tutor, as knowledge expert, in this online course:

Hi [*student name*], Just note that there are both negative and positive types of nationalism. And some theorists would argue that Nazi-regime was not a product of nationalism but of fascism.

Hi [*student name*], I would just like to highlight that, although tolerant and indeed with a helping hand to our fellow neighbours in the times of crises. There is also another side to your argument (especially in regards to Australian Indigenous people and asylum seekers) in the Human Rights Debate.

Hi [*student name*], You have raised an interesting but also quite a contraversial point in your post. Thus I would just like to note that in order to critically analyse concepts like that of global justice you could argue that Milosevic's arrest served justice, but not global justice. In fact, considering the nature of the conflict it can be argued that global justice for the victims of the war in former Yugoslavia can only be achieved if its 'global reach' was to bring justice to all three sides that have 'lost their loved ones' in the conflict.

[*Student name*] I will have to disagree with you on the point that 'the soviet union was successful in its assimilation of a wide number of ethnic minorities into the one national culture'. If this was the case then we would not see an explosion in nationalistic identities after its collapse.

I happen to disagree with you [*student name*]. Yugoslavia as a project from its early days as the ‘Kingdom of Serbs Croats and Slovenians’ to its last reunion attempt was not to prosper under assimilationist ideal; and this was (unfortunately) supported by its collapse in the 1990s. One of the reasons why this is, I mentioned in my reply to [*student name*’s] post.

Online tutors should also be familiar with a wealth of resources to which they can refer students for further individual or group study. Many authors point out that the number, quality, and accessibility of these resources are increasing exponentially as more information is digitised and made available via the World Wide Web (Garrison & Anderson, 2003). The online tutor offered such resources on three occasions:

For additional readings on the theme please consider consulting: [*list provided of online and hard copy resources*]

Thank you [*student name*] for putting me on the spot :). Anyway, I suggest my thesis as a useful additional reference. It explores the possibility for universal human rights, whilst at the same time criticising both culturally relativist and (the currently in place) universalist discourses as these two have (I argue) the most detrimental consequences on women’s rights. I enjoyed writing this thesis I hope that you will enjoy reading it (if you do at all :)).

If you are interested in exploring this other perspective please consider consulting the following (the readings also include the ones on our treatment of Indigenous Australians): [*list provided*]

Finally, the tutor may be asked to provide direct instruction on technical questions related to access to the web forum system, manipulation of the web forum software, operation of other tools or resources provided by the LMS, and the technical aspects of dealing with any of the subject related tools and techniques (Garrison & Anderson, 2003). The online tutor addressed a couple of technical concerns in the *Noticeboard and Information* forum regarding access to resources:

All fixed. Try now.

You should be able to access it now.

The major component of instruction for the course was included in the pre-designed online materials that students worked through as the course progressed. The online tutor offered a supporting role to encourage and guide the students through the materials, and also provided clarification of tasks, due dates, and expectations when required.

This chapter has introduced the organisation and structure of the online course, and the characteristics of the learning environment. The role of the Course Coordinator in providing purposeful instructional resources and tasks has been analysed and discussed. The role of the online tutor in facilitating discourse and in providing direct instruction as necessary has also been analysed and discussed. Overall, the instructional contribution to the course was 88 per cent dedicated to instructional design and organisation, but only eight per cent to facilitation of discourse and four per cent to direct instruction. This could be perceived as reflecting the student-centred intent of the course in that, once the course was prepared, student contribution was of primary importance. It also relates to the availability of the online tutor to the students in the course as alluded to in the introduction to this chapter.

The next chapter focuses on student participation in the course environment. It begins with the analysis of web data logs to understand student activity within the learning environment, and then proceeds to a content analysis of cognitive and social presence to understand the nature of the activity. The chapter concludes with the analysis of online survey results to understand the attitudes of students towards aspects of the course.

Chapter 6

Analyses of learning activity and participant attitudes

The previous chapter described the online course and analysed data relevant to teaching presence in the Community of Inquiry model developed by Garrison and his team (2000). The focus of this chapter is the analysis of data associated with cognitive and social presence using the Community of Inquiry model. Student attitudes relevant to teaching presence are also covered in the last section of the chapter where the results of the analysis of the survey data are reported. Student participation in the course, both group and individual, is considered by examining mainly quantitative or quantised data sources (see 4.1.3). The chapter begins with the web data logs that provided an indication of group and individual student activity within the various stages and components of the course. It then presents the group and individual data from the content analysis of web forum transcripts of student interaction to highlight the learners' cognitive and social patterns as they participated in the course. The chapter concludes with the analysis of the group and individual survey responses that provide attitudinal information about the course.

6.1 Overview of selected research participants

In Chapter 4 (see 4.2.3), the process of how groups and individuals were selected for the research was explained. The students were allocated by the Course Coordinator to seminar groups and to country forums. The following table provides an overview of the groups to which selected individual student participants were allocated. Students were able to view messages in all forums, but could only post to the seminar group and country forum to which they were allocated. Any student could post to the *Noticeboard and Information* forum but only those nominated as country leaders by their country groups could post to the *All Countries* forum and the *Country Position Statement* (CPS) forum. Table 6.1.1 provides an overview of

membership and activity of the selected research participants. ‘View’ in Table 6.1.1 below indicates that only selected participants viewed messages in the forum, while ‘view & post’ indicates that selected participants viewed and posted messages to the forum. All of the selected participants both viewed and posted to their allocated seminar group and country forum.

Table 6.1.1: Selected participants and their allocated groups

Participant	Seminar group	Country forum	All countries forum	CPS	Noticeboard and information
P1	1	Azerbaijan	view	view	view & post
P5	2	France	view	view	view
P11	2	Georgia	view	view	view & post
P17	1	Italy	view	view	view
P18	2	Kazakhstan	view	view	view
P19	3	Kazakhstan	view & post	view & post	view
P25	2	Turkey	view	view	view & post
P28	2	Turkmenistan	view	view	view & post
P29	2	Turkmenistan	view	view	view
P30	3	Turkmenistan	view & post	view & post	view & post
P36	3	USA	view	view	view

6.2 The web data logs

Web data logs were a record of student activity within the course environment. They provided an indication of the extent to which group and individual participation were active or passive. Each time a message was clicked on by a student (viewed), or each time a message was posted, a record of the time, date, forum title, and message content was recorded in the data logs. Web data logs recorded participant views of and posts to seminar group (SG) discussions, country forums (CF), and the *Noticeboard and Information* forum in the online course. Section A of the table on the following page presents the number of messages viewed in each seminar group by all research participants in that group. Section B of the table presents the number of messages viewed by each of the selected research participants.

Table 6.2.1: Viewed messages in seminar group discussions

Section A: Groups										
	Intro	T1	T2	T3	T4	T5	T6	OTC	Total views	Mean views
SG1 (n=11)	255	331	189	208	217	223	136	125	1,684	211
SG2 (n=12)	291	455	285	365	311	370	241	175	2,493	312
SG3 (n=11)	260	476	552	701	394	394	148	209	3,134	392
Section B: Individual participants										
	Intro	T1	T2	T3	T4	T5	T6	OTC	Total views	Mean views
P1	48	54	27	28	34	36	19	19	265	33
P5	39	32	40	20	31	29	17	15	223	28
P11	12	31	20	73	61	31	37	29	294	37
P17	16	27	22	30	24	26	19	10	174	22
P18	10	21	6	36	17	17	26	9	142	18
P19	11	28	49	40	42	22	15	27	234	29
P25	30	66	2	45	30	19	3	12	207	26
P28	29	52	18	7	13	32	7	8	166	21
P29	60	46	45	14	43	34	36	15	293	37
P30	60	88	219	196	81	111	21	35	811	101
P36	4	5	8	2	9	0	0	9	37	5

SG1, SG2, and SG3 show the combined number of messages viewed by the research participants within their respective seminar groups for each of the introduction and six seminar topics presented throughout the course. It also shows the number of online tutor comments (OTC) viewed, and the total and average number of views by research participants in each seminar group. P1–P36 shows the number of messages viewed by each of the selected participants. The table indicates that Seminar Group 3 had the greatest viewing activity and Seminar Group 1 the least. It also indicates that participant 30 had the greatest viewing activity and participant 36 the least. Both of these participants belonged to Seminar Group 3. Table 6.2.2 on the following page compares the average viewing activity in the first three topics and the last three topics of the course.

Table 6.2.2: Comparison of viewed messages at the beginning and end of the course

Section A: Groups			
	Mean T1-T3	Mean T4-T6	Difference
SG1	243	192	-51
SG2	368	307	-61
SG3	576	312	-264
Section B: Individual participants			
	Mean T1-T3	Mean T4-T6	Difference
P1	36	30	-6
P5	31	26	-5
P11	41	43	+2
P17	26	23	-3
P18	21	20	-1
P19	39	26	-13
P25	38	17	-21
P28	26	17	-9
P29	35	38	+3
P30	168	71	-97
P36	5	3	-2

The table shows a decline in viewing activity in all three seminar groups in the second half of the course. This probably occurred because the role-play scenario commenced during Topic 4 which meant that students had to distribute their time between the readings, tasks, and contributions of the on-going seminar discussion topics, and the relatively intense problem-solving task of the escalating international conflict in the role-play scenario. Most of the selected participants also decreased their viewing activity in the second part of the course, apart from participants 11 and 29. The change in viewing activity was most significant for Seminar Group 3 and participants 30 and 25. Possible reasons are explored in the next two chapters.

It was common practice, as recorded by the web data logs, that students would click on the same message heading more than once in a session. This inflated the number of views of a single message by a single participant. It is not clear whether students simply viewed the message or read the message. Even if they read it, there is no indication of what action was taken based on the reading unless a response was posted to the message by the participant. Nevertheless, the web data logs provide a

measure of activity within the course and locate areas of activeness and passiveness, despite the relative crudeness of the measure. By comparison, the number of messages posted provides a more precise measure of activity since the posting of a message is a more deliberate act, and each message was posted only once by each participant. But, again, some messages were relatively meaningless compared to others. For example, many of the messages posted and viewed within the country forum France related to the arrangement of a face-to-face meeting to circumvent the online processes. Another message was a simple ‘probably hahaha’, but others were much longer and directly relevant to learning. The table below shows the number of messages posted to each of three seminar groups by research participants for each seminar topic.

Table 6.2.3: Posted messages to seminar groups

Section A: Groups								
	Intro	T1	T2	T3	T4	T5	T6	Total posts
SG1 (n=11)	11	10	8	10	12	11	7	69
SG2 (n=12)	10	15	11	16	10	20	15	97
SG3 (n=11)	5	16	17	23	8	17	7	93
Section B: Individual participants								
	Intro	T1	T2	T3	T4	T5	T6	Total posts
P1	1	1	1	2	3	0	1	9
P5	1	1	1	1	1	1	1	7
P11	1	1	1	1	1	1	1	7
P17	1	1	1	1	2	1	1	8
P18	1	2	0	2	1	3	4	13
P19	0	2	1	1	1	1	1	7
P25	1	1	0	1	0	1	0	4
P28	1	3	1	1	1	1	1	9
P29	2	1	2	0	1	1	2	9
P30	1	1	5	4	1	1	2	15
P36	0	1	1	0	0	0	0	2

The table shows that Seminar Group 2 was most consistently active in posting messages per topic, but that Seminar Group 3 averaged the most posts per participant, and that Seminar Group 1 was the least active. Participants 18 and 30 were most active in posting messages while participant 36 was least active. Participant 18 belonged to Seminar Group 2, while participants 30 and 36 belonged to Seminar Group 3. Students were instructed to post only one message per topic throughout the course, but they could also interact and respond to the messages of others (see 5.1). In the table above, a posted message could be in direct response to the questions asked of the lecturer in relation to the readings for each topic or it could be a response to another student's message. If more than one posted message was recorded for a topic, it was most often an indication of the student responding to other students' messages.

Time was an important factor in posting messages and responding to the messages of other students. The seminar group discussions were organised into fortnightly topics for the duration of the online course which gave students time to read the online topic notes, read through the set readings, reflect on the questions, read the responses posted by other students, and then formulate an individual response as a contribution to the topic. If time permitted, students were then obliged to respond to the messages of other students. The figure on the following page maps the patterns of activity for each topic over a period of two weeks. The data were derived from the web data logs and from the *Course Schedule* in the online course materials.

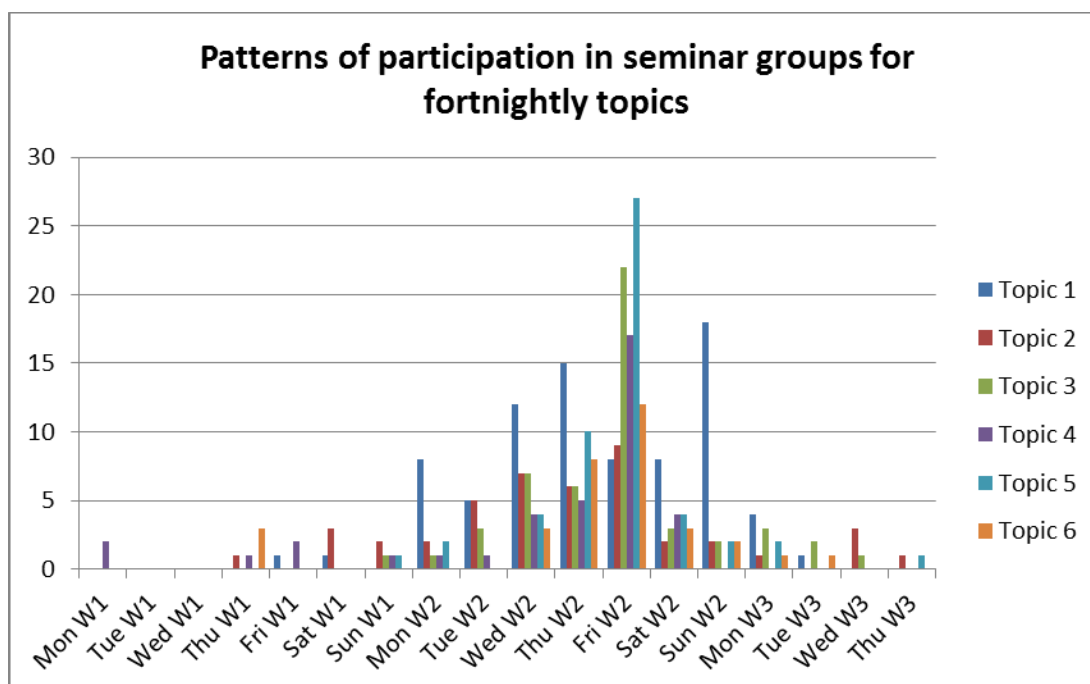


Figure 6.1: Patterns of participation in seminar groups for fortnightly topics

Contributions for each topic began on the Monday of the first week of the two-week period and were to be finalised by Friday of the second week. W1-W3 indicate the number of the week for a topic, where W1 is the week of the commencement of the topic and W3 is the week following the finalisation of the topic. W3 was included because some posts extended beyond the two week period of a topic. One post was made to topic five on the Wednesday prior to the commencement of the topic, but this was not included in the figure. Topic one includes the introductory statements posted by students at the commencement of the course.

Figure 6.1 shows that the posts for topic one gradually increased during the second week with most posts occurring on the Sunday two days after the final day that contributions were due. Initial activity included students introducing themselves to other participants while the flurry of posts on the Sunday specifically addressed the first topic. Apart from topic one, the greatest number of posts for the remaining five topics fell on the Friday in the second week when they were due with some build up in the two days prior. So despite being an asynchronous threaded discussion that allowed flexibility of time for reflection, posts, and responses, students followed patterns of participation that aligned to pedagogical expectations. The task required that students read the set readings and study notes in the first week of a topic, and

then respond to the set questions about the readings in the second week of a topic prior to finalisation on the Friday of the second week of the topic. A new topic commenced on the Monday of the following week. No activity occurred in the seminar groups during the two week mid-semester break.

The table on the following page shows the total number of messages viewed by research participants in the selected country forums in the role-play scenario as well as those for the selected individual participants.

Table 6.2.4: Viewed messages in country forums**Section A: Groups**

	RPS	OTC	Total views	ACF	OTC	Total views	CPS	OTC	Total views
Azerbaijan (n=2)	239	11	250	168	3	171	22	2	24
France (n=2)	312	6	318	54	2	56	34	2	36
Georgia (n=3)	350	17	367	177	8	185	27	3	30
Italy (n=1)	530	3	533	77	2	79	14	0	14
Kazakhstan (n=4)	469	11	480	289	10	299	55	1	56
Turkey (n=3)	541	12	553	239	5	244	44	1	45
Turkmenistan (n=4)	2,449	15	2,464	678	14	692	110	3	113
USA (n=4)	398	9	407	251	9	260	49	1	50

Section B: Individual participants

	RPS	OTC	Total views	ACF	OTC	Total views	CPS	OTC	Total views
P1	165	7	172	54	1	55	7	1	8
P5	184	4	188	35	2	37	29	2	31
P11	127	6	133	63	3	66	14	2	16
P17	530	3	533	77	2	79	14	0	14
P18	106	2	108	20	2	22	23	0	23
P19	142	4	146	111	4	115	10	0	10
P25	315	7	322	230	5	235	21	0	21
P28	94	2	96	21	1	22	1	0	1
P29	450	8	458	132	3	135	34	1	35
P30	883	8	891	276	5	281	33	2	35
P36	34	1	35	17	2	19	0	0	0

The table shows the total number of messages viewed by research participants in the selected country forums for the role-play scenario (RPS) and for the online tutor contributions (OTC) to the role-play scenario. The country forum Turkmenistan was the most active country forum in terms of messages viewed. Again, participant 30 was the most active viewer, and participants 28 and 36 were the least active viewers.

Participants 28 and 30 belonged to the country forum Turkmenistan while participant 36 belonged to the country forum USA. The following table indicates the number of messages posted to the country forums.

Table 6.2.5: Messages posted to country forums

Section A: Groups			
	RPS	ACF	CPS
Azerbaijan (n=2)	21	-	-
France (n=2)	16	-	-
Georgia (n=3)	25	-	-
Italy (n=1)	39	-	-
Kazakhstan (n=4)	47	-	-
Turkey (n=3)	33	-	-
Turkmenistan (n=4)	115	-	-
USA (n=4)	32	-	-
Section B: Individual participants			
	RPS	ACF	CPS
P1	15	-	-
P5	12	-	-
P11	7	-	-
P17	39	-	-
P18	11	-	-
P19	12	4	1
P25	16	-	-
P28	5	-	-
P29	20	-	-
P30	43	3	1
P36	7	-	-

The table shows that the country forum Turkmenistan was the most active in terms of messages posted while France was the least active. Italy, however, had the highest average of messages posted per participant (39 messages per participant) with Turkmenistan not far behind (29 messages per participant). France, Georgia, and the

USA share the position of lowest average of messages posted per participant. The individuals with the highest post rates were participants 30 and 17; participant 17 was the only research participant in the country forum Italy. The least active contributors were participants 28, 11, and 36 from Turkmenistan, Georgia, and the USA respectively.

The role-play scenario ran concurrently with the final three seminar group discussions. The introductory elements of the role-play – including familiarisation with the country to which one was allocated; familiarisation with other group members; allocation of roles such as country leader, and; familiarisation with the international conflict, and the requirements of the role-play activity – occurred in the two weeks prior to the mid-semester break, and to a limited degree during the mid-semester break. The problem-solving activity required of country teams during the escalation of conflict from week three to five demanded constant attention from students and regular communication between team members to produce the resolution statement required of each team by week 6.

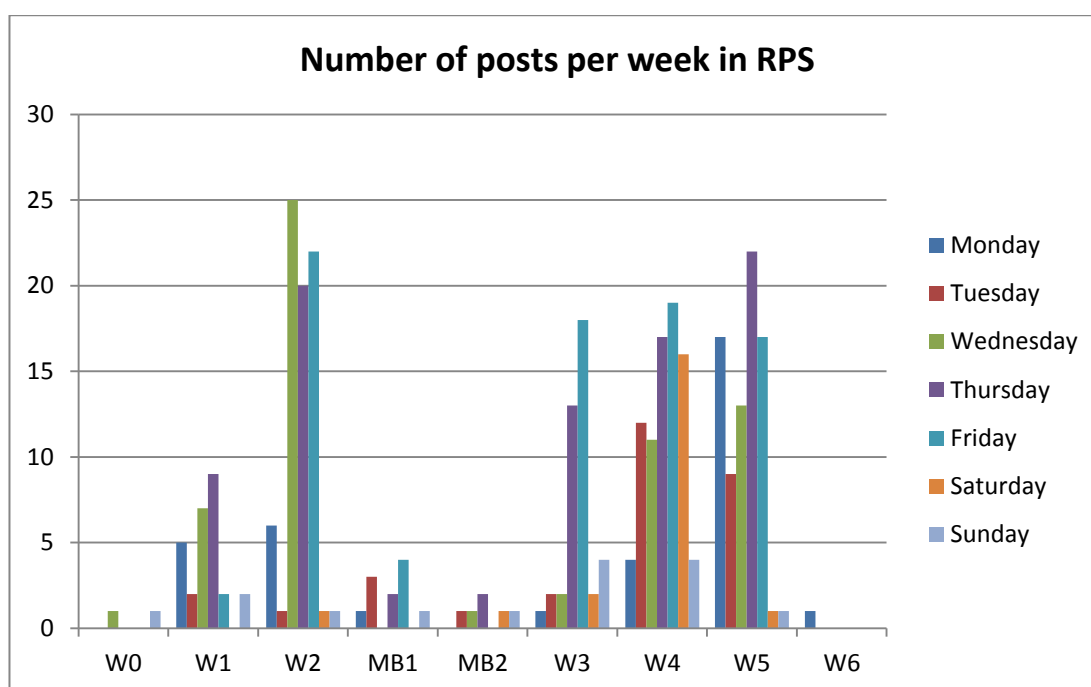


Figure 6.2: Patterns of participation in the role-play scenario

Figure 6.2 shows patterns of participation over time for the selected country forums in the study including only research participants and not total numbers of students in

each forum. W0 represents the week prior to the commencement of the role-play scenario. In W1 students introduced themselves and appointed a team leader. W6 represents the week following the end of the role-play scenario. The country position statement for each country forum was due Friday evening of W5. MB1 and MB2 represent the two weeks of the mid-semester break.

The figure shows that most activity occurred in weeks two, three, four, and five of the role play. Each country forum varied in the number of posts each week. Italy, Kazakhstan, and Turkmenistan were most active (see Table 6.2.5). Italy had only one research participant compared to the four in Turkmenistan (see Table 6.2.5). P17, who represented Italy in this study, posted 19 messages on Wednesday of Week 2 of the role-play scenario and 15 messages in the final week, but little else in any of the other weeks. Turkmenistan posted most messages in weeks two, four, and five with a concentration of 25 posts over two days in week 2. Kazakhstan, like the remaining groups, had a spread of posts over the five weeks of the role play but a concentration on Saturday of Week 4, with 11 messages posted, and over the fifth week, 12. Concentrations of activity could account for organised online meetings within teams. Figure 6.2 shows days of the week in the legend rather than country forums because the frequency of posts in this forum compared to the frequency of posts in the seminar groups is important to the discussion of findings in later chapters.

The figure on the following page displays the number of words produced by each selected research participant compared to the mean number of words produced by the seminar groups to which they were appointed. The figure shows P1, P11, P19, and P30 to be the most productive in their respective seminar groups, and P18, P25, P29, and P36 to be the least productive.

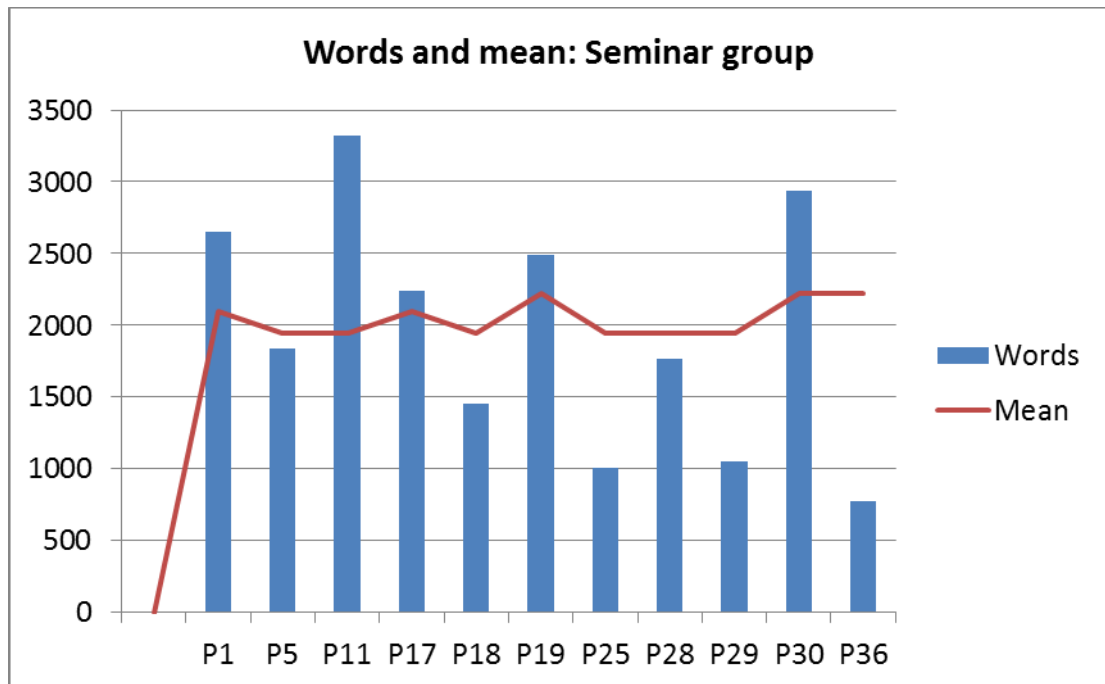


Figure 6.3: Comparison of the number of words produced by individuals compared to the mean number of words produced in their allocated seminar group

The figure on the following page displays the number of words produced by each selected research participant compared to the mean number of words produced by the country forums to which they were appointed. The figure shows P25 and P30 to be the most productive in their respective country forums, and P11, P18, P28, P29, and P36 to be the least productive.

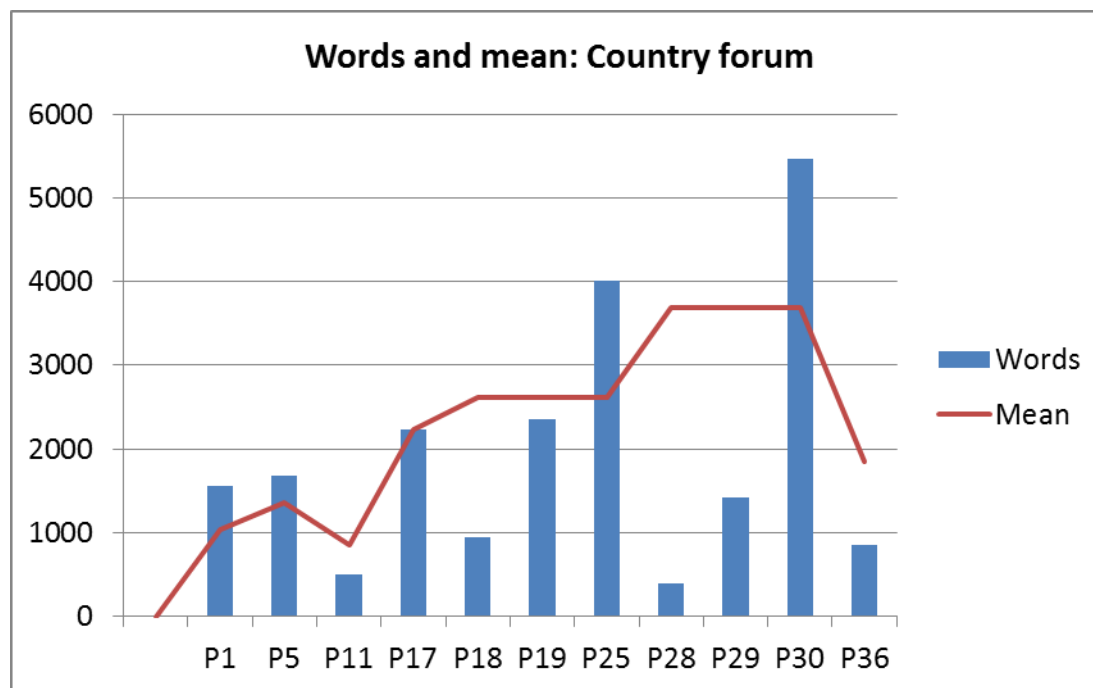


Figure 6.4: Comparison of the number of words produced by individuals compared to the mean number of words produced in their allocated country forum

The figure on the following page displays the total number of words produced by each selected research participant compared to the mean number of words combined from seminar groups and the country forums to which each was appointed to provide an overall picture of productivity. The figure shows P30 to be the most productive of all the selected research participants, and P36 to be the least productive.

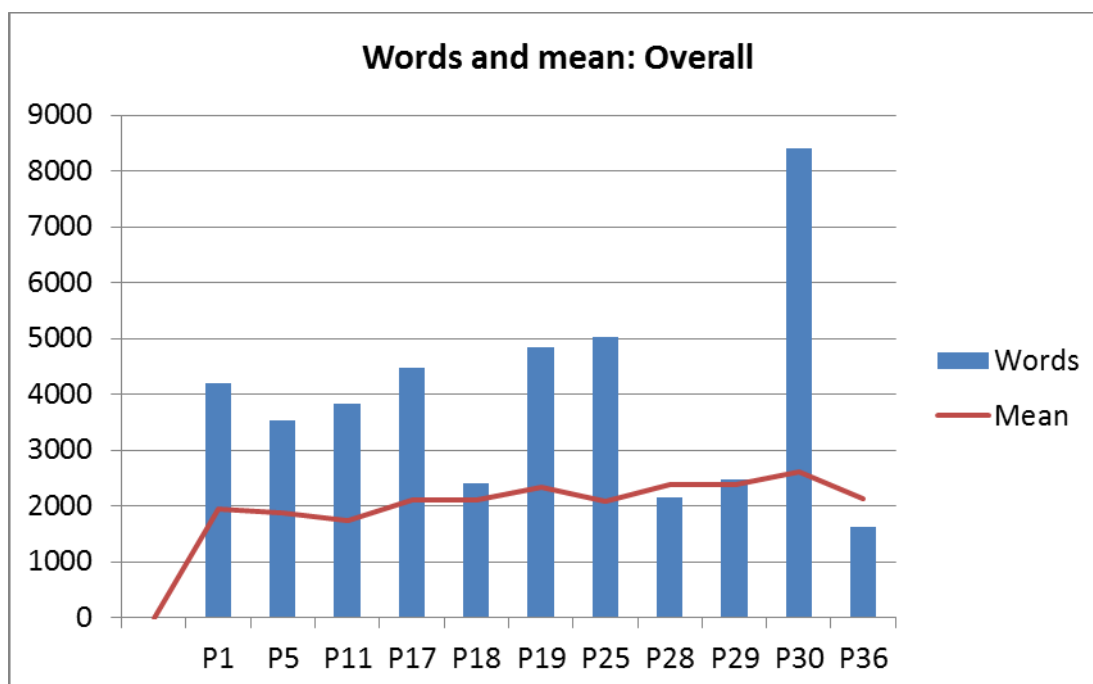


Figure 6.5: Comparison of the number of words produced by individuals compared to the mean number of words produced in their allocated groups overall

When the messages posted and viewed were examined together they provided an overall indication of how active selected individual participants were in the online environment, and where individual and group activity was focused. However, they do not indicate the precise nature of the activity. The content analysis that follows identifies the type of activity undertaken by groups and individuals, and is discussed in the next section.

6.3 Content analysis

The content analysis involved the application of indicators developed by Garrison and his team (see Appendix C) using the units of measurement selected for coding (see 4.3.3) within the web forum transcripts. The coding and analysis were performed using QSR nVivo software to identify the nature and relative importance of categories of cognitive and social presence in student online interactions and collaborations. This was conducted in similar fashion to the indicators applied to the instructional materials and the tutor contributions to the web forum transcripts to identify the nature and relative importance of categories of teaching presence

presented in Chapter 5. An aggregate unit was devised for analysis of cognitive and social presence to represent the addition of the percentages⁴ reported using nVivo software for each indicator within each category of cognitive and social presence. The addition of percentages is normally meaningless but, in this case, the aggregation is meaningful because it allowed the overlap of units of analysis to provide a measurement greater than 100 per cent to show the relative importance or otherwise of a particular category for a specific group or individual participant. In other words, some of the words coded for one indicator might also have been coded for another (see 4.3.3). However, the aggregate units could not be compared from one group to another or from one participant to another because groups consisted of different numbers of individual participants, and both groups and participants produced varying numbers of words. Therefore the aggregate unit represented the relative importance of a particular indicator of cognitive or social presence to a group or an individual but could not be directly compared with the aggregate units of other groups or individuals. The purpose for recording the results in this way was to identify which indicators and categories were of importance to an individual in relation to other indicators and categories for the same individual. The patterns of individual preference or activity could be compared to patterns for other individuals and within the group to which the individual belonged. This section presents the results of the coding based on the categories and indicators for each of cognitive and social presence. Indicators are listed as I1, I2, and so on, in each of the tables with a list of what the indicators represent beneath each table.

6.3.1 Cognitive presence

Cognitive presence comprises four categories within inquiry-based stages of cognitive development: evocative cognitive presence is represented at the first stage by a triggering event; inquisitive cognitive presence is represented at the second stage by exploration; tentative cognitive presence is represented at the third stage by integration; and committed cognitive presence is represented at the fourth stage by resolution. Each category has its own indicators for the coding of text within the

⁴ The numbers recorded for indicators and aggregate units in the tables in the content analysis section represent percentages even though the % symbol was not used. The percentages reported by QSR nVivo software included two decimal places. When imported into a spreadsheet, they were rounded to nearest percentage as decimal places were regarded as relatively meaningless. This accounts for instances, as for SG2 in Table 6.3.7, where I1=1 and I2=1 but the aggregate unit is recorded as 3. The actual figures are I1=1.14 and I2=1.38 and aggregate unit is 2.52.

transcripts (see Appendix C). The following tables show the text coverage as a percentage of the total word count in each transcript as reported by QSR nVivo qualitative research software. The tables display the aggregate units for categories of cognitive presence which were calculated as the sum of the indicators in each row. Table 6.13 shows evidence of evocative cognitive presence for seminar groups, and for individual research participants.

Table 6.3.1: Evocative cognitive presence (triggering event) in seminar groups

Section A: Groups

	Total words	I1	I2	Aggregate unit
SG1 (n=11)	23,111	7	3	10
SG2 (n=12)	23,389	1	1	3
SG3 (n=11)	24,486	1	1	2

Section B: Individuals

	Total words	I1	I2	Aggregate unit
P1	2,650	6	0	6
P5	1,839	3	5	8
P11	3,324	5	0	5
P17	2,238	14	4	18
P18	1,450	0	0	0
P19	2,493	0	0	0
P25	1,007	0	2	2
P28	1,766	0	2	2
P29	1,048	0	0	0
P30	2,939	0	0	0
P36	777	0	0	0

Notes:

I1 – Recognising the problem

I2 – Sense of puzzlement

The triggering event as the first stage of cognitive presence resided in the instructional materials as a set of evocative questions asked by the Course Coordinator as instructional designer of the set readings, and based on the instructional notes for each seminar topic. Some students repeated the question in the message content, and some included additional evocation. Seminar Group 1 showed

the highest level of evocative cognition. Participant 17 displayed the highest level of evocative cognition through recognition of the problem (I1) and belonged to Seminar Group 1. As the Course Coordinator had instigated the problem in the instructional notes for each seminar topic, not much could be deduced or even implied from this stage of development without closer qualitative examination. This is examined more closely in the following chapter.

Table 6.3.2: Inquisitive cognitive presence (exploration) in seminar groups

Section A: Groups

	Total words	I1	I2	I3	I4	I5	I6	Aggregate unit
SG1 (n=11)	23,111	0	3	0	11	5	7	27
SG2 (n=12)	23,389	5	0	4	18	3	5	35
SG3 (n=11)	24,486	2	0	2	12	2	10	28

Section B: Individual participants

	Total words	I1	I2	I3	I4	I5	I6	Aggregate unit
P1	2,650	0	0	0	15	4	10	29
P5	1,839	0	0	10	42	2	6	59
P11	3,324	0	0	0	6	0	0	6
P17	2,238	0	0	0	7	8	8	23
P18	1,450	19	3	12	12	4	14	64
P19	2,493	0	0	5	0	4	4	13
P25	1,007	0	0	0	54	0	0	54
P28	1,766	8	0	10	0	14	9	42
P29	1,048	0	0	7	9	9	13	37
P30	2,939	0	0	5	16	7	20	48
P36	777	0	0	0	0	0	0	0

Notes:

I1 – Brainstorming

I2 – Divergence within a single message

I3 – Divergence within the online community

I4 – Information exchange

I5 – Leaps to conclusions

I6 – Suggestions for consideration

Seminar Group 2 showed the strongest results for this stage of cognitive progression. Information exchange featured prominently in all groups with suggestions for consideration (I6) also showing some prominence. Participants 5, 18, and 25

attributed most importance to this stage of cognitive development, while participant 36 contributed nothing at all. The attributed importance for participants 11 and 19 was quite low, but for the rest of the participants it was relatively strong. The next table shows the third stage of cognitive development.

Table 6.3.3: Tentative cognitive presence (integration) in seminar groups

Section A: Groups

	Total words	I1	I2	I3	I4	Aggregate unit
SG1 (n=11)	23,111	36	7	13	0	57
SG2 (n=12)	23,389	16	14	32	0	62
SG3 (n=11)	24,486	28	13	18	0	59

Section B: Individual participants

	Total words	I1	I2	I3	I4	Aggregate unit
P1	2,650	34	6	3	0	43
P5	1,839	3	0	22	0	26
P11	3,324	55	34	61	0	150
P17	2,238	11	13	21	0	46
P18	1,450	0	9	14	7	30
P19	2,493	0	55	26	1	82
P25	1,007	4	10	19	0	33
P28	1,766	0	3	42	0	45
P29	1,048	0	11	38	0	49
P30	2,939	24	10	13	0	46
P36	777	82	30	0	0	113

Notes:

I1 – Connecting ideas, synthesis

I2 – Convergence among group members

I3 – Convergence within a single message

I4 – Creating solutions

The table above shows Seminar Group 2 as slightly stronger in relation to this third stage of cognitive development. Connecting or synthesising ideas (I1) was strongest with Seminar Group 1 and Seminar Group 3 while convergence within a single message (I3) was most prominent for Seminar Group 2. This stage of cognitive development was most significant for participants 11, 36, and 19, and least

significant for participants 5, 18, and 25. No evidence for the fourth stage of cognitive development, which required committed resolution, was found, nor was it expected for this stage of learning. The following table shows the first stage of cognitive development within country forums:

Table 6.3.4: Evocative cognitive presence (triggering event) in country forums

Section A: Groups

	Total words	I1	I2	Aggregate unit
Azerbaijan (n=2)	2,068	3	7	10
France (n=2)	2,716	0	0	0
Georgia (n=3)	2,557	0	0	0
Italy (n=1)	2,238	0	0	0
Kazakhstan (n=4)	10,461	0	0	0
Turkey (n=3)	7,823	0	0	0
Turkmenistan (n=4)	14,776	0	0	0
USA (n=4)	7,374	0	0	0

Section B: Individual participants

	Total words	I1	I2	Aggregate unit
P1	1,558	4	8	12
P5	1,684	0	0	0
P11	497	0	0	0
P17	2,238	0	0	0
P18	948	0	0	0
P19	2,351	0	0	0
P25	4,013	0	0	0
P28	388	0	0	0
P29	1,420	0	0	0
P30	5,460	0	0	0
P36	847	0	0	0

Notes:

I1 – Recognising the problem

I2 – Sense of puzzlement

Participant 1 was the only participant to trigger evocation in the country forums and was allocated to the country forum Azerbaijan which, in turn, was the only country forum to register the triggering of evocative cognition. The next table shows the second stage of cognitive development within the country forums.

Table 6.3.5: Inquisitive cognitive presence (exploration) in country forums

Section A: Groups								
	Total words	I1	I2	I3	I4	I5	I6	Aggregate unit
Azerbaijan (n=2)	2,068	0	0	1	4	2	26	33
France (n=2)	2,716	0	0	0	8	1	11	20
Georgia (n=3)	2,557	0	0	0	10	0	28	38
Italy (n=1)	2,238	0	0	0	10	2	23	35
Kazakhstan (n=4)	10,461	3	0	3	14	0	24	44
Turkey (n=3)	7,823	0	0	0	36	0	15	51
Turkmenistan (n=4)	14,776	2	0	4	17	0	21	44
USA (n=4)	7,374	2	0	2	39	0	21	63

Section B: Individual participants

	Total words	I1	I2	I3	I4	I5	I6	Aggregate unit
P1	1,558	0	0	1	5	2	22	30
P5	1,684	0	0	0	12	2	10	24
P11	497	0	0	0	0	0	31	31
P17	2,238	0	0	0	10	2	23	35
P18	948	0	0	8	0	0	36	44
P19	2,351	0	0	0	16	0	15	30
P25	4,013	0	0	0	26	0	15	41
P28	388	0	0	0	16	0	0	16
P29	1,420	0	0	0	12	0	22	34
P30	5,460	1	0	2	14	0	17	35
P36	847	7	0	14	12	0	35	68

Notes:

I1 – Brainstorming

I2 – Divergence within a single message

I3 – Divergence within the online community

I4 – Information exchange

I5 – Leaps to conclusions

I6 – Suggestions for consideration

Information exchange (I4) and suggestions for consideration (I6) were the most significant indicators for this stage of cognitive presence in the country forums. The USA, Turkey, Kazakhstan, and Turkmenistan were the strongest at explorative cognition amongst the country forums. This stage of cognitive development was most important for participants 36, 18, and 25. It was least important for participant 28, and the country forum France. This is not surprising since France used up most of its online opportunities for organising an offline discussion which is discussed in more detail in the next chapter. The following table presents the third stage of cognitive development for the country forums.

Table 6.3.6: Tentative cognitive presence (integration) in country forums**Section A: Groups**

	Total words	I1	I2	I3	I4	Aggregate unit
Azerbaijan (n=2)	2,068	0	0	0	15	15
France (n=2)	2,716	27	6	9	13	55
Georgia (n=3)	2,557	0	5	0	31	35
Italy (n=1)	2,238	4	5	0	17	25
Kazakhstan (n=4)	10,461	4	14	3	15	36
Turkey (n=3)	7,823	3	16	0	9	27
Turkmenistan (n=4)	14,776	1	0	0	12	14
USA (n=4)	7,374	1	2	0	7	11

Section B: Individual participants

	Total words	I1	I2	I3	I4	Aggregate unit
P1	1,558	0	0	0	14	14
P5	1,684	41	3	0	10	53
P11	497	0	12	0	18	30
P17	2,238	4	5	0	17	25
P18	948	0	9	0	14	23
P19	2,351	0	1	14	22	37
P25	4,013	5	18	0	8	31
P28	388	0	0	0	0	0
P29	1,420	0	0	0	0	0
P30	5,460	3	0	0	24	27
P36	847	0	0	0	0	0

Notes:

I1 – Connecting ideas, synthesis

I2 – Convergence among group members

I3 – Convergence within a single message

I4 – Creating solutions

Convergence among group members (I2) and creating solutions (I4) were most significant to both individuals and groups at this stage of cognitive development. Participant 5 who was a member of the country forum France was most dedicated to

connecting and synthesising ideas (I1). This suggests that the offline work the participants of France conducted at stage two came together significantly online as stage three of cognitive presence. Connecting ideas or synthesis was most important for France and participant 5, while the country forum Georgia and participants 30 and 19 attributed most importance to creating solutions. Participant 25 attributed most importance to the convergence of ideas among group members in her country forum, and participant 19 attributed most importance to the convergence of ideas within his own messages. This stage of cognitive development was least prominent for Azerbaijan, Turkmenistan, and the USA, and most prominent for France. Participants 28, 29, and 36 did not contribute at all to this stage of cognitive development, while participants 5 and 19 attributed it the most importance. It was expected that creating solutions would be significant for the resolution of conflict in the role-play scenario. The following table shows the final stage of cognitive development where problems were resolved within the country forums.

Table 6.3.7: Committed cognitive presence (resolution) in country forums

Section A: Groups

	Total words	I1	I2	I3	Aggregate unit
USA (n=4)	7,374	4	0	0	4

Notes:

I1 – Defending solutions

I2 – Testing solutions

I3 – Vicarious application to real world

The only country forum to commit to a resolution outside of the *Country Position Statement* forum was the USA. The participant who registered a resolution to the CPS forum was not one of the selected participants. Three of the selected country forums committed a collaborative resolution in the form of a country position statement to the *Country Position Statement* forum, namely, Kazakhstan, Turkmenistan, and the USA.

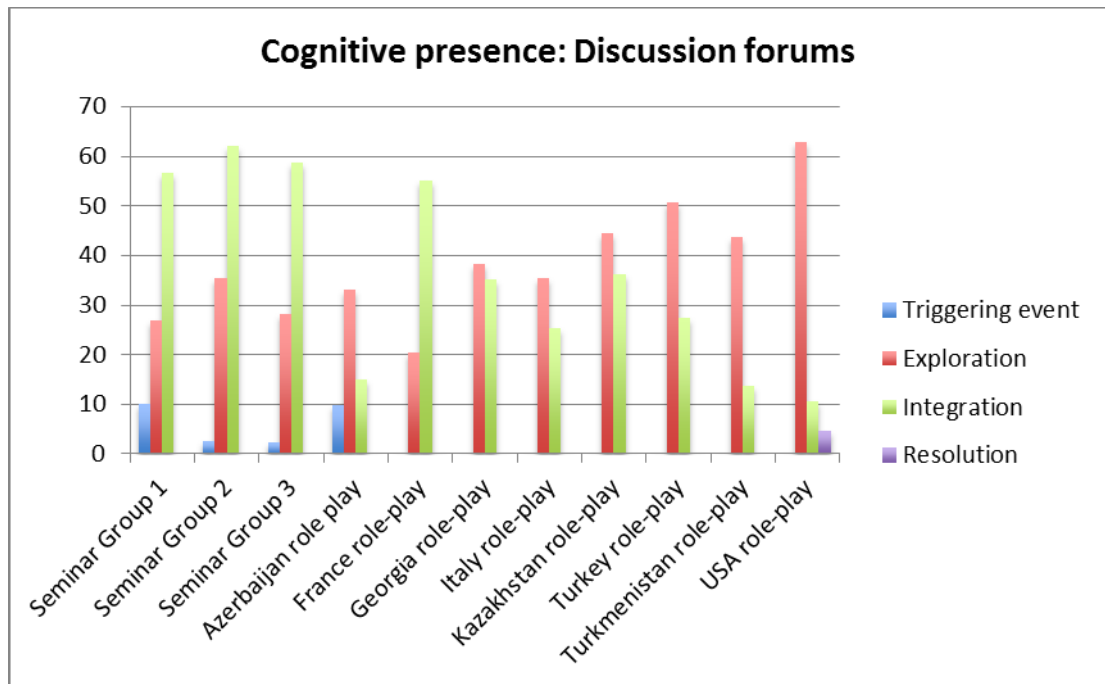


Figure 6.6: Comparison of stages of cognitive presence amongst discussion forums

Figure 6.6 illustrates that the third stage of cognitive presence was more prominent in the seminar groups than in the country forums, apart from France, while the second stage of cognitive presence was more prominent in the country forums than in the seminar groups, apart from France. The seminar groups included the first stage of cognitive development while the country forums, apart from Azerbaijan, lacked the first stage. The USA displayed resolution within the country forums, and the USA, Kazakhstan, and Turkmenistan further committed to a resolution in the *Country Position Statements* forum. The seminar groups did not show any commitment to resolution mostly due to the nature of the first stage of the course compared with the second. The seminar groups only required students to explore concepts and not resolve a problem as in the goal-oriented role-play scenario. The figure on the following page shows the breakdown of cognitive presence for the selected individual participants.

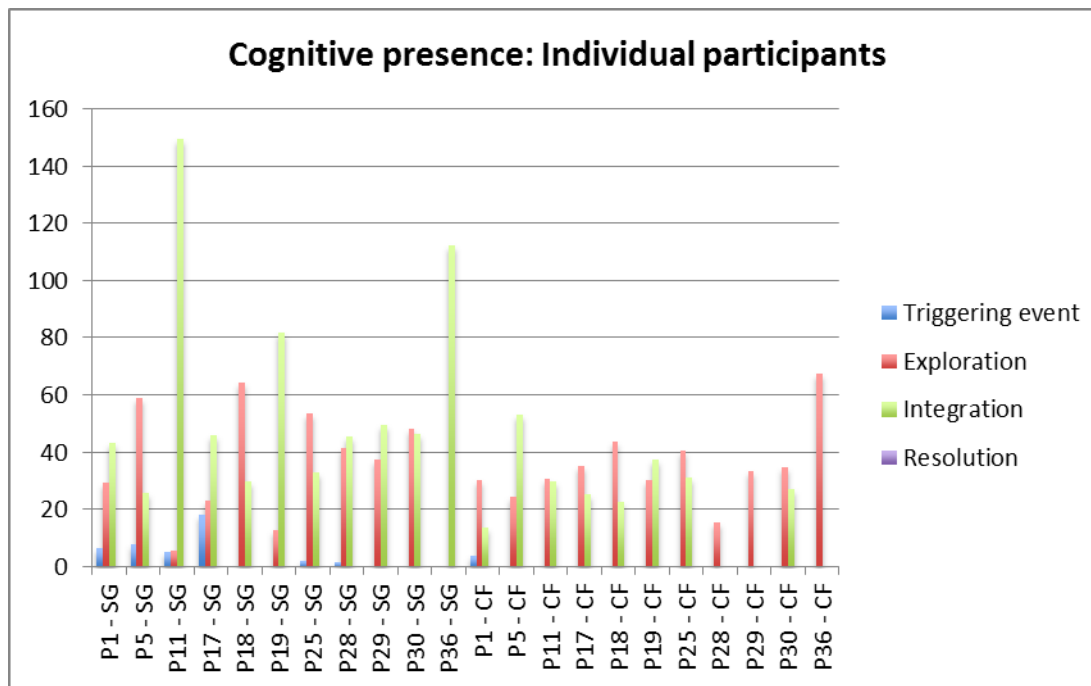


Figure 6.7: Comparison of stages of cognitive presence amongst individual participants

The third stage of cognitive presence was of most importance to participants 11, 36, and 19 in their respective seminar groups. The second and third stages were equally important for participant 30 in the seminar groups. The second stage of cognitive development was of more importance than the third for participants 5, 18, and 25 in the seminar groups. The importance attributed to the second and third stages of cognitive presence was reversed in the country forums for participants 5 and 36. Participants 36, 29, and 28 contributed only to the third stage of cognitive presence in the country forums after contributing significantly to the second stage in the seminar groups. Participant 17 displayed the most evocation in the seminar groups, and participant 1 in the country forums.

6.3.2 Social presence

Social presence comprises three categories: affective, cohesive, and interactive. Each category has its own indicators for the coding of text within the transcripts (see Appendix C). The following tables present the text coverage for indicators reported by QSR nVivo software as a percentage of the total word count in a transcript. The tables display the aggregate units for categories of social presence which were calculated as in the tables for cognitive presence in the previous section. The

codings employed for each indicator are listed below each of the tables. The tables are divided into two sections: one for group analysis and one for individual participant analysis for the same set of indicators.

Table 6.3.8: Affective social presence in seminar groups

Section A: Groups

	Total words	I1	I2	I3	I4	I5	Aggregate unit
SG1 (n=11)	23,111	2	0	0	5	0	7
SG2 (n=12)	23,389	3	0	0	3	0	6
SG3 (n=11)	24,486	3	0	0	2	1	5

Section B: Individual participants

	Total words	I1	I2	I3	I4	I5	Aggregate unit
P1	2,650	9	0	0	10	0	19
P5	1,839	0	0	0	1	2	3
P11	3,324	1	0	0	1	0	2
P17	2,238	0	0	0	2	0	2
P18	1,450	5	0	0	10	0	15
P19	2,493	0	0	0	0	0	0
P25	1,007	1	0	0	1	0	3
P28	1,766	3	0	0	3	0	6
P29	1,048	13	0	0	7	0	20
P30	2,939	5	0	0	2	0	7
P36	777	5	0	0	0	3	7

Notes:

I1 – Expression of emotions

I2 – Frustration at lack of response or participation

I3 – Offering reassurance

I4 – Self-disclosure

I5 – Use of humour

The aggregate unit shows that Seminar Group 2 and Seminar Group 3 were relatively similar in the affective domain of social presence with the highest indicators being the expression of emotion (I1) and self-disclosure (I4). Seminar Group 1 was slightly higher in the affective domain with a greater amount of self-disclosure (I4). Participants 29, 1, and 18 displayed the greatest amounts of affective social presence,

while participant 19 showed none within the seminar groups. The next table shows the cohesive elements of social presence.

Table 6.3.9: Cohesive social presence in seminar groups

Section A: Groups						
	Total words	I1	I2	I3	I4	Aggregate unit
SG1 (n=11)	23,111	5	1	4	4	14
SG2 (n=12)	23,389	1	1	4	5	11
SG3 (n=11)	24,486	1	1	5	5	12
Section B: Individual participants						
	Total words	I1	I2	I3	I4	Aggregate unit
P1	2,650	3	2	4	6	15
P5	1,839	0	0	5	5	10
P11	3,324	0	1	1	4	7
P17	2,238	4	0	1	4	10
P18	1,450	0	0	2	2	4
P19	2,493	2	0	3	7	12
P25	1,007	0	2	3	8	14
P28	1,766	0	0	9	5	15
P29	1,048	3	2	0	6	11
P30	2,939	0	1	3	4	7
P36	777	5	1	15	0	20

Notes:

I1 – Addresses or refers to the group using inclusive pronouns

I2 – Apologies

I3 – Phatics, salutations

I4 – Vocatives

The same method for aggregate units was applied to the cohesive domain of social presence. The table shows that overall the seminar groups displayed similar levels of cohesion but with groups one and three more cohesive than two. The use of inclusive pronouns when addressing or referring to other group members (I1) was of more importance to Seminar Group 1 than to the other two groups. Group cohesion was of most importance to participant 36, but also important to participants 1 and 28. Participant 18 exhibited the least amount of group cohesion amongst the selected participants. The least active participants as identified in the previous section,

participants 28 and 36, used the greatest amount of phatics, salutations (I3), and vocatives (I4). In fact, most participants made use of phatics, salutations, and vocatives.

The next table illustrates the interactive elements of social presence.

Table 6.3.10: Interactive social presence in seminar groups

Section A: Groups

	Total words	I1	I2	I3	I4	I5	I6	I7	I8	Aggregate unit
SG1 (n=11)	23,111	4	0	4	9	0	3	2	0	18
SG2 (n=12)	23,389	3	1	3	4	0	0	9	1	18
SG3 (n=11)	24,486	4	2	1	4	0	0	6	0	14

Section B: Individual participants

	Total words	I1	I2	I3	I4	I5	I6	I7	I8	Aggregate unit
P1	2,650	0	0	9	10	0	0	0	0	20
P5	1,839	0	0	1	6	0	0	8	0	15
P11	3,324	0	0	3	2	0	0	4	0	8
P17	2,238	0	0	8	10	0	0	0	0	19
P18	1,450	9	1	3	5	0	0	9	0	17
P19	2,493	6	0	1	6	0	0	11	0	18
P25	1,007	0	0	0	4	0	0	6	0	9
P28	1,766	1	6	6	7	0	0	8	0	28
P29	1,048	9	2	22	4	0	3	2	0	37
P30	2,939	6	2	2	2	0	0	3	0	12
P36	777	0	1	0	0	0	0	0	0	1

Notes:

I1 – Asking questions

I2 – Complimenting or expressing appreciation

I3 – Continuing a thread

I4 – Expressing agreement

I5 – Offering advice

I6 – Quoting from others' messages

I7 – Referring explicitly to others' messages

I8 – Requesting comment or feedback

The table shows that Seminar Group 1 and Seminar Group 2 displayed higher levels of interaction than Seminar Group 3 overall. Seminar Group 1 showed greater levels of continuing threads of conversation (I3) and expression of agreement (I4), while

seminar groups two and three showed higher levels of explicit reference to the messages of other participants (I7). Participants 36, 11, and 25 displayed the lowest levels of interaction, while participants 29 and 28 showed the highest levels of interaction. Although participant 30 was shown to be a very active participant in the web data logs, he only showed moderate levels of interactivity which primarily involved the asking of questions. Participant 29, who was the most interactive participant, mainly continued threads of conversation (I3), but also asked questions (I1). Participant 30 may have generated some original ideas based on responses to the readings while participant 29 may have asked questions of other participants to challenge their contributions or seek clarification. The next table shows affective social presence for the role-play scenario.

Table 6.3.11: Affective social presence in country forums

Section A: Groups

	Total words	I1	I2	I3	I4	I5	Aggregate unit
Azerbaijan (n=2)	2,068	8	3	0	3	1	14
France (n=2)	2,716	5	0	0	0	0	5
Georgia (n=3)	2,557	7	0	0	0	0	7
Italy (n=1)	2,238	2	0	0	0	1	3
Kazakhstan (n=4)	10,461	2	0	0	0	0	3
Turkey (n=3)	7,823	4	2	0	1	0	7
Turkmenistan (n=4)	14,776	5	0	0	1	0	6
USA (n=4)	7,374	5	0	0	1	0	6

Section B: Individual participants

	Total words	I1	I2	I3	I4	I5	Aggregate unit
P1	1,558	9	3	0	4	1	18
P5	1,684	4	0	0	0	0	4
P11	497	3	0	0	0	0	3
P17	2,238	2	0	0	0	1	3
P18	948	9	0	0	4	2	15
P19	2,351	3	0	0	0	0	3
P25	4,013	6	4	0	1	0	11
P28	388	11	0	0	9	3	23
P29	1,420	11	0	0	3	0	14
P30	5,460	6	0	0	0	0	7
P36	847	11	0	0	4	1	16

Notes:

I1 – Expression of emotions

I2 – Frustration at lack of response or participation

I3 – Offering reassurance

I4 – Self-disclosure

I5 – Use of humour

Of the selected country forums, Azerbaijan displayed the strongest affective social presence. The expression of emotions (I1) was the most prominent indicator in all of the country forums, but Azerbaijan was stronger in the expression of emotions (I1) as well as in showing frustration at a lack of response (I2), of self-disclosure (I4), and of the use of humour (I5). The country forums that showed least affective presence were Kazakhstan and Italy. Participants 1, 28, 18, and 36 were amongst those who displayed the strongest affective presence and participants 11, 17, and 19 the weakest. Again, expression of emotion (I1) was the strongest indicator, but participant 28 also offered a good deal of self-disclosure (I4), and the greatest use of humour (I5). Participants 1 and 25 were the only ones to show frustration at a lack of participation or response (I2). The table on the following page shows elements of social cohesion:

Table 6.3.12: Cohesive social presence in country forums**Section A: Groups**

	Total words	I1	I2	I3	I4	Aggregate unit
Azerbaijan (n=2)	2,068	48	2	21	13	84
France (n=2)	2,716	5	4	15	2	26
Georgia (n=3)	2,557	19	0	14	2	35
Italy (n=1)	2,238	36	4	7	4	50
Kazakhstan (n=4)	10,461	31	0	8	2	41
Turkey (n=3)	7,823	23	0	7	3	33
Turkmenistan (n=4)	14,776	24	1	10	2	36
USA (n=4)	7,374	31	0	7	1	40

Section B: Individual participants

	Total words	I1	I2	I3	I4	Aggregate unit
P1	1,558	44	2	24	15	86
P5	1,684	6	2	17	1	26
P11	497	6	0	26	2	35
P17	2,238	36	4	7	4	50
P18	948	26	2	9	3	40
P19	2,351	32	0	17	1	49
P25	4,013	25	0	9	3	38
P28	388	1	3	27	0	32
P29	1,420	23	1	12	3	38
P30	5,460	27	0	10	3	39
P36	847	32	0	19	2	53

Notes:

I1 – Addresses or refers to the group using inclusive pronouns

I2 – Apologies

I3 – Phatics, salutations

I4 – Vocatives

The country forum Azerbaijan displayed the highest levels of social cohesion, mainly through the use of inclusive pronouns to address or refer to others in the group (I1). Participant 1 displayed the highest personal levels of cohesive presence primarily by addressing others using inclusive pronouns (I1), but also by using phatics and

salutations (I3), and vocatives (I4). Participant 1 belonged to the country forum Azerbaijan and her results closely reflected those of the group. Most participants contributed to reasonable levels of social cohesion within their respective groups, which is consistent with the collaborative problem-solving nature of the role-play scenario. Participant 5 displayed the lowest personal levels of cohesive presence, but gave higher importance to phatics and salutations than most. The next table shows the interaction within the country forums and amongst individual participants in the role-play scenario.

Table 6.3.13: Interactive social presence in country forums

Section A: Groups

	Total words	I1	I2	I3	I4	I5	I6	I7	I8	Aggregate unit
Azerbaijan (n=2)	2,068	8	2	8	7	4	0	4	18	51
France (n=2)	2,716	1	1	13	0	0	0	3	0	18
Georgia (n=3)	2,557	2	2	8	0	0	0	0	4	16
Italy (n=1)	2,238	5	6	63	25	28	6	15	11	160
Kazakhstan (n=4)	10,461	4	2	31	1	1	0	7	3	50
Turkey (n=3)	7,823	4	2	39	1	0	0	9	2	57
Turkmenistan (n=4)	14,776	3	2	61	2	4	2	5	8	87
USA (n=4)	7,374	1	1	16	2	0	0	1	9	29

Section B: Individual participants

	Total words	I1	I2	I3	I4	I5	I6	I7	I8	Aggregate unit
P1	1,558	9	3	9	9	6	0	5	18	58
P5	1,684	1	0	16	0	0	0	1	0	18
P11	497	0	2	21	1	0	0	0	2	26
P17	2,238	5	6	63	25	28	6	15	11	160
P18	948	11	6	77	8	0	0	12	1	114
P19	2,351	6	1	37	1	0	0	3	7	56
P25	4,013	5	4	46	1	0	0	11	1	69
P28	388	3	12	71	8	10	0	0	0	104
P29	1,420	8	3	80	3	3	3	0	13	114
P30	5,460	1	2	42	1	3	0	3	11	64
P36	847	1	2	83	4	0	0	0	2	92

Notes:

I1 – Asking questions

I2 – Complimenting or expressing appreciation

I3 – Continuing a thread

I4 – Expressing agreement

I5 – Offering advice

I6 – Quoting from others' messages

I7 – Referring explicitly to others' messages

I8 – Requesting comment or feedback

Participants 17, 18, 29, and 28 assigned greatest importance to interactive elements of social presence in the country forums. Participant 17 was the only research participant allocated to Italy and so the levels of interactivity for each matched. Participants 28 and 29 were allocated to the country forum Turkmenistan which also displayed high levels of interactivity. Participant 17 was the only participant to show significant levels of interaction across all eight indicators. The greatest interactive element for groups and individual participants was the continuation of threads (I3). Participants 36 and 18 showed the highest levels of continuing a thread of discussion, but were among the least active of research participants in the country forums. Participant 17 showed the highest levels of expressing agreement, of offering advice, and of referring explicitly to the messages of others. Participants 5 and 11 assigned the least importance to interactive elements of social presence.

The two figures that follow diagrammatically summarise the findings for all three categories of social presence at the group or collective level and at the individual participant level respectively. Figure 6.8 compares the different categories of social

presence between discussion forums, while Figure 6.9 compares the different categories of social presence for individual participants. The values in the figures are based on the aggregate unit.

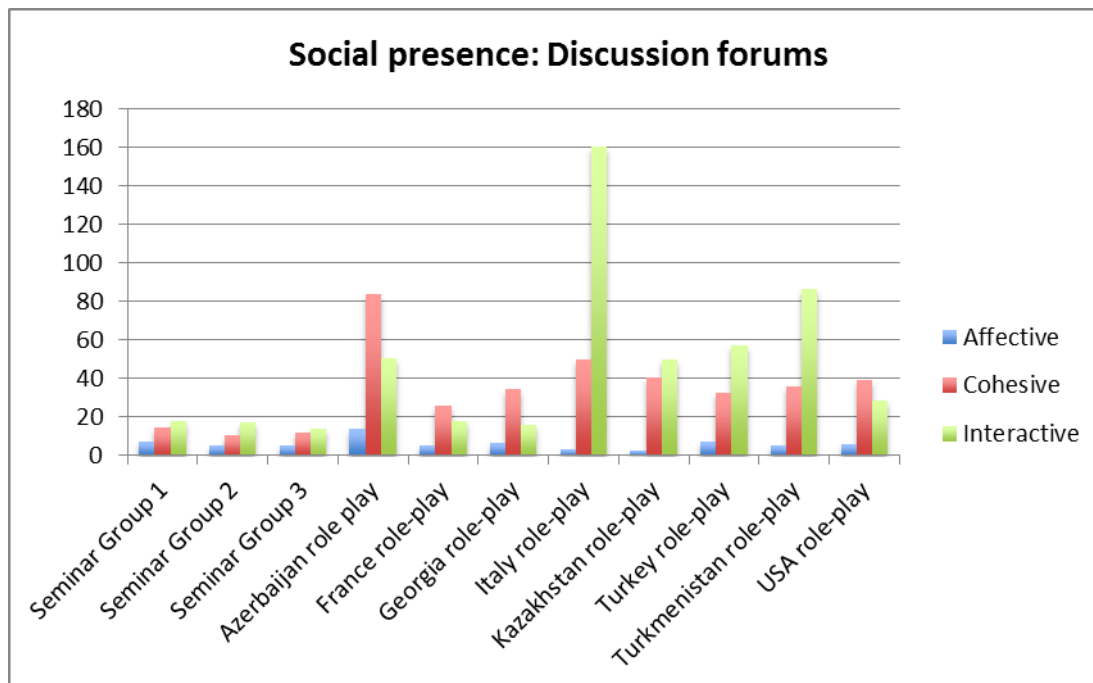


Figure 6.8: Comparison of social presence elements amongst discussion forums

Figure 6.8 shows interaction and cohesion to be generally higher in the role-play scenario than in the seminar groups. The country forums Italy and Turkmenistan displayed the highest levels of interaction while the country forums Azerbaijan, Italy, and Kazakhstan displayed the highest levels of cohesion. The affective domain of social presence was relatively low for all groups. Generally the seminar groups displayed low levels of social presence while the country forums displayed relatively high levels of social presence.

Figure 6.9 compares the different categories of social presence between selected participants in relation to their participation in their allocated seminar groups and country forums.

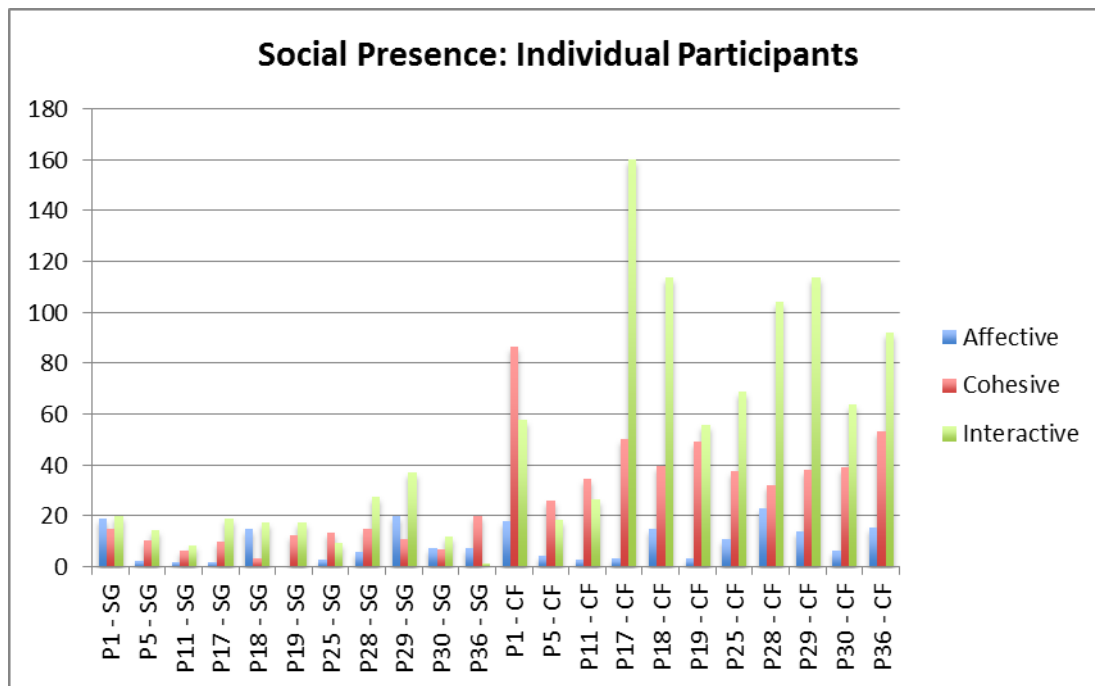


Figure 6.9: Comparison of social presence elements amongst individual participants

The figure again confirms the high levels of social presence in the country forums compared to relatively low levels in the seminar groups. Interactivity was most significant for participants 17, 18, 29, and 28 in the country forums. Participants 1, 36, 17, and 19 assigned greatest importance to social cohesion within their respective country forums. Participants 5 and 11 assigned the least importance to social presence in the country forums. Social presence was relatively low for all participants in the seminar groups, but relatively higher for participants 1 and 29. Affective social presence was most significant for participants 1 and 29 in both the seminar groups and in the country forums. Participant 19, 17, 11, and 5 showed little affective social presence in the country forums, and little to none in the seminar groups.

The web data logs revealed that P30 was the most active participant in the online course while P36 was the least active. In Chapter 2, it was argued that active participation is crucial for deep learning to occur, and that collaboration is an essential component. Both P30 and P36 belonged to Seminar Group 3. P30 later became the group leader of the country forum Turkmenistan. P36 was allocated to the country forum USA and participated minimally. The content analysis revealed patterns in their participation relative to the discussion groups to which they

belonged. Figure 6.7 revealed that the inquisitive and tentative stages of cognitive presence were important to P30 in both the seminar group and the country forum, while the tentative stage was important to P36 in the seminar group discussion and the inquisitive stage was important in the country forum. Figure 6.9 revealed that both participants displayed similar patterns of social presence, but that all categories of social presence were more important for participant 36, with the exception of interactive social presence in the seminar groups. Closer examination of the indicators for each of the categories of cognitive and social presence revealed differences in patterns of communication, but the qualitative analysis in the next chapter provides insights and more detailed explanation of the participants' engagement in the course based on the critical factors identified in this chapter. The next section presents important attitudinal information on each of the selected research participants compared to all survey respondents.

6.4 Survey data

Two online surveys were conducted at different stages of the course (see Appendix D, Appendix J, and Appendix K for the survey questions and responses) to determine attitudes towards the learning that occurred in both stages. This section begins by presenting background information about the survey respondents, derived from the first eight survey questions. These questions were identical in both surveys. There was no pre-determination of who might participate in each survey and so repetition of the initial questions was considered important. Background information on the selected participants is presented in the next chapter. The quantitative results, which were derived from 24 likert-scale questions, are presented after the overview of all the survey respondents. These questions cover attitudinal responses that relate to each of cognitive presence, social presence, and teaching presence so that perceived patterns of participation and learning could be triangulated with actual patterns of participation and learning as analysed earlier in this chapter. The survey responses also offered possible explanations for patterns of participation and learning. The responses of the selected research participants are compared to the total responses. Qualitative data are then presented as categorised summaries of responses to the open-ended questions in each of the surveys.

The course, *Learning to Resolve Global Conflicts 201*, attracted more than 120 students per year. It was offered as a compulsory second-year course in the degree of Bachelor of Arts (International Studies) in the second semester each year. It was also offered as an elective course to all students in undergraduate education at the university and, as such, could attract students from any year of any undergraduate degree at *Uni Technovation*. Such courses were offered generally across the University curriculum to broaden the experience and knowledge of undergraduates from various undergraduate degree programs. The following table shows the range of programs from which participants in Surveys 1 and 2 were enrolled.

Table 6.4.1: Programs in which survey respondents enrolled

Survey 1			Survey 2		
Program Title	#	%	Program Title	#	%
Bachelor of Management, Bachelor of Arts (International Studies) [Double Degree]	4	10.3	Bachelor of Business (International Business), Bachelor of Arts (International Studies) [Double Degree]	1	3.6
Bachelor of Management (Marketing), Bachelor of Arts (International Studies) [Double Degree]	7	17.9	Bachelor of Management, Bachelor of Arts (International Studies) [Double Degree]	3	10.7
Bachelor of Management (Human Resources Management), Bachelor of Arts (International Studies) [Double Degree]	1	2.6	Bachelor of Management (Marketing)	1	3.6
Bachelor of Arts	2	5.1	Bachelor of Management (Marketing), Bachelor of Arts (International Studies) [Double Degree]	3	10.7
Bachelor of Arts (International Studies)	8	20.5	Bachelor of Arts (International Studies)	6	21.4
Bachelor of Arts (Journalism), Bachelor of Arts (International Studies) [Double Degree]	9	23.1	Bachelor of Arts (Journalism), Bachelor of Arts (International Studies) [Double Degree]	6	21.4
Bachelor of Arts (Journalism)	1	2.6	Bachelor of Arts (Journalism)	1	3.6
	2	5.1		1	3.6
	2	5.1		1	3.6
	1	2.6		1	3.6
	1	2.6		1	3.6
	1	2.6		3	10.7
Total	39	100	Total	28	100

The information provided in this table shows that most participants were enrolled in the double degree of Bachelor of Arts (Journalism) and Bachelor of Arts (International Studies). The course, *Learning to Resolve Global Conflicts 201*, was embedded in the Bachelor of Arts (International Studies) program. Most participants were enrolled in combined degrees with the BA (International Studies) or enrolled in the degree as a single degree.

The age groups and gender balance of the survey participants are shown in the following tables:

Table 6.4.2: Age groups of survey respondents

Survey 1			Survey 2		
Age Group	#	%	Age Group	#	%
Age Group 1 (under 21)	22	56	Age Group 1	15	54
Age Group 2 (21-29)	14	36	Age Group 2	11	39
Age Group 3 (30 or over)	3	8	Age Group 3	2	7
Total	39	100	Total	28	100

Most participants were under 30 years of age with the majority under 21 years of age.

Table 6.4.3: Gender of survey respondents

Survey 1			Survey 2		
Gender	#	%	Gender	#	%
Male	8	21	Male	6	21
Female	31	79	Female	22	79
Total	39	100	Total	28	100

The majority of participants were female with only eight males participating in each survey. This reflects a stronger gender bias than the general gender bias of the course, which had 66 per cent female enrolment and 34 per cent male enrolment.

Table 6.4.4: Socio-cultural experience of survey respondents

Survey 1			Survey 2		
Background	#	%	Background	#	%
Domestic student	39	100	Domestic student	27	96.4
International student	0	0	International student	1	3.6
Lived overseas*	14	36	Lived overseas	10	36
Only lived in Australia*	24	62	Only lived in Australia	18	64
Visited overseas	27	69	Visited overseas	18	64
Never been overseas	12	31	Never been overseas	10	36
Learned another language	33	85	Learned another language	22	79
No other language	6	15	No other language	6	21
Native-English speaking	35	90	Native-English speaking	25	89
Non-native-English speaking	4	10	Non-native-English speaking	3	11

* One response was blank in each instance.

All survey participants, except one in Survey 2, were domestic students. Most participants stated that their native language was English (90%), but that they had learned a language other than English (79% in survey 1 and 85% in survey 2). Most had visited overseas (64% in survey 1 and 69% in survey 2), but few had lived overseas (36%).

The table on the following page summarises the survey responses, based on a five-point likert scale, to Survey 1 questions Q9 to Q32 (see Appendix J). The numerals 1, 2, 3, 4, and 5 are used to represent a five-point likert scale where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree, and 5 is strongly agree. A zero value (0) is given for no response to a question. The table compares the individual responses of the selected research participants with the mean of all respondents for Survey 1 to indicate how each participant compared with the group response. Group responses can be viewed in Appendix J. The questions with an asterisk (*) highlight those that were negatively worded, so strongly disagree (1) is a favourable rather than an unfavourable response and a lower mean value is a favourable one.

Table 6.4.5: Survey 1 individual responses compared to overall mean response

	P1	P5	P11	P17	P18	P19	P25	P28	P29	P30	P36	Overall Mean
Q9	2	4	5	4	5	5	3	2	4	5	4	3.8
Q10*	4	4	2	5	1	5	3	4	3	2	4	3.0
Q11*	4	5	1	2	2	4	4	4	4	5	4	3.0
Q12	4	1	5	5	3	4	1	4	2	4	5	2.8
Q13	5	4	2	5	4	4	2	1	4	4	4	3.4
Q14*	2	4	2	2	4	1	4	4	2	2	2	2.9
Q15	4	5	3	4	4	4	4	4	4	2	4	3.7
Q16	5	4	5	4	4	3	4	3	3	4	4	3.8
Q17	4	4	4	4	3	3	3	3	4	5	4	3.6
Q18	4	4	5	4	3	4	4	3	4	4	4	3.9
Q19*	5	2	3	2	4	3	3	4	4	2	2	3.1
Q20	3	4	4	4	3	4	2	2	4	4	4	3.1
Q21	3	4	4	4	4	4	4	2	2	5	4	3.4
Q22*	1	2	3	2	4	2	3	3	4	1	2	2.3
Q23	5	4	4	4	4	4	3	4	4	4	0	3.7
Q24*	3	2	4	2	5	3	4	2	2	2	3	2.9
Q25	4	4	4	4	4	5	4	4	4	2	4	4.0
Q26*	5	4	4	3	4	4	4	4	4	2	4	3.5
Q27	4	1	1	4	1	3	1	2	1	3	2	2.0
Q28	4	4	4	4	3	4	4	3	4	3	3	3.5
Q29	2	3	4	2	3	3	3	3	2	3	3	2.7
Q30	4	4	5	3	4	5	4	4	4	4	4	3.7
Q31*	4	1	4	4	3	4	3	4	4	2	4	3.7
Q32*	4	1	2	2	3	4	4	4	5	2	4	3.2

* For the questions marked with an asterisk, a lower number should be regarded as a favourable response due to the negative framing of the question.

The mean values in Table 6.4.5 show that responses varied between positive and negative attitudes to the initial learning experience of the online course. This overall variation in attitude was also reflected in the individual research participant responses. In most cases, the individual research participant responses reflected the group responses. The group responses are presented below and individual research participant responses are presented in the next chapters where they are combined with other data sources (see Appendix D for the survey questions, Appendix F for sums and frequencies of individual participant response, and Appendix J for group response).

Questions 9-11 provided an indication of the importance of the course to the respondents. Overall, strong agreement was expressed in enrolment in the course based on a keen interest in international affairs. P1 and P19 were the only two research participants to disagree. This question linked the course to their program choice and reason for studying. Nevertheless, although mixed in response, most agreed that this course was not as important as other courses in their degrees. Also mixed in response was the choice of course due to limited options. Question 12 asked whether the respondents liked the fact that the course was offered entirely online; this again produced a mixed response.

Questions 13-15 provided an indication of prior knowledge and expectations. Most agreed that they had pre-conceived notions of the concepts taught in the course, and that the course was different to their expectations. However, there was a mixed response to whether they had thought much about the concepts prior to undertaking the course.

Questions 16-18 provided an indication as to whether ideas were challenged and clarified by participation in the course. There was strong agreement that ideas had been challenged by the readings and tasks in the online seminar groups, and that ideas had been clarified by the readings and interaction. Agreement was not as strong when asked whether ideas had been challenged by other learners in online seminar groups.

Questions 19-21 provided an indication of preparedness to apply the concepts learned. Responses were mixed but slightly positive regarding the preparedness to apply the knowledge learned to the online scenario and to participate in the online role-play. The responses were slightly negative regarding the application of knowledge learned to different contexts other than those studied in the seminar groups.

Questions 22-23 indicated that respondents felt their contributions were taken seriously and not ignored by other participants. Most indicated that they made an effort to respond to the contributions of others.

Questions 24-26 provided insight into interaction. A mixed response was given when asked whether they responded individually to the task in preference to building a

rapport with others by considering their responses before contributing, but most strongly agreed that they read the responses of others before submitting their own contribution. Most indicated that it had been difficult to build a rapport with others online.

For Question 27, most respondents strongly disagreed that they find it easier to learn in an online environment. P1 and P17 were notable exceptions. Questions 28-30 provided an indication of what aspects of the course contributed most to their personal learning. Most agreed that the participation of other learners and the online resources contributed most to their learning, but were not so positive about the online tutor's contribution to their learning. Most participants chose to remain neutral on this question, and those who did respond disagreed that the online tutor had contributed to their personal learning. This may have reflected the student-centred nature of the course, and the limited role that the online tutor was willing to play in the teaching and learning spaces of the course.

Questions 31-32 provided an indication of the clarity of course structure and expectations. Most found the course structure confusing, but were more mixed in their response about the clarity of expectations. Most found the expectations of them unclear. P5 and P30 indicated that they found expectations and structures clear.

The table on the following page summarises the survey responses, based on a five-point likert scale, to Survey 2 questions Q9 to Q32. As with Table 6.4.5 above, the numerals 1, 2, 3, 4, and 5 are used to represent the five-point likert scale where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree, and 5 is strongly agree. The table compares the individual responses of the selected research participants with the mean values for all respondents of Survey 2 to indicate how each participant compared with the group response. Not all of the selected research participants completed this survey so their results are recorded with a dash (-). A zero (0) value has been used where a response was not given to a question. Group responses can be viewed in Appendix K. The questions with an asterisk (*) highlight those that were negatively worded, so strongly disagree is a favourable rather than unfavourable response and a lower mean value is a favourable one.

Table 6.4.6: Survey 2 individual responses compared to overall mean response

	P1	P5	P11	P17	P18	P19	P25	P28	P29	P30	P36	Overall Mean
Q9	2	5	4	3	-	-	3	2	4	5	-	3.6
Q10	2	4	4	2	-	-	2	2	4	4	-	3.3
Q11	4	4	5	3	-	-	2	4	5	4	-	3.4
Q12*	1	5	2	4	-	-	2	1	2	1	-	3.1
Q13*	2	5	4	4	-	-	1	4	4	2	-	2.6
Q14	2	4	4	2	-	-	4	2	3	4	-	3.1
Q15*	2	4	4	4	-	-	3	4	5	2	-	3.4
Q16	2	4	4	2	-	-	4	2	4	4	-	3.2
Q17	2	5	5	4	-	-	4	2	4	4	-	3.5
Q18	4	3	4	3	-	-	3	4	3	4	-	3.5
Q19	5	5	4	4	-	-	4	2	4	5	-	3.9
Q20	2	4	4	4	-	-	4	4	5	3	-	3.7
Q21	1	2	2	4	-	-	3	2	1	2	-	2.3
Q22	2	3	2	3	-	-	2	4	4	4	-	3.2
Q23	4	5	4	4	-	-	4	4	5	3	-	4.0
Q24	5	5	4	4	-	-	4	4	5	5	-	4.0
Q25	4	5	4	4	-	-	3	4	4	5	-	4.0
Q26	5	5	4	4	-	-	2	4	4	5	-	4.0
Q27*	4	4	2	4	-	-	5	4	5	2	-	3.7
Q28*	2	4	4	4	-	-	5	2	5	2	-	3.6
Q29	2	3	4	3	-	-	2	2	1	4	-	3.0
Q30	4	3	4	3	-	-	1	4	2	4	-	3.1
Q31	3	2	3	3	-	-	1	3	2	4	-	2.7
Q32	2	3	2	3	-	-	2	4	2	2	-	3.2

* For the questions marked with an asterisk, a lower number should be regarded as a favourable response due to the negative framing of the question.

The mean values in Table 6.4.6 show that responses varied between positive and negative attitudes to the learning experience in the later stages of the online course. This overall variation in attitude was also reflected in the individual research participant responses. The results were marginally more positive than in the previous survey with a slight decrease in the neutral responses and a slight increase in the positive responses. In most cases, the individual research participant responses reflected the group responses and so the group responses are presented below, and the individual research participant responses reserved for reporting with other data sources in the next chapters.

Questions 9 and 10 were about student motivation to participate and learn in the online course. Question 9 indicated whether the role-play scenario had stimulated their desire to actively participate and learn in the course, and Question 10 indicated whether the course content as a whole had done so. The overall response to both questions was positive but the individual research participant responses were mixed. This is explored further in the next chapter.

Question 11 addressed whether the online interactions and collaboration in online forums enhanced student learning in the course. Most believed such interaction and collaboration had enhanced their learning in the course. Question 12 sought to discover whether students had used means of communication other than those provided by the online forums in the course environment. Overall, there was a mixed response to this question, but the individual research participants mostly denied that they had used other forms of communication.

Questions 13 and 15 were about the use of multimedia facilities within the online environment to support learning. Question 13 asked whether multimedia facilities such as audio headsets or webcams would have improved their participation in the course. There was a mixed response to this question, but most disagreed that multimedia support would have improved their participation. Question 15 asked whether it would have been beneficial to have the lecturer's input including instructions and guidance in the form of recorded video segments throughout the course to enhance the text-based environment. Most agreed it would. This suggests that students would have preferred to view multimedia content than read the text provided by the course instructor, but that they would have preferred not to use such modes of communication themselves for collaborative learning purposes.

Questions 14 and 16 indicated whether the instructions and guidance provided by the lecturer for the online role-play scenario were clearly stated and well-presented, and whether they had sufficiently prepared the students for the online role play. The group responses were identical for each question and indicated a slightly positive response, but not convincingly so. However, Question 17 indicated that most thought the online simulation had provided a real-world context with which they could

identify, and many found it relatively easy to apply the learning from the first part of the course to the online role-play scenario as indicated in Question 18.

According to Questions 19 and 21, most respondents felt they had contributed well to the online role play and to the development of a country position statement, but most disagreed that all members of the country forum to which they had been assigned had contributed well to the development of the country position statement. Question 20 indicated that the contributions of other students in the online learning environment had broadened their own general understanding of the course content.

Questions 22 to 26 were about collaborating with other students in the role-play scenario. The intentions and expectations of other participants in the country forum were clear to many of the survey respondents. Most found it easy to follow the contributions to the country forums by other group members, and to express their own views. Most thought their views were well received by other group members, and that their contributions were valued by other group members. The most notable exception was P25.

For Question 27, most respondents, apart from P11 and P30, would have preferred to do the role-play simulation in face-to-face mode than in online mode, and in Question 28 most admitted that, if they could have had the opportunity to meet face-to-face with other students in the course, it would have assisted with their online participation. Nonetheless, the results were mixed but slightly positive when asked in Question 29 whether they felt that there was more support from other students for their learning in the online environment than in face-to-face contexts, and Question 30 revealed that many of the respondents found it easier to communicate their ideas online than in face-to-face teaching contexts. By contrast, Question 31 indicated that most did not find it easier to understand the ideas and views expressed by others in the online learning environment than in face-to-face teaching contexts. This suggests that students found it easier to express their ideas in written form in the reflective mode of the online learning environment than in the spontaneous mode of the face-to-face tutorial environment, but conversely find it easier to understand the views of others in the spoken mode of face-to-face contexts than in the written mode of the online environment.

Question 32 was perhaps a poorly worded statement that contained both a positive and negative view which may have confused students, or perhaps they agreed with one aspect of the statement but not the other. The results indicated that there was almost equal agreement and disagreement to the statement: overall, the course was a valuable learning experience, but studying online had taken much more time than a face-to-face version of the course would have done. It is unclear as to whether the respondents were agreeing or disagreeing with the statement overall or whether they were agreeing or disagreeing about the value or time aspects of the course. Therefore, I have not used this question in the analysis of data.

Two additional questions were asked in each of the two surveys. Question 33 was an open-ended question which asked respondents about those aspects of the course that worked well, while Question 34 was an open-ended question that asked respondents about the aspects of the course that could be improved. The responses were imported into a table in a word-processing document and sorted: firstly, into categories based on the aspects of the course about which respondents commented and secondly, into columns of positive or negative comments. The categories identified were: course expectations, clarity and organisation; online interaction; instructional resources and teaching input; and other. The last category was small and included only four comments, all negative, from respondents who thought that nothing in the course had helped them. The remaining three categories were responded to in equal proportion with large amounts of text. Responses to the first category of course expectations, clarity and organisation were largely negative. The comments about the categories of online interaction and instructional resources had roughly equal amounts of positive and negative comment (see Appendix L).

The comments for open-ended questions were similar for each category and have been paraphrased and summarised as follows:

1. Course expectations, clarity and organisation

Positive

An abundance of information and repetition of information ensure that students understand expectations. Lecture notes are clear, well-structured, and easy to understand. The detailed list of expectations provided by the online tutor is very

clear. The tasks were fairly clear and some clarification from the online tutor was good. The scenario was well thought out and implemented.

Negative

There was too much to prepare for, more than expected of other online courses. Unclear expectations and directions were given for the seminar discussions. More teaching input was required to provide clearer direction and purpose to the discussions. Many questions were asked in the online notes on set readings for each topic and if all were addressed the response would have far exceeded the limitations of the set task. Most participants wrote essay-length responses to the questions which was contrary to the task requirements. Some found the teaching input in the seminar discussions sufficient but not helpful. One student commented that 'it felt an imposition to ask a question (of the online tutor) or ask for clarification – and the response was not always prompt'. Many felt that insufficient teaching input and too many links within the online course environment added to confusion. A contradiction of due dates for an assessment between the course outline and the information provided online also caused confusion. Those who worked and had other commitments found the course confusing and stressful due to the amount of text-based information and communication presented in the course environment, and felt that more face-to-face meetings would have clarified and facilitated the processes. Better group organisation would have helped with communication and learning. The organisation of tasks with everything separated and delivered in sections created confusion for some. The lack of examples, and ambiguous instructions and expectations pertaining to assessment tasks made participation in the course more difficult for some. Often students were unsure of what needed to be done.

2. *Online interaction*

Positive

Online discussions bring students together who are physically apart, and 'force you' to understand concepts, and interact and communicate with others to gain different views and perceptions. They allow greater freedom, flexibility, and confidence to respond than face-to-face discussions. Reading a range of responses broadens everyone's knowledge. Group work relieves some pressure as learning and

knowledge are shared. Collaborating with other students has helped to clarify tasks and related issues.

Negative

Collaborating in a group can be detrimental if other group members do not contribute or perform to expectations. If a student is left with the responsibility of producing work to meet deadlines and others benefit without contributing, it can lead to feelings of frustration, annoyance, and of inequitable treatment. Communication becomes difficult if group members are not available for days at a time when important decisions are required of the group. It is also easy to miss important parts of group discussions and decision making if you are unavailable for a few days. Online tutor feedback on online interaction is lacking, so how would students know if they are performing to appropriate standards, or if they are off-track. It was felt by some that real-time chat facilities were needed for the role-play scenario to complement the text-based asynchronous discussions. One commented that it took much more time to participate in the online course than in a face-to-face course, and that expressing agreement with other students' views did not contribute to enlightened debate and devalued the learning process. The respondent went on to argue that a course loses its characteristic of being flexible if students have no choice but to study in particular ways. Another student made the following comment:

I am not convinced that online study is as effective as face to face study. I have also studied Australian Asian Relations and French 2B this semestre. The personalities of the lecturers, the incidental anecdotes, the passion for the subject, the body language all added an enormous amount of insight that my online teacher and tutor could not provide. The online subject, satisfying in its own way is a thin filtered version of the real life experience that one enjoys in face to face contact.

A third made the comment:

All students should be forced to participate in the country forum at least twice, for example monday and friday. Apart from one other student all students from my country group only checked the forum fridays, so that a proper discussion was hardly possible, which annoyed me because I found the role play exciting.

3. Instructional resources and teaching input

Positive

The available online readings and texts were particularly helpful in preparing students for discussions and the role-play scenario. Reminder emails from the online tutor, on what was expected and when, helped keep students on task. Different discussion boards separated different kinds of information and tasks so that it was not all jumbled together. Many believed the online scenario was well constructed and implemented, and the best piece of assessment that they had been involved in. It was engaging and beneficial with a purposeful end-product. Some commented on it being a realistic scenario rather than an imagined hypothetical ‘what if’ one. It helped with the application of theory to a practical real-world situation.

Negative

More teaching input from the online tutor was the greatest concern, but also more background information on the role-play scenario would have been helpful. A simpler course was recommended because too much was expected of students in the course – either have fortnightly postings to the seminar discussions or have a role-play scenario, but not both. Sometimes the correlation between the two was difficult to determine for some students. One student commented that she found the themes harder to process online than in face-to-face settings and, although the role-play scenario was a practical way of applying them in context, trying to do this without complete understanding was somewhat challenging. Also a fortnight was not seen as a sufficiently long period for in-depth treatment of a topic in the seminar discussions. A better website layout or clearer instructions on how to navigate the online course would have been helpful.

This concludes the presentation of largely quantitative data from various sources to illustrate patterns of learning and engagement in the online course, and associated views of the experience. The quantitative results have highlighted areas of interest in the data for further comment and analysis which is undertaken in chapter 7.

The next chapter presents the analysis of the qualitative data to provide a fine-grained understanding of the selected research participants. The qualitative data are drawn from the content analyses of the web forum transcripts for social and cognitive presence, and are corroborated with the online survey responses and web

data logs to offer insights that the quantitative data alone could not provide. The data presented in Chapters 5-7 are drawn together with all the findings and analyses to provide an in-depth view of the students' educational experience of the online course in Chapter 8.

Chapter 7

Individual cases of student experience

This chapter presents a narrative synthesis of the various data sources for each of the individual cases detailed in the previous chapter to produce a fine-grained qualitative analysis of individuals' learning experiences. The analyses of data presented in Chapter 6 identified areas of interest for further investigation of the selected research participants as individual cases. These cases are reported below as summarised accounts of the 11 selected research participants. The method was introduced in Chapter 4 (see 4.3.2 and 4.3.3), and supported by processes presented in the appendices (see references below).

7.1 Grouping of students

For efficiency, individual students have been grouped according to the degree program in which they were enrolled, their age group, and their gender. Each student is discussed as an individual case, but also compared within the following groupings:

Table 7.1.1: Grouping of selected participants

Group	Participant	Degree	Age	Gender
Group 1	P1, P5, P29 P17	Bachelor of Journalism,	< 21	Female
		Bachelor of Arts (International Studies)	<21	Female
		Bachelor of Arts		
Group 2	P18 P25	Bachelor of Arts (International Studies)	21-30	Female
		Bachelor of Journalism,	21-30	Female
		Bachelor of Arts (International Studies)		
Group 3	P11 P30	Bachelor of Management (Marketing),	21-30	Female
		Bachelor of Arts (International Studies)		
		Bachelor of Management (Marketing), Bachelor of Arts (International Studies)	21-30	Male
Group 4	P19 P28 P36	Bachelor of Psychology	<21	Male
		Bachelor of Psychology	21-30	Female
		Bachelor of Psychology	21-30	Female

The participants selected for each group are introduced in an overview, based on information provided in the online survey results, before details of each participant within the group are presented. The survey item that provides the information is referred to as S1 for Survey 1 and S2 for Survey 2 followed by the question number (e.g. S1Q9 refers to Question 9 in Survey 1) (see Appendix J and Appendix K for the survey questions and group results). The data analysed and discussed in Chapter 6 is represented in a summarised format for each individual case in Appendix E and Appendix F. This allowed me as researcher to identify areas of interest for each individual at a glance. Areas of interest include high and low values in the data as well as values that were unique to individuals. For example, P5 and P36 were the only participants to exhibit obvious use of humour in the seminar groups while P1 and P25 were the only participants to reveal frustration at a lack of response to messages posted in the country forums. The nodes corresponding to areas of interest for individual participants identified in the data were examined further in QSR nVivo to identify the nature of the areas of interest and possible reasons for explanation of why they were important to an individual (and not others) (see Appendix I). This process was corroborated using filtered data in a spreadsheet of messages posted to forums with dates and times recorded (see Appendix M). These data were also corroborated and merged with the survey results that supported the findings. The process included the qualitative responses to the open-ended survey questions. This same systematic process was used for each case to provide the summarised qualitative accounts, triangulated and synthesised from the various data sources, presented in the remainder of this chapter.

7.2 Group 1: Overview

P1, P5, and P29 were all young female students under the age of 21, enrolled in the double degree of Bachelor of Journalism, Bachelor of Arts (International Studies). P17 was also a young female student but enrolled only in the single degree of Bachelor of Arts. P1 and P5 had both visited countries overseas but had not lived abroad. P29 had not been overseas. Their native language was English, and they had all learned a language other than English. P17 was the only one of the group to have lived abroad, but had not learned a language other than English. P5, P17, and P29 all chose to do the online course because they had a keen interest in international affairs

(S1Q9), even though the course choices for P5 and P29 were limited (S1Q11), whereas P1 only did the course because her options for course choice were limited (S1Q11). The course was not as important to P1, P5, and P17 as the other courses in their degrees (S1Q10). The initial survey responses for P1 and P17 indicated that they liked the fact that the course was offered entirely online (S1Q12), perhaps because they thought that learning online would be easier than in face-to-face situations (S1Q27); P5 and P29 were of the opposite opinion. All four participants later admitted that they would have preferred to have done the online role-play scenario in face-to-face mode than in online mode (S2Q27).

7.2.1 Participant 1

On the whole, P1 expressed a strong desire for social connection with others in her allocated discussion groups and displayed a sense of group awareness and collaborative responsibility. She contributed nine of the 69 messages posted by the 11 research participants in Seminar Group 1 ($\bar{X}=6.3$) and 15 messages of the 21 posted by 2 research participants in the country forum Azerbaijan ($\bar{X}=10.5$). In terms of social participation, more so than other students, she referred to others using inclusive pronouns or given names, expressed agreement and offered advice, and disclosed personal information and expressed emotions. She invited comment or feedback and asked questions in the country forum rather than continue threads of conversation, but this led to frustration at a lack of response. Her introductory statement to the seminar forum revealed that she was initially overwhelmed by the amount of information and ideas contributed to the seminar group. She also admitted that she was not looking forward to participation in the course:

I am not looking forward to this course but only because this whole online bizzo is confusing! But I guess that'll keep things interesting. The scenario/role play sounds intriguing. Catch ya on the flipside.

She was intrigued by the prospect of the role play. She wrote in a conversational style as if talking to others in the group and regularly used colloquial expressions. Although she tended to be a little harsh on herself and apologetic for her 'rambling' contributions, she demonstrated confidence in her contributions to the seminar group, and later in the course as she co-led the country forum and helped create solutions

that contributed to the development of the country position statement. Her confidence was cautious and often undermined by her own negativity:

Wow my mind is swimming with thoughts. I don't really know what to comment on because there's just too much to think about. But I guess I'll start by saying that I am not convinced that globalisation has replaced international relations.

The readings and discussion in the seminar group in relation to the state of the world negatively affected her state of mind over time:

That's all I can think of right now to be honest. I am in such a negative mood because I've been reading a lot about how ruined the environment is, how corrupt some states are and how little most countries do to promote global justice. Anyway I'll try not to be too negative in my commenting!... So there I've just confused myself... Perhaps I should get on to the topic a little more... So really none of that helped me, and I think the situation is hopeless...so maybe I should stop reading things!

Her cognitive contribution was stronger than her social contribution in the seminar group but this was reversed for the country forum. Nevertheless, her cognitive contributions reflected her social awareness since she mostly engaged in collaborative activities; she connected and synthesised ideas, exchanged information, and offered suggestions for consideration in the seminar group, while in the country forum she offered suggestions for consideration and created solutions. She readily disclosed her feelings and state of mind:

Wow I didn't realise that. But that just makes me feel more negative, haha. Oh well I'm sure it's just a bad day, but this topic has really just made me give up hope for the world and I don't think it was meant to do that. Thanks for your comment!

Though in saying this, I'm clearly proving myself right as I am merely talking about it and getting all huffy!

Wow! Everyone seems enthusiastic about this topic. I, for one, was not aware of just how complex the enforcement of human rights was. Don't get me wrong, I didn't think of it as just...

In the role-play scenario, she seemed frustrated by the lack of contribution of other participants to the country forum, and assumed the leadership role because of this:

Any one got any ideas? Also if I've got completely the wrong idea someone tell me!

Hi guys we definitely need to appoint a leader. We're all working on this together so they don't have extra work to do or anything. Does anyone WANT to

do it? I don't, but only because I'm bad at explaining things. If no one else volunteers I guess I'll have to do it. But please decide!

When another participant contributed ideas in a more eloquent and informed manner, she shifted the leadership responsibility to him, but continued to co-lead:

I'm not sure about the oil thing, but I think your idea to gain support from America is spot on. Ditto with the Russian support. Do you want to be the leader? You seem to be good at getting a point across.

Thanks for posting the statement [*student name*], at least some of us are on track. If you don't want to be the leader by yourself we can share like you suggested just let me know. Until the next update, have a good break!

Well I think our posting is due today, so if [*student name*] hasn't done it by some time this evening I guess I will do it. But he's so much more eloquent than I!

When addressing misunderstandings, she tended to soften her tone with 'haha' appended to the statement:

Sorry to hear that [*student name*], I hope everything is ok. Thankyou for your lengthy input, and I hope you don't think I was being rude. I was a bit stressed and confused about deadlines for this online scenario, haha. Well guess I'll post again later when I have some helpful solution to put forward to the scenario!

According to the survey results, she liked the fact the course was offered online as she found it easier to learn online than in face-to-face settings. However, she would have preferred more facilitation and guidance from the online tutor, better clarity of instructions and expectations, and more committed input from other members of her country forum.

7.2.2 Participant 5

P5 displayed a social awareness of contributing ideas for an audience to consider, but rarely acknowledged others explicitly. She contributed seven of the 97 messages posted by the 12 research participants in Seminar Group 2 ($\bar{X}=8.1$) and 12 messages of the 16 messages posted by the two research participants in the country forum France ($\bar{X}=8.0$). She mostly exchanged information with other students in her seminar group in an instructional style and developed her own ideas as a logical coherent argument within her messages based on what she had read in course materials and beyond. She tended to question in a rhetorical form what she had read that invited consideration and comment from others. She often referred explicitly to

the messages of others, but diverged from the thoughts of other group members more than expressing agreement (e.g. *I agree with [student name], in that it would be great to think that human rights are universal, but in practice they definitely are not... and I agree with the posings about international morality. Although in an ideal world there would be universal morals which would be followed by all countries, in the real world that's never going to happen.*), although she did express agreement with the comments of others in a few messages (e.g. *like [student name] said,* and *As [student name] said,*).

In the country forums, she was more collaborative. She achieved this by responding to the messages of others. She often justified her position rather than simply stating it (e.g. *Hi everyone, My name's P5, and like [student name] said, I think France will have a big role in this. Not only does the country belong to the UN, but it is an influential member of the EU, attaching a high priority to European integration. It is also a member of the G8 and the Council of Europe (CE), so its power in the area is going to be pretty big.*) Many of the messages contributed to the country forum were brief and for the arrangement of face-to-face meetings, two of which she attended and reported on to the country forum. Her reports and reflections on face-to-face meetings tended to be relatively long. She connected and synthesised the ideas of others, shared information, provided suggestions for consideration, and created solutions. She apologised to the group for late contributions and for arriving late at a meeting or for not being able to attend on one occasion, which demonstrated a commitment to the group and to the responsibility of contributing to the shared learning goal. According to her survey responses, she strongly disliked learning online and she wanted more input and feedback from the online tutor who was too far removed from the learning process for her.

7.2.3 Participant 17

P17 completed the course as part of a minor in international studies. She was focused on the content and the task at hand. She contributed eight of the 69 messages posted by the 11 research participants in Seminar Group 1 ($\bar{X}=6.3$), and 39 messages to the country forum Italy, in which she was the sole research participant. Apart from P30, who posted 43 messages to his allocated country forum, her contribution to the country forum was significantly higher than any other individual research

participant. In the seminar group discussion, she progressed her own ideas and arguments with occasional acknowledgement of those of others, although she did respond to the message of another student to continue the thread of conversation:

...In this I agree with the point that ### made regarding society becoming immune to the suffering of others...

This continued throughout the seminar group discussions with no mention of others in some postings and only minimally in others:

...I agree with others that have talked about Australia's apparent 'lack' of nationalism...

She did exhibit some cohesive social presence by addressing others by name and using inclusive pronouns in some of her messages, particularly when continuing threads of conversation to express agreement. Despite an apparent lack of desire for social connection, she thought her contributions were valued by other participants (S1Q22 & S2Q26), and that she had made an effort to respond to the contributions of others (S1Q23). She preferred to read the responses of others before submitting her own response (S1Q25), which suggested that her contributions were a reflective consideration of the contributions of others. She neither agreed nor disagreed that it had been difficult for her to build a rapport with others in the online environment (S1Q26), which was perhaps a reflection of her attitude towards the importance or otherwise of social connection in achieving the learning goals of the course.

She displayed a strong sense of interactive social presence in the country forum to which she was allocated (see Figure 6.9), and cohesive social presence to a lesser extent. Affective social presence for her was low in both forums. This came through clearly in her contributions.

She began the country forum in a much more social tone than she had in the seminar group:

Hi everyone, my name is P17 and i'm completing my minor in International Studies. I look forward to working on this issue with you all.

Her initial participation in the country forum tended to be in the form of brief responses to the messages of others, offering her own reflections or suggestions for consideration. Upon closer investigation, it was revealed that there was an

arrangement for the group participants to meet online together at a mutually convenient time. These two messages were posted in the two days prior to the meeting:

Hi guys, Tuesdays are good for me as long as it's before 2pm – although if we're going to meet tomorrow it has to be before 12. Sorry for the late reply! – P17

...I'll 'talk' to you all at 1 tomorrow!

Then there were nine consecutive posts by P17 – all relatively brief, and all responses to messages posted by others – posted on the same day, beginning with:

I'm here.

And ending with:

Great, see you next time!

In one of her responses, she declared:

Discussion boards might be easier or meeting online – it would be hard for both country groups to find a time to meet in RL – or maybe one or two reps from each groups could meet if there's a suitable time and report back to the group.

From the context of the message, it was assumed that RL meant real life. The 'live' synchronous interaction helped explain the characteristics of the participant's brief and numerous interactive responses. This appears to have happened on at least two occasions during the online role-play scenario, with brief interactions between, since the interactions followed the same patterns, and occurred in concentrated blocks of time. This is supported by the patterns of post discussed in relation to Figure 6.2. She liked the fact that the course was offered online (S1Q12) and admitted that she found it easier to learn in an online environment than in face-to-face situations (S1Q27), which was reflected in her response above. There was a second reference to an online meeting:

Guys – I have a class on Friday so will be online at about 2pm.

Despite the interactive nature of her participation in the country forum, she remained very much focused on the task at hand, which in this case was trying to resolve a global conflict. She achieved this by expressing agreement with explicit reference to the messages of others, by offering advice and suggestions for consideration, and by creating solutions. According to her survey responses, she thought that explanations could have been clearer, and that it might have been better if students had remained

in the same groups for both stages of the course (S1Q34). She thought clarity of instructions and guidelines, and relevance of the readings could have been improved, but her comments suggested that she perhaps misunderstood the purpose of the readings, and the nature of the response expected (S2Q34):

it was hard to 'discuss' the issue in the online groups because we had to in effect summarise the readings. I think more discussion could be generated by everyone having more of a discussion than everyone only being allowed one post, pretty much saying the same thing.

She disclosed that for her the instructions and guidance provided by the lecturer for the online role-play scenario were not stated clearly nor presented well (S2Q14), and that the instructions and guidance provided by the lecturer did not prepare her for participation in the role-play scenario (S2Q16); however, she admitted that the role-play scenario did provide for her a real-world context with which she could identify (S2Q17). She neither agreed nor disagreed that she found it relatively easy to apply the learning of the first part of the course to the online role-play scenario (S2Q18), although she was perhaps the only research participant to make a clear connection between the two stages of learning (see 8.1.3).

7.2.4 Participant 29

P29 found it difficult to commit to the learning goals of the groups in which she participated mainly due to a lack of clarity of expectation, and her preference for face-to-face learning (evidenced in the survey data). Nevertheless, she contributed nine of the 97 messages posted by the 12 research participants in Seminar Group 2 ($\bar{X}=8.1$), and 20 of the 115 messages posted by the four research participants in the country forum Turkmenistan ($\bar{X}=28.8$). She was highly social in both forums, but this participation often reflected a dependence on others for learning in the course. She tended to apologise for her lack of participation or lateness of contribution. She relied on guidance and feedback from others, and showed constant appreciation for the contributions and work of others (e.g. *that sounds great guys...good job, guys, etc.*):

Hi guys, sorry I've taken so long to contribute, I've had a stressy week. You've done great work, I think what you've come up with so far is pretty much everything we need. One thing though, should we offer to talk with Ukraine

about oil deals etc? Seeing as we're encouraged to talk with other country groups etc? Although this wouldn't really be HEAPS relevant to position statement...

Hi again guys. About the scenario this week – there isn't really much to respond to from Turkmenistan's perspective, is there? So what should we do, just focus on writing our country's position statement?

In the seminar group, she mainly presented her own ideas in response to the contributions of others rather than responding directly to the readings, which was confirmed to some extent by her survey response (S1Q24), since she believed she had made an effort to respond to the contributions of others (S1Q23). She did ask questions of others, exchange information, and offer suggestions for others in the group to consider. In the country forum, she exchanged information, offered suggestions for consideration, and requested feedback from others, which perhaps revealed her lack of confidence and dependency on others, rather than collaboration, to achieve the learning outcomes required of the course. She expressed high levels of emotive content in both forums.

She attended the in-person introductory seminar to the course at which the course and its expectations were explained, and she related a summarised version of this information at the commencement of the course to others in her seminar group. Despite this, she admitted in the online surveys that she found the structure of the course confusing and the instructions unclear. In an introductory comment to the seminar group, she asked whether anyone else was slightly daunted by the sound of the role-playing task: in her country forum introduction she said that she looked forward to doing this assignment, 'even if it was a bit confusing.' She further disclosed her lack of knowledge about the country to which she had been assigned, but offered information to others that she had found:

I don't know if you guys know much about Turkmenistan, but I'm embarrassingly clueless!...

Nevertheless, she found the online scenario a good learning experience in that it provided for her a real-world context with which she could identify (S2Q17).

7.3 Group 2: Overview

P18 and P25 were both female students aged between 21 and 30. They were native English speakers who have lived abroad and learned languages other than English. P18 was enrolled in the single degree of Bachelor of Arts (International Studies), while P25 was enrolled in the double degree of Bachelor of Journalism, Bachelor of Arts (International Studies). P18 chose to do the online course because she had a keen interest in international affairs (S1Q9), not because her options for course choice were limited (S1Q11), as was the case with P25. The course was as important to P18 as the other courses in her degree (S1Q10), while P25 chose not to comment on this issue. Her initial survey response indicated that she was unsure as to whether she liked the fact that the course was offered entirely online (S1Q12), but did not agree that she found it easier to learn online than in face-to-face situations (S1Q27), whereas P25 was strongly opposed to the course being offered entirely online (S1Q12), and did not find it easier to learn online than in face-to-face situations (S1Q27). P18 completed only the first online survey, so it was not possible to determine a change in attitude after involvement in the online role-play scenario. In her introductory statement in Seminar Group 2, she did not comment on the online nature of the course, but referred to the social aspects of the course: P18 was a member of Seminar Group 2, and the country forum Kazakhstan, and contributed minimally to both groups. P25 would have preferred to do the online scenario in face-to-face mode than in online mode (S1Q27) as she found it much easier communicating in face-to-face settings (S2Q15; S2Q18). She expressed anxiety in her introductory statement in the seminar group about participating in the role-play scenario.

7.3.1 Participant 18

Unlike the participants in Seminar Group 1, P18 launched into her response to the first topic in her opening contribution to the seminar group discussion:

The compassion fatigue article made me think about how gradually over the years I have become less and less outraged by global injustices. I think that, perhaps, because we are reminded quite regularly of these types of atrocities, that they no longer have the impact that is needed to spark action.

Rather than focus on the nature of the course in her opening comments to the seminar group, she simply stated that she looked forward to working with the group. Her contributions, like P29, were responses to the messages of others, but unlike P29, her responses were the continuation of a thread with little to no reference to others' contributions. This was confirmed by her strong agreement in the first survey that she focused specifically on the task and gave a considered individual response, rather than developing a rapport with other learners and taking into account or being influenced by the responses of others (S1Q24). She was confident and self-assured in her comments, and focused her responses on the readings with no references to other group members. This was similar to the task-focused nature of P17's contributions and contradicted her opening statement in which she disclosed that she was looking forward to working with the group. However, in her opening statement to the country forum, she seemed less confident and seemed to want greater collaboration with the group:

I'm pretty confused about this whole role play thing, so hopefully we can work through it together!

P18 contributed 13 of the 97 messages posted by the 12 research participants in Seminar Group 2 ($\bar{x}=8.1$) but only 11 of the 47 messages to the country forum Kazakhstan ($\bar{x}=11.8$). In contrast to her more considered formal responses to the readings in the seminar groups, her discourse was more informal and social in the country forums. In both forums, she displayed relatively strong affective social presence in her disclosure of thoughts to others and her expression of emotion. Her discourse became similar to P29 in the country forum in that she apologised for her lack of commitment, and was very complimentary and grateful for the contributions of others in the group:

Hey guys, I just like to say thanks for all the work you guys have put into the case and apologise for my lack of help so far. I agree with [student name], we should definitely refrain from providing military support...Thanks again for all the work!

She also apologised in her advice to others in the group, making her feelings on certain matters explicit and clear, which illustrated a determined attitude in relation to particular issues:

Sorry to be such a pain, but I really don't think that we should grant them independence until they have their [expletive] sorted out (pardon the swearing).

and

I had a huge fight with one of my best friends about this at the pub on Friday night, so now I am determined to stick by my guns!

She apologised for making the debate more contentious:

Sorry to add more fuel to the debate!

Also similar to P29, she asked others for feedback or comment:

So at the moment, I think we should keep our position as is. Any thoughts?

and

These are just my thoughts at the moment. I am very open to other opinions about the issue!

She offered suggestions for consideration as a collaborative effort using inclusive pronouns (e.g. *I think we should...*), and affirmed and added to the contributions of others in the group (e.g. *I think you've made some very valid points [student's name]...*). She saw herself very much as a team collaborator as she asked questions of others and offered advice using inclusive pronouns (e.g. *...Also, does supporting the Chechen movement mean that we are giving in to terrorist demands? Would this be a green light for other ethnic groups who are striving for their independence? ...We need to be explicit in what we expect from either side.*). She applied learning from the seminar groups to the resolution of the conflict by drawing on themes from topics discussed in the seminar groups. She also reached a state of disillusion and resignation with the depressing nature of the state of global affairs, but appealed to the group for answers:

Well this is all pretty depressing! So the question I want to put out there is, if there is no international morality, how can we force our concept of human rights on others? Can we only enforce human rights on countries that have signed the declaration of human rights? If so, does it mean that those countries subscribe to the same moral code as we do?

This was similar to P1's disclosure in the seminar groups when the seemingly negative state of global affairs seemed to overwhelm her. However, P18 turned it into a shared learning opportunity by challenging the group's position through analytical questioning. The course seems to have engaged her in transformative learning, revealed in admissions such as:

I would agree that my understanding of the term security changed in recent times. Personally, I feel that traditional security threats, such as the threat of war, are perhaps no longer as important compared to issues such as environmental and human security... I guess that living in a country where geographical isolation has always made me feel particularly safe from the threat of war on our soil, makes non-traditional security threats seem more threatening (and terrifying!) to me.

However, it is unclear whether it was the course or external sources of information and debate that triggered her changing attitudes. The course might have created reflexive opportunities for self-awareness, and this was evident in the confident personal position she adopted in her messages particularly towards the end of the role-play scenario:

I think that the only possible way to approach and resolve global threats is with a united global front. There is no point in one state deciding to cut down on its cfc emissions when its neighbour is increasing them... What is the point of one country doing the right thing if another is going to do something that is taking pollution to extremes? What is the point of me watering my garden with water from my washing machine if the school across the street is going to water with a sprinkler in the middle of the day? So my rambling comes to this point... everybody needs to do the right thing by the environment (and therefore the population) to make a difference. There can't be exceptions. A global front is the only solution to global problems, but we can all do our bit until that time comes...

P18 brainstormed ideas, offered suggestions for consideration, offered divergent views within the online community, and exchanged information with other group members at the exploration stage of cognitive development in the seminar group, while at the same stage in the country forum (only 948 words) her suggestions for consideration increased (36%) and her divergent views within the online community decreased (8%). This revealed the original thought expressed in her contributions; rather than simply respond to the messages of others, she brainstormed her own ideas for others to consider that diverged from ideas already presented within the group. At the third stage of cognitive development, P18 developed her ideas within a single message, synthesised ideas among group members, and created solutions within the seminar group. In the country forum, she expressed convergent views with group members and created solutions. This demonstrated her (pro)active contribution to the resolution of the problem.

P18 agreed that she had brought pre-conceived notions to the course of the concepts covered in the seminar group (S1Q13), and had not thought much about the concepts before enrolling in the course (S1Q14). Her ideas were challenged by the readings for the weekly tasks and online tutorial groups (S1Q16), but she did not indicate whether her ideas were challenged by other learners through online interaction (S1Q17), or whether her ideas of the concepts covered were clarified by her reading and interaction in the course (S1Q18). She did not indicate whether she was sufficiently prepared to apply the concepts in the online scenario (S1Q20), but did feel sufficiently prepared to role-play and collaboratively develop the country position statement (S1Q21). She did think the online scenario was beneficial (S1Q34) but found the amount of information on the website confusing:

there is so much text on the website that its easy to get confused... clearer instructions would be helpful. the online scenario is great though, its probably the best assessment piece i've done so far in my degree.

7.3.2 Participant 25

P25 contributed minimally to the seminar group to which she was allocated, but substantially more in the role-play scenario. She contributed four of the 97 messages posted by the 12 research participants in Seminar Group 2 (\bar{x} =8.1), and 16 of the 33 messages posted by the three research participants in the country forum Turkey (\bar{x} =11.0). Like others, P25 expressed initial anxiety at the thought of the role play in her introductory comments to the seminar group in response to comments made by another participant:

It's my 1st online course also and yes, [*student name*], I am nervous about starting the role play task!

In the seminar group, P25 presented her own views in relation to the readings and in response to the postings of others. She exchanged information with others, developed her own arguments and ideas within messages, and drew on the ideas of other group members to help formulate her own responses. This is evident in the following excerpt from one of her messages:

...[*student's name*] highlighted a quote from The Advertiser which showed the somewhat uncompassionate, numbed feelings of one woman only caring about her dog. The sad truth is that a majority of people only care about local issues

that directly affect themselves or their family.... We are lucky to be living in a safe city, with no bloodiness and war, but I agree with [*another student's name*] that our “cushioned lifestyles” make the devastation in Lebanon seem all the more far away, unrealistic and unreachable.

In one of her contributions to the seminar group, she apologised for having contributed late due to technical problems:

Sorry about my late response – my new over-protective, anti-virus program on my computer blocked me from accessing the discussion site!

She used rhetorical questions in the building of her position on a topic, and drew on the readings and contributions of others for ideas and support:

The four goals for self-determination according to Dahbour are:... Does self-discrimination always lead to ethnic conflict? As [*student's name*] mentioned, giving example to the ongoing Palestinian-Israeli crisis, the subject of self-determination has been the basis for contention and war...

In the country forums, P25 was committed to the collaborative team effort, and contributed in a confident manner with support from readings. She continued the thread of others' contributions and exchanged information with other team members. She addressed or referred to others using inclusive pronouns in bringing together the ideas of group members. She referred explicitly to others' messages and offered suggestions for consideration. Her authoritative leadership style was evident from her first contribution to the country forum in which she provided evaluative comment on the messages of others and self-appointed a task. This committed leadership style of contribution and organisation continued in the messages that followed:

Hey there! I've put together an overview of what questions we have to answer on this site/the assesment criteria for the country position statement just to confirm we're all on the same wavelength (it's hard not being face-to-face!) and so you can have something to refer back to when you're researching etc....What do you guys reckon about dividing up research topics so we're not all overlapping each other?

Even though she was not appointed leader, she advised the leader and the rest of the group on the position they should take in relation to the conflict scenario, and the reasons why. Her commitment to the team's goal furthered her self-appointed leadership role within the group:

hi [*leader's name*], those four points on the position statement look good. noticed you didn't post the position statement on the general discussion forum – do you know you had to by last friday? are you in germany? did you want more

help with it before you posted it ? did you want me to do it or will you do it sometime soon? let me know asap if you can. thanks, [P25]

She thanked the leader for posting the developing position statement, and complimented him on his effort. Her advice to the leader continued in her contributions:

[*Leader's name*], perhaps in the next posting, it may be good to use some of these references to the real world. You could write something like:...

She combined the ideas of others succinctly including her own position on the ideas supported by research. Towards the end, she urged the leader to include these summarised views in the final statement, but felt that all of her committed effort to assist the team in successfully achieving its goals had been ignored. The leader responded to her complaint, and she seemed satisfied with his response. She also advised the online tutor to clarify due dates for the benefit of the group.

She concluded one message in the country forum with a more collaborative and softened tone:

Hope this is ok and my input is of some help. Cheers guys, keep up the good work.

but continued to keep everyone on task:

Just a reminder to you guys if you didn't know already...BY THE END OF THE WEEK WE SHOULD HAVE A DRAFT POSITION STATEMENT COMPLETED!

She suggested meeting face-to-face to facilitate and expedite the process during the mid-semester break:

P.S – Did you guys want to meet up in the holidays to talk in person because I'm finding this means of communication slow and difficult – it will be easier to talk face-to-face. I don't mind where we meet – perhaps [*campus location*] if its most central. I'll just put it out there – How is midday on Friday September 22 for everyone??? Let me know and we can arrange a place to meet.

Her request to meet during the break appeared to have been ignored as she pursued the desire to meet after the break, whether using MSN or face-to-face:

hey guys, [*student name*], thanks for posting that position statement, it was great. hope you all had some good holidays. was wondering if you wanted to perhaps have a chat on msn or meet up in person at some stage in the next week. ive got these msn addresses so far...but perhaps it would even be better if we could meet

face-to-face to start our position statement – due in 3 weeks. let me know what days are good for you all. i'm pretty flexible coz i just work nights. cheers, P25.

Apart from P1, she was the only other selected research participant to have been frustrated at a lack of response. This was possibly mainly due to the part-time nature of her enrolment and her wanting to progress the development of the position statement during the mid-semester break, when full-time students were not participating in the online discussions, and not responding to her contributions and requests.

Her survey response on the problematic features of the course was that the readings were too long, complex, and difficult to understand (S1Q34). To improve the course, she made the following comments (S2Q34):

personally i just find it hard to read the masses of readings – i take in lectures better and feel it is easier to ask questions and learn more face-to-face. So the only way to improve this is face-to-face contact, which defeats the purpose of an online course.

This confirmed her desire, demonstrated throughout the role-play scenario, for 'live' meetings with others in her country forum.

7.4 Group 3: Overview

P11 and P30 were both aged between 21 and 30 years of age, and were enrolled in the double degree program of Bachelor of Management (Marketing), Bachelor of Arts (International Studies). P11 was female and in her final semester of the double degree, while P30 was male and not as advanced through his program of study. P11 had visited overseas but, unlike P30, had not lived abroad. Both were native speakers of English and had learned a language other than English. Both chose to do the online course because they had a keen interest in international affairs (S1Q9), but P30 also indicated his options for course choice were limited (S1Q11). Although completed in the final stages of her double degree, the course was as important to P11 as the other courses in her degrees (S1Q10). The initial survey responses of both indicated that they liked the fact that the course was offered entirely online (S1Q12), although P11 strongly disagreed that she found it easier to learn online than in face-to-face situations (S1Q27). P30 took a neutral position on this but he indicated that

he would prefer to do the online scenario in online mode than in face-to-face mode (S1Q27), and found it easier communicating in online than face-to-face settings (S2Q15; S2Q18). P11 later admitted that she would prefer to do the role-play scenario in online mode than face-to-face (S2Q27).

7.4.1 Participant 11

P11 lived far from the CBD and relied on public transport, so she chose this course because it was external and well suited to her study purposes. She was in her final semester of a double-degree in marketing and international studies. She also had a cross-institutional enrolment. She commented in her opening statement to the seminar group that she looked forward to working with others in the group, rather than commenting on the nature of the course and its online learning tasks. P11 posted seven messages to both Seminar Group 2 ($\bar{x}=8.1$) and to the country forum Georgia ($\bar{x}=8.3$), but in terms of the number of words her contribution to the seminar group was greater than to the country forum. This probably reflected her enjoyment of the seminar discussions, as she commented in her second message to the seminar group how much she had enjoyed the topics so far and was looking forward to the next. She initially apologised for late contributions and furthered the discussions of others without mention of names or specific reference to their messages until later in the course. She quoted and explicitly responded to a discussion item in the online notes for the first topic whereas other participants responded to the readings or messages of others. She continued, as evident in the following contributions, to add to the ideas of the group by responding to the readings as a continuation of her thoughts from the previous topic:

Sorry my posting is late, but i hope that i can add my thoughts to the discussion on identity. Following on from last weeks topic 'a divided world' which explored the increasingly global nature of issues...

and

Continuing on from the previous discussions concerning the question of whether human rights can be considered universal...

She explicitly referred to others by name from the time of the third topic in the seminar groups, but did so to diverge from their ideas and present contrasting thoughts or, at least, to progress and validate her own ideas. The experience,

knowledge and maturity developed through her program of studies was evident in her online communications. Similar to P18, her writing style was academic in the seminar groups in that it was formal, had few indicators of social presence, and drew together ideas from various sources for critique and comment. Her written style changed significantly in the country forums, becoming more casual and social in nature:

Hi all, Just thought i would say hello so we could make a start on our discussions :) P11

Hi guys, Thanks for the background info [student's name] i think we definately need to get a move on and post our reaction to the scenario!

She offered suggestions for consideration and requested feedback (e.g. *What do you think guys?*). She also complimented others on their contributions and expressed agreement (e.g. *That sounds great [student's name], i definately agree with you also.*). She raised the question of leadership and then, when one was appointed, went straight into the business of progressing the country's position on the conflict:

If you would like to be leader then thats great, we can discuss what we should write now.....Maybe it should be something like:... still feel like that is too broad, but it only needs to be simple i guess

Some of her contributions were brief and in response to the comments of others (e.g. *And also mention that Georgia would like to remain neutral?*). She demonstrated similar commitment to the group effort as P25, but did not attempt to dominate the group decision-making process, or subvert it for her own purposes. Although she supported the leader, she respected the role of the leader and the contributions of others:

Just wanted to know, from [leader's name] in particular if you wanted any help or input with the position statement as i know that we all have to contribute towards it. Let me know if you need more ideas or if anybody else wants to continue our discussion about it.

P11 contributed less than other participants to the development of the country position statement and, although she had offered to assist, left most of the work to others. She only exchanged information at the exploration stage of cognitive development in the seminar group, while at the same stage of cognitive development in the country forum she only offered suggestions for consideration. At the third stage of cognitive development within the seminar group, P11 developed her own

ideas within her messages, but also connected and synthesised ideas of others in the process; she also showed convergence of ideas among group members. In the country forum, she expressed convergent views among group members in order to create solutions. To a large extent, this reflected the different nature and purposes of the two forums.

Her comments about what prepared her well for the online scenario related to the reading resources and instructional materials, including teaching input, that provided stimulus for student interaction (S1Q33):

Reading resources and additional reading resources. Additionally, teaching input and lecture notes. Online discussions force you to understand the concepts and interact and communicate with others to gain different views and perceptions.

This was reinforced in the second survey at the end of the course (S2Q33), and reflected her preference for learning online (S2Q11, S2Q30), although she admitted that face-to-face mode would have been easier for her (S1Q27):

definitely the resources provided, however more internet resources should be provided. I think that there needs to be stronger consequences for students who do not participate in the online scenario.

Her survey response about stronger consequences for students who do not participate in the online scenario suggested that some students in the country forum did not participate as required by the task instructions. Her comments on how to improve the course focused on reducing collaboration and increasing independent participation, which reflected her participation patterns in the seminar group (S1Q34):

Less group collaboration, for example in the case of the country discussions as I find it hard to communicate with others in an online environment, especially when something needs to be handed up as I found that it was hard to get things done with a whole group. I would prefer to work individually.

In other comments in the second survey at the end of the course, she added that clarification of assignment requirements was important (S2Q34):

More information on the assignments should be provided to show what exactly is expected of students when submitting their assignments.

7.4.2 Participant 30

P30 was the most active participant and prolific contributor of all of the selected research participants. He contributed 15 of the 93 messages posted by the 11 research participants in Seminar Group 3 ($\bar{X}=8.5$), and 43 of the 115 messages posted by the four research participants in the country forum Turkmenistan ($\bar{X}=28.8$). He showed excitement from the outset about the online nature of the course, probably because it allowed him to express his ideas and respond to those of others frequently and without restriction. He expressed awareness of the need for restraint from the beginning, but then apologised at having written too much in his first message:

Hi, I'm [P30] – studying Management and International Studies. I'm really looking forward to studying this course! The content looks interesting, and the online environment is the best that I have seen since starting at [*Uni Technovation*]. Here are a couple of my observations from the readings (I'll try not to write too much!)...[*over 400 words*]...Sorry I've written so much! I'll try to restrain myself next time...

P30 tended to continue threads of messages posted by other group participants, which resulted in many contributions in a short space of time on a single topic; many of these were relatively short posts. By challenging the contributions of others and strongly expressing his own beliefs, sometimes without evidentiary support, he attracted some criticism from other group members. However, he admitted his opinionated bias and lack of critical reflection of media reports when he made unsubstantiated or misinformed claims:

Interesting to see read the interview in context [*student's name*], thanks for posting that. I think I was sucked in by the media... I hate when that happens!

Because his opinions differed from the apparent consensus of the seminar group on certain topics, he made it clear that difference of opinion was good and should be encouraged. He offered comments, like the following, that would be the kind expected of an online tutor:

Good post [*student's name*] – I may not agree with everything you have written, but you should not feel afraid to post your opinions :-). I think what you have written is well expressed.

P30 began the country forum with instructions to others on how to begin the role play; he shared information on the country and encouraged others to do likewise. He

praised others for their contributions to the information gathering exercise, in keeping perhaps with his eventual appointment as country leader:

Excellent stuff [*student's name*] :-)

He showed enjoyment at the developing scenario and his appointed country's involvement in the evolving conflict. He also provided suggestions for other group members to consider:

Hmm...this is shaping out interestingly! Love a good political thriller... What do other people think?...

In relation to leadership, P30 offered to post on behalf of the group, but asked whether another member of the group would like to do it. He continued to outline a suggested position statement and asked other group members to provide comment:

Well, we need to have a position statement out by tomorrow... I am happy to do it. Or would you like to do it [*student's name*]? I just want to make sure that the online task is completed by C.O.B tomorrow!

The student to whom he referred for the position of leadership in the message above posted a position statement at the same time (*Sorry [student's name], you posted while I was writing!...*). He responded immediately to this member with a comparison of their statements, and then posted a final statement that combined both of their contributions. He requested that others contribute. Although probably well meaning, it appeared that not everyone appreciated his involvement. After some discussion of the suggested statement by other group members, the person he referred to as a possible leader above offered to post the position statement on behalf of the group. P30 responded with appreciation:

[*Student's name*] – I have also added your amendment. Thanks for offering to post later this afternoon. It's probably a good idea anyway, so that we are sharing the work around :-)...[*offers an amended statement*]... Thanks again everyone for all your help :-)

The student to whom he referred as a possible leader suggested that he be leader, to which he responded:

Sure thing [*student's name*]. “[*P30's name*] Turkmenbashi” – I like it ;-)

P30 became actively involved from this point in seeking contributions from others, and pulling these contributions together into a coherent position in support of a

resolution to the conflict. He continued to work closely with the aforementioned student, and thanked her often for her input and suggested amendments. He also thanked others for their contributions:

I like it [*student's name*] – thanks for your feedback and the improvement (thanks to [*student's name*] as well for pointing it out).

P30 took the concept of the role play seriously, and clarified the reality of the simulation to another student in relation to their assigned country's position:

Hey [*student's name*], The view that I am taking in approaching this whole thing is that it is a role play, and we are playing the role of Turkmenistan. To be as realistic as possible, we should try to emulate what Turkmenistan would likely do in real life. One of the central ideas of the Turkmen state is neutrality – in reality Turkmenistan would not openly be part of a coalition such as that which Turkey has instigated, and nor would it be part of any coalition started by any other country. It's just not what Turkmenistan does. And I think that the way Turkey is handling itself in the scenarios is not how Turkey would act in real life – I can't see a standoff happening between Russia and Turkey over Chechnya in reality, what does Turkey have to gain? I think they are using personal ideologies instead of basing their position on Turkey in real life. I guess it makes it interesting at least.

P30 regularly posted his own thoughts, and then invited others to comment or contribute. He thanked others for their input, and integrated individual views into a single group position for further comment. He also presented the reasons for individuals adopting a particular position. His active involvement, his apparent enthusiasm for the role playing nature of this stage of the course, his willingness to integrate the views of others into a single collaborative position and to accept criticism of his own views, and to work closely with other members of his group identified him as an outstanding contributor among the selected research participants.

In the seminar group, P30 continued threads of conversation, and connected and synthesised ideas from various sources to develop his own position in relation to the topic under discussion. He also exchanged information and offered suggestions for other group members to consider. In the country forum, P30 continued threads of conversations, offered suggestions for consideration, and created solutions. The evidence suggested that he enjoyed the online nature of the course, and his open-ended survey responses were only positive:

Personally I have not found the course structure confusing at all, but others have. Maybe this needs to be made more clear for others so there is less confusion.

7.5 Group 4: Overview

P19, P28, and P36 were all enrolled in a Bachelor of Psychology degree, and were at various stages in the program. P19 was a young male student, while P28 and P36 were female students aged between 21 and 30. According to her introductory statement in her seminar group, P28 was 21 years old and enrolled in her third year of study. P36 indicated in the online survey that she was enrolled in a Master of Psychology degree, but her introductory statement to the seminar group suggested that it was a Bachelor of Psychology degree. P19 had lived abroad, but had not learned a language other than English, while P28 had learned a language other than English, but had not been abroad. P36 had learned a language other than English and lived abroad. They were all native English speakers. P19 and P36 chose to do the online course because they had a keen interest in international affairs (S1Q9), but all three admitted that their options for course choice were limited (S1Q11). The course was as important to P19 as the other courses in his degree (S1Q10). The initial survey responses of all three indicated that they liked the fact that the course was offered entirely online (S1Q12), but that neither P28 nor P36 found it easier to learn online than in face-to-face situations (S1Q27). P19 did not indicate whether he found it easier to learn online than in face-to-face situations (S1Q27). P19 did not complete the second online survey so it is not possible to determine a change in attitude on completion of the online role-play scenario.

7.5.1 Participant 19

P19 contributed as much to Seminar Group 3 as to the country forum Kazakhstan in relation to word count. He posted seven of the 93 messages to the seminar group 9 ($\bar{X}=8.5$), and 12 of the 47 messages to the country forum ($\bar{X}=11.8$), and, like P30, was appointed leader of the country forum. He provided a brief introduction before posting on the first topic in which he presented a positive attitude towards the course:

Before I get into posting some of my thoughts from the first reading, I'll just do a brief intro....Like most of you, I'm a second year student and this is my first time studying a course in this manner. I'm looking forward to it, and judging from current posts there will be a lot of interesting discussion here. On to the first topic...

In the seminar group, P19 was concerned with the task at hand. He continued the threads of conversation in a formal style responding to and drawing together the ideas from the course materials and of others. He also asked questions of his own to challenge the views presented:

...but is it really essential to our sense of identity?... Can these forms of identity exist independently of national identity though?...

Some thoughts regarding your question [*student's name*]:...

I think everyone who has posted so far has shared the opinion that all people are entitled to the same universal human rights, and I too agree with this.

He acknowledged the thoughts and contributions of others in an inclusive manner and extended them. He initially approached the role play cautiously:

I've been a bit confused about the role play as well, mostly just regarding what we're meant to discuss here (especially this week). Also kind of curious to see how many people are in our group.

But then he adopted a strong leadership style by presenting his thoughts on the country's position, and requested feedback:

There are a few changes in the scenario this week that we should think about, some more important than others. I'll start us off by looking at each in turn and briefly stating what I think our position should be.... Let's see what you guys think.

He added a postscript asking for volunteers for leading the country forum:

PS. We need to nominate a group leader to post our positions in the general discussion forum. Any volunteers?

There was no explicit statement about P19 being appointed leader to the country forum but, like P30, he assumed the responsibility. He became more collaborative and social, and less formal, in his contributions than in the seminar group. He offered suggestions to the group for consideration, and worked at creating solutions:

On a final note, thanks for all the comments about the discussion post in the first activity. If anyone else would like to take over for this week feel free to, but I'm happy to write up our position statements each week if no one else wants to.

Thanks to everyone for giving your thoughts. I hope I've been able to mediate a position that everyone can be happy with.

He collaborated and expressed agreement with others in the group, and reported back information from the general forum. Overall, the organisation of course content was

problematic for him, as reported in his online survey, but the content itself was of value to his learning in the course. He thought that better group organisation was needed.

7.5.2 Participant 28

P28 contributed strongly to the seminar group apologising at one point for the long contributions. She also disclosed that family issues had interfered with her participation at one stage. Nevertheless, she presented her personal views on a range of topics and issues in relation to the readings, and in response to selected participants. Her contribution of nine of the 97 messages posted to Seminar Group 2 ($\bar{x}=8.1$) was relatively substantial compared to her minimal contribution of less than 400 words in five of 115 messages posted to the country forum Turkmenistan ($\bar{x}=28.8$). Turkmenistan was one of the most active forums, but P28 seemed reluctant to take responsibility in her country forum, and was only willing to perform allocated tasks:

Hi everyone. I too have no idea about turkmenistan. I also have no idea about this assignment and I think most people are confused. I think nominating a leader is a good idea as long as it isn't me. I am very happy to sit back and take direction so just tell me what to do and I'll do it as best I can. Hopefully we can sort this out!!! Cheers.

She later apologised for a lack of contribution to her allocated country forum:

Hi everyone. I have to sincerely apologise for my lack of contribution last week. As I am sure everyone is at this point in the year I am snowed under and my head feels like it will explode. Have attempted to keep updated on the postings so far and you guys have done a great job!!! Great find with the online book relating to the Turkmenbashi and his impositions, that should prove to be a valuable resource down the track. Hopefully I will be able to contribute this week a little more effectively.

She applauded the contributions of other participants in the country forum, and offered some supportive advice. Despite her apparent confusion at the beginning of the role-play scenario, she finished the course by acknowledging the value of the shared learning experience in the course, and by thanking everyone in her group for broadening her understandings:

I would like to take the opportunity in my last posting for the semester to thank everyone for broadening my mind on topics that are relevant in the world today.

This is not a subject that under normal circumstances I would have chosen to do but completed due to having no other choice. However, I am now glad that I did. I feel that I have learned so much in a short period of time and everyone has contributed to this. Thanks for an interesting semester of discussion everyone :)

Her open-ended survey responses revealed that she liked the flexible nature of online learning because she could do what she wanted when she wanted, but found that ‘the slightly ambiguous instructions and expectations pertaining to the assessment made life hard sometimes’.

7.5.3 Participant 36

P36 thought she had come to the discussion late, and seemed surprised by the amount of purposeful contribution and activity already contributed to the seminar discussion. In terms of lateness, most students had already introduced themselves and posted a response to the first topic. However, Figure 6.1 shows that most research participants posted to topic one on the Sunday of the second week. This is when P36 posted her first message of two to Seminar Group 3. Her second and final message posted to the seminar discussion was on Tuesday more than a week later, but still before the majority of contributions had been posted to the second topic. Despite acknowledging a sense of laziness at arriving late to the discussions, and a commitment to make timely contributions in future, she only made the two contributions to the seminar discussion in the 12 weeks that it ran:

Hi Guys – well do I feel like the biggest slacker ever! Usually in these things people write their bit and then run for the hills, but how great that we actually have a discussion going on I’m a third year Psychology student, just finishing my Minor in International Studies, and really loving it. I’m external because I work full time at [name of company] – major fun! I’ve read through some of the posting here, though there are quite a few, and think that there are heaps of good points made. I’ll try to get in earlier with my bit next time so I can come back and participate more.

However, the two messages amounted to much more than 300 words each, and more than P30, the most active contributor, had posted in a single message. The web data logs revealed that she continued to view messages posted to the seminar group until the mid-semester break (at the end of the fourth seminar topic). Her contributions to the seminar group ceased two days before the online tutor posted the reprimand in capitalised letters to Seminar Group 3 reminding participants to keep messages to less than 300 words (see 5.3). This also came after the online tutor was drawn into a

debate with some of the students in the group. There is insufficient evidence to suggest that either of these incidents were responsible for P36 not continuing to contribute to the seminar group discussion. Work commitments, her relaxed attitude to the course, and the amount of information posted to the website prior to her participation might also have been contributing factors.

P36 contributed personal views based on issues of interest she read in the contributions to the seminar group, and provided examples to support her views from media reports and discussions with friends. She concluded her first message to the seminar discussion with, '*Anyway, thats my two cents. Will try harder next week :)*' but then began her next contribution with '*Again late – sorry guys*'. Her second contribution was again drawn from media reports and based on personal views. She qualified one of her views with '*(and, if I'm going to be really outspoken, to an extent in this one)*' and ended again with '*My two cents!*' P36 contributed more regularly to her country forum USA with seven messages posted by the end of the mid-semester break, but began by apologising for her organisation and time management skills, and blamed it on her full-time employment. She admitted confusion but seemed committed:

Hey there! My name is [P36], and I'm obviously terribly organized! I'm a third year psych. student who works full time at [name of company]. I have done quite a bit of travelling around the place (unfortunatly never to Chechnya!). Anyway, I am also a little confused about what is going on, but once someone sets me straight will be fine! Cheers.

She stated that she had done some background reading for homework, and had 'googled' some information online. She then summarised her understanding of the relationship between her allocated country, USA, and Russia in relation to Chechnya, the source of the international conflict. She acknowledged the complexity of the situation, but only contributed at a general level before requesting suggestions:

So what seemed to be a fairly straightforward position is actually fairly complicated!! Anyone have any suggestions on what to do next? I think you'd make a great leader [student name]! ;)

She was concerned that the group was behind others in the progression of the task but committed to assisting rather than expecting others to do all of the work as her rate of contribution increased and became more purposeful:

Okay guys, just checking out the discussion board for all groups, and we are seriously behind the eight ball. aghhh!

P36 read, edited, and offered suggestions and advice to the group on the formulation of the country's position statement. She ended her final contribution with, '*Okay, enough for now!!*' and failed to contribute after the mid-semester break to either seminar topics five and six, or to the developing conflict in the role-play scenario. She may have withdrawn from the course as there was no evidence of activity on the course website beyond the mid-semester break. According to her first survey response, she thought the course could be improved by providing a better idea of what was expected from week to week.

The individual cases presented in this chapter have provided insights into the unique characteristics and experiences of 11 selected research participants. They have illustrated how each individual experienced the course differently and offered unique perspectives, but that commonalities between individual participants also existed. The cases have also provided evidence of group membership, identity, and belonging as well as instances of exclusion or frustration at lack of participation, and the importance of these factors for the achievement of the overall learning goals of student groups.

The final chapter addresses the research questions, and draws conclusions about the students' individual and group experiences by making connections between the learning and teaching theories presented earlier in the study, and the findings presented in Chapters 5-7.

Chapter 8

The experience of learning online

This study investigated the student experience in an online undergraduate international studies course at an Australian university. The course was designed for online delivery to allow flexibility in achieving planned learning outcomes using a collaborative student-centred pedagogy. The study focused on two aspects of the course: first, how the course provided a flexible, student-centred learning experience, and how the online tutor facilitated this; second, how students contributed to shared learning endeavours in the two stages of the course, and their views of the experience. By presenting detailed accounts of participation for individuals and groups, and of participant views of the learning experience, the study aimed to elucidate the implications for the pedagogical design of such online courses at other universities. The study pursued the following two research questions which are addressed in this chapter:

1. How does the design of an online course create a flexible student-centred learning experience?
2. How do undergraduate university students at an Australian university experience such an online course, both collaboratively and individually?

The first question was partly addressed in Chapter 5, and the second in Chapters 6 and 7. In the introductory section of this chapter, the key findings related to the course's pedagogical design and its implementation explored in Chapter 5 are combined with the findings related to the cognitive and social participation of students explored in Chapters 6 and 7. The aim here is to consolidate the study's main findings in the form of group, or collective, experience of cognitive presence, social presence, and teaching presence. Drawing on the individual experiences of the selected research participants, the two research questions are then considered in light of the learning and teaching theories discussed in Chapters 2 and 3, which focused on student-centred learning in communities of inquiry using computer-mediated

technologies for flexible course delivery. The second research question is addressed primarily in sections 8.1.2 and 8.1.3, while the first research question is addressed primarily in section 8.1.4. Implications are then drawn from this discussion before reflections on the research are offered and the chapter concluded.

8.1 Consolidation of key findings

The thesis has highlighted a distinction between learning and teaching as separate, but intimately interrelated, social activities (see Chapters 2 and 3). One cannot be discussed without reference to the other in formalised programs of instruction. This distinction presented in Chapters 2 and 3 was sustained in the presentation and discussion of findings in relation to teaching presence in Chapter 5, and in relation to cognitive presence and social presence in Chapter 6. This was an artificial separation for the purposes of discussion and analysis. The Community of Inquiry model itself offers an integrated and interconnected view of teaching, cognition, and social activity as experienced by the student. This section integrates the three categories of presence in an effort to draw conclusions about the collective student experience.

The analysis in Chapter 5 was based on two main sources of data: the webpages that constituted the course prior to student involvement, and the online tutor contributions to web forum transcripts from the various forums in the course. The analysis in Chapter 6 was based on three main sources of data: the web data logs, transcripts of the online discussions, and the two online surveys. Further analysis of the findings of cognitive presence and social presence was presented in Chapter 7 to highlight key aspects of the student experience. Garrison and his team (2000) argue that the experience of student learning in an online course lies at the nexus of cognitive presence, social presence, and teaching presence (see 2.1). Informed by this key understanding, the consolidation of key findings from these three chapters (5, 6, and 7) provides a holistic view of student experience in the course.

The learning experience of groups of students in the online course is captured in Figure 8.1 on the following page.

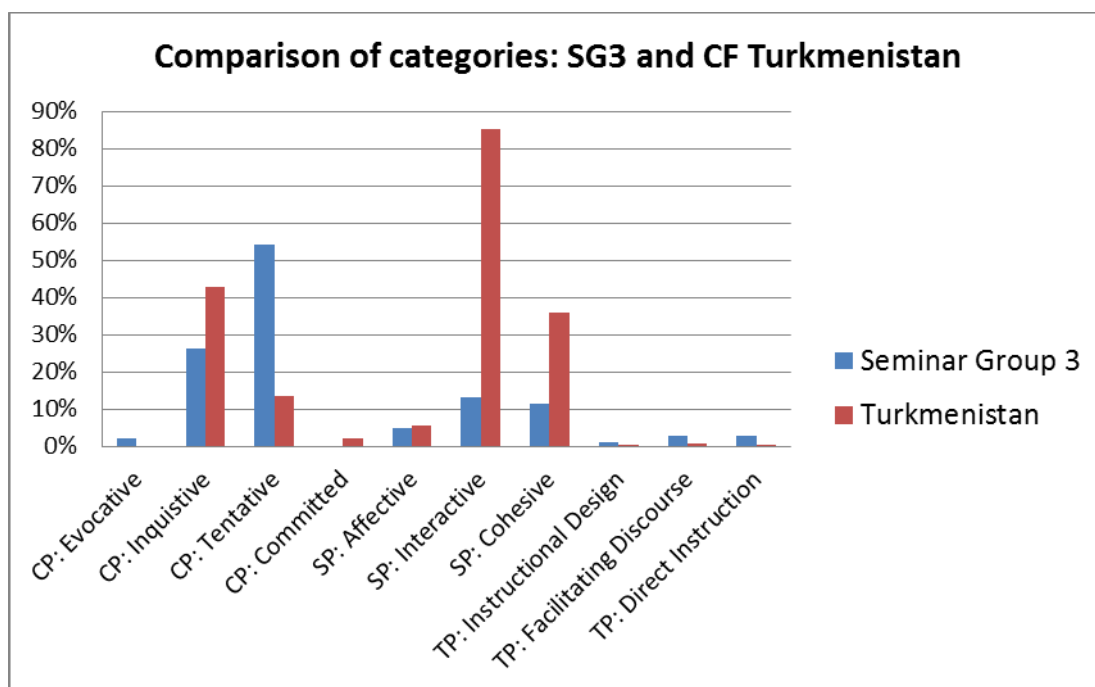


Figure 8.1: Comparison of each presence in Seminar Group 3 and the country forum Turkmenistan

Figure 8.1 presents each presence in the Community of Inquiry model along the x-axis of the chart: cognitive presence (CP), social presence (SP), and teaching presence (TP) for both Seminar Group 3 and the country forum Turkmenistan (including its contribution to the *Country Position Statement* forum). Each presence is further divided into its constituent categories along the x-axis: evocative, inquisitive, tentative, and committed cognitive presence; affective, interactive, and cohesive social presence; and instructional design and organisation, facilitating discourse, and direct instruction for teaching presence.

In Figure 8.1, Seminar Group 3's results represent the results of 11 of the research participants and the online tutor, while those for Turkmenistan represent those of four research participants and the online tutor. The 11 group participants in Seminar Group 3 jointly produced 24,486 words, and the online tutor added 1,945 words to the discussion, while the four participants in the country forum Turkmenistan jointly produced 14,776 words, and the online tutor added 200 words, the most for any of the country forums. The percentages in Figure 8.1 cover the indicators for the categories within each of social, cognitive and teaching presence against the total number of words produced jointly by the participants and online tutor in each group.

The pattern was almost identical when comparing this and other seminar groups with country forums such as Azerbaijan (see Appendix N).

8.1.1 Discussion of collective experience

The patterns represented in Figure 8.1 between the two stages of learning in the online course reflect distinctions in three key aspects:

1. nature of the assigned task
2. where the overall control for the learning process resides
3. the nature of knowledge and how learning is conceptualised

At the group level, the findings for the two stages of learning are discussed below in relation to Figure 8.1. The collective experience is presented first, and then the discussion turns to individual experience.

The analysis of one of the categories of teaching presence, instructional design and organisation (see 5.1), showed a systematically organised course design using the learning management system for a common, collaborative, student-centred or, rather, student-driven, learning experience. All of the web forums that were made available to the seminar groups and country teams were identical in design and operation, the same readings were given and the same questions asked of each seminar group, and the same conflict scenario was offered to each of the country teams, albeit from different country perspectives. The same assessment requirements, tasks, and expectations applied to each of the groups and individuals in the course. Close to 30,000 words were produced, excluding the set readings, in preparation for the learning that was planned to take place in the course once it commenced. These 30,000 words formed a substantial component of the teaching presence, and set the agenda for student learning. It represented a grand design for the curricular processes that engaged students in learning. The online tutor contributed no more than 200 words to each country forum at the commencement of the role-play scenario, and no more than 2,000 words to each of the six seminar groups throughout the course. The online tutor contributed about 2,000 words to the general consultative space of the *Noticeboard and Information* forum throughout the course.

In Figure 8.1 above, the cognitive, social, and teaching presence within the web forums of two groups are combined to capture the learning experience of students from commencement to completion of the course. The two groups that were identified by the online tutor as exemplifying the learning practices expected in the online course were Seminar Group 3 and the country forum Turkmenistan. The data confirmed that these two groups were actively engaged with the assigned tasks and produced the greatest volume of words in the web forums. The most active and engaged of the participants in this study, P30, was a member of both groups and was assigned the role of country leader by his group members in the role-play scenario. Figure 8.1 does not factor in the pre-planned curriculum of close to 30,000 words produced by the instructional designer, who was also Course Coordinator. Nor does it take account of the consultative space of the *Noticeboard and Information* forum, as it was a non-instructional space. However, it does include the 323 word collaboratively produced resolution submitted to the *Country Position Statement* forum by the country leader (P30) of Turkmenistan on behalf of his group.

1. Nature of the assigned task

The patterns of group participation reflected the differences between the assigned tasks for each stage of learning. The first stage of learning was focused on collaborative knowledge construction in which participants moved towards a shared understanding of the topics under discussion based on individual views expressed about each. The second stage of learning was highly interactive and the discussion was aimed at brainstorming and sharing ideas to create solutions to a developing conflict to reach a common resolution. Social presence was much higher for the second stage of learning than for the first stage as it reflected the interactive, goal-oriented, problem-solving nature of the assigned task. Each week, as the conflict escalated, the students were expected to arrive at a consensus view of their country's position (see 2.2, 2.2.7 and 5.2) in relation to the conflict and how their view might influence or be affected by other country positions. This expectation necessarily generated a high degree of social interaction over a shorter period when compared to the seminar group discussions. The two primary stages of cognitive presence, inquisitive and tentative, were reversed in the second stage of learning which again

reflected the interactive, goal-oriented, problem-solving nature of the assigned task as students exchanged information and shared ideas to create solutions.

2. Where the overall control for the learning process resides

The patterns of group participation reflected a shift in the location of the control of learning processes consistent with the two stages of learning. In the seminar groups, the students responded to questions based on notes and readings supplied by the Course Coordinator as content expert and implicit controller of learning processes. The online tutor was seen as the immediate content expert through her correction of misconceptions, and the direct facilitator of learning processes through reinforcement of guidelines and expectations as reflected in Figure 8.1. Individuals contributed their independent views based on the questions posed of set readings, and in response to the views contributed by others. Individuals were, to some extent, in control of their own learning as they collaborated in the shared learning processes. With the introduction of the role-play scenario, the location of the control of learning processes shifted to the small cooperative teams of students (see 3.3.1) who were to become experts in the application of knowledge, attained in the first stage of learning, to the resolution of a developing conflict. Figure 8.1 illustrates this shift from direct teaching and facilitation of learning processes by the online tutor to no direct teaching, and only introductory facilitation of learning in the role-play scenario. The responsibility shifted with the assigned task from a more teacher-directed process of student collaboration to a more student-directed cooperative process of learning (see 3.3.1).

3. The nature of knowledge and how learning is conceptualised

The nature of knowledge and how learning was conceptualised also changed between the two stages of learning. In the seminar groups, learning was a transactional process based on knowledge that was informed by evidence. In the role-play scenario, learning was an interactive problem-solving process that was generated by shared experience. The former involved challenging individual notions to arrive at a more informed view of the topic under discussion, while the latter involved creating solutions to a developing problem to arrive at a committed resolution based on group consensus. This is reflected in Figure 8.1 in the higher levels of social interaction and cohesion in the role-play scenario, and by the higher

volume of information exchange and suggestions for consideration to provide a resolution.

While shared individual experience constituted group experience, the understandings of how students were to engage in the learning process, what they contributed personally to the shared learning endeavour, and what they perceived as having gained from the experience varied to a large extent. As evidenced in the previous chapters, individuals experienced the course uniquely, and contributed to group or shared learning in diverse ways. Some students constructed knowledge for themselves using the information within the environment or that provided by others to develop their own mental schemas (see Piaget in 2.2.2), while others contributed to the collaborative knowledge-building process by brainstorming ideas, sharing information, and offering suggestions for consideration (see Vygotsky in 2.2.3). Yet others connected and synthesised ideas and information from various sources and created solutions (see Jonassen & Strobel in 2.2.7 and Garrison & Anderson in 2.2.8), while some expressed agreement with the ideas contributed by members of the group without advancing knowledge much beyond what was already available to the group. The degree of social integration amongst individuals in group participation also varied. All of these processes involved commitment and engagement to community learning evidenced by the capacity to demonstrate individual understanding, to exchange information from various sources to advance group understanding, or to synthesise the different sources of knowledge and experience that were contributed to the environment to advance group understanding and create solutions. These varied processes allowed students to identify with the group in individual ways resulting in comprehensive learning outcomes at the group level. The next sections discuss how students experienced the course cognitively, socially, and instructionally; that is, the extent to which individuals experienced the course as collaborative, as providing opportunities for deep, reflective learning, and as flexible in its delivery.

8.1.2 Individual experience of collaborative learning

Participation is a necessary requirement to facilitate the social processes of learning, and sustained participation is necessary for the development of a sense of

community. Participation may be peripheral and passive or engaged and active. The interplay between participation and reification promotes the negotiation of meanings. It is in the negotiation of meanings that community processes are advanced towards common goals or outcomes that are desirable or acceptable to the community (see 2.2.5). Purposeful and meaningful learning is supported by community processes of inquiry that engage students collaboratively in higher order learning activities (see Chapter 2). Learner engagement is associated with an intent to learn (see 2.2.6) that inspires motivation to achieve the shared goals of the learning community through interaction and collaboration with others. The sources of data that revealed an intent to learn, and an active and sustained engagement with the learning processes in the course investigated in this study, were the web data logs, the transcripts for the seminar group and country forums, and the survey data.

The introductory statements to the web forum transcripts were viewed for each of the selected research participants during the narrative synthesis process and presented in the individual narratives in Chapter 7. Most of the selected research participants commented favourably on the prospect of engaging in the proposed collaborative processes, demonstrating an intent to learn, and a commitment to learning with others; although some also disclosed a level of apprehension. The web data logs recorded actual activity reported by the number of messages viewed and the number of messages posted, while the web forum transcripts reported the amount of words contributed (see Chapter 6 and Appendix E). When individual student activity was measured against group activity, it revealed that the selected research participants who consistently viewed and posted above the average number of messages, and contributed the greatest volume of words, were P1, P11, and P30 in the seminar groups. Those selected research participants that consistently viewed and posted below the average number of messages, and contributed the least amount of words, were P25, P29, and P36 in the seminar groups. In the country forums, there was a reversal for both P11 and P25, with P17, P25, and P30 the most active and the most contributing participants, and P11, P18, P28, and P36 the least active and the least contributing participants. P29 posted actively to both the seminar group and the country forums, but contributed well below the average volume of words to both forums.

Collaboration on group tasks promotes active engagement in the learning processes of the community. These processes are shared, interactive, and social in nature. Social presence indicators in the Community of Inquiry model helped determine the level and nature of social engagement evident in the online transcripts of the selected research participants. Those who engaged most socially across both the seminar group forums and the country forums were P1, P17, P18, P28, P29, and P36. The least social across both forums were P5 and P11. P5 participated in face-to-face meetings on campus in the country forum France, and so most of her contribution to the online environment was a reporting and progression of the outcomes of the face-to-face discussions. P11 seemed to be the least engaged socially. When combined with activity in the online forums, P11 was among the most active members in the seminar groups, where overall levels of social presence were low, but among the least active in the country forums, where overall levels of social presence were high. She contributed mostly to cognitive development in both forums. P18, P28, and P29 were highly social but the least active and contributed relatively low levels of cognitive development. P1 and P17 were both social and active participants throughout the course, engaging socially and contributing cognitively throughout the course.

The online surveys complemented the findings of the levels of activity in the course and the nature of the contributions to the course by revealing student perceptions of their experiences. Ratios of student satisfaction reported in this section as (P:N) have been calculated from the survey data presented in Appendix F (see 4.3.2). The first online survey was conducted during Topic 4 of the seminar group discussions and the introductory sessions to the country forums in the fortnight prior to the mid-semester break. This survey revealed perceptions mostly related to the seminar group forums. The second online survey was conducted during Topics 5 and 6 of the seminar group discussions and in the final weeks of the role-play scenario. This survey revealed perceptions mostly related to the role-play scenario, but included questions about the course as a whole. In response to the question about reading the contributions of others before submitting a response to the tasks in the seminar groups (S1Q25), most survey respondents agreed that they had (31:2). P30, the most active participant among the selected research participants, was the only selected

research participant to disagree. This conflicts to a large extent with his actual experience, where he viewed the highest number of messages and responded most to the messages of others in the seminar group discussions. In response to the question about making an effort to respond to the messages of others (S1Q23), most survey respondents agreed that they had (28:5), and all but two of the selected research participants agreed that they had. P25 gave a neutral response, and P36 gave no response. Most disagreed that their contributions had been ignored or not treated seriously by others (23:5), but P18 and P29 agreed with this, and P11, P25, and P28 gave a neutral response (S1Q22). Many disagreed that they had focussed on the task and given an individual response rather than develop a rapport with others, and take account of their responses (15:11); P11, P18, and P25 admitted they had focussed on individual responses (S1Q24). Most admitted that they had found it difficult to build a rapport with others in the online environment (22:6), with the exception of P30 who disagreed, and P17 who gave a neutral response (S1Q26). Most agreed that the contributions of others had contributed significantly to their personal learning (22:6), with the exceptions of P18, P28, P30, and P36 who had all given a neutral response (S1Q28).

Of the selected research participants, P18, P19, and P36 did not participate in the second survey. In response to whether the online scenario and role play (S2Q9), and whether the course as a whole (S2Q10), stimulated a desire to actively participate and learn in the course, most survey respondents agreed (17:7 and 17:8 respectively). P5, P11, P29, and P30 all agreed, with P5 and P30 expressing strong agreement to the first of the questions. P1 and P28 disagreed with both questions, while P17 and P25 remained neutral on the first, but disagreed with the second. Most felt that they had contributed well to the online role play and the development of a country position statement (22:5); only P28 disagreed (S2Q19). However, in response to whether all members of the country forum to which they were assigned contributed well to the development of the country position statement, most disagreed (18:5); only P17 agreed while P25 remained neutral (S2Q21). All of the selected research participants found it easy to express their own views (S2Q24), and to follow the contributions submitted to the country forums by other group members (S2Q23), which reflected the overall responses (21:1 and 22:1 respectively). Most survey respondents thought their own views were received well by other group members

(22:0), and were valued by other group members (22:1), but P25 remained neutral on the first, and disagreed with the second (S2Q26, S2Q25). The intentions and expectations of other participants in the country forums were clear to many (12:8), but P1, P11, and P25 disagreed while P5 and P17 remained neutral (S2Q22). Most survey respondents agreed that the online interactions and collaboration with other students in the online forums had enhanced their learning in the course (16:6). The only selected research participant to disagree was P25, while P17 remained neutral (S2Q11).

Patterns begin to emerge from the actual and perceived experiences of students in relation to their social activity and contributions to the collaborative endeavour of the seminar groups and country forums. In the seminar groups, P30 believed that it was relatively easy to build a rapport with others in the course, but that he had not read others' messages before responding, and that the contributions of others had not contributed significantly to his personal learning. In the country forums, P30 admitted that the online scenario in particular, and the online course in general, had stimulated his desire to actively participate, and that the interactions and collaborations with others in the course had enhanced his learning. He strongly agreed that his contributions had been well received and valued by others in the course. P36, who had contributed least to the seminar groups, completed all of the survey questions in the first survey apart from one; she did not respond to the question about making an effort to respond to the messages of others. Along with P18, she did not participate in the second survey. P18 and P29 felt that their contributions had been ignored or not treated seriously by others, and P11, P25, and P28 gave neutral responses. P25 felt that her contributions had not been valued by her country forum. Together with P36, P25 and P29 were the least active participants in their respective seminar groups.

The perceptions of student experience seem to align to a certain degree with actual experience, and tend to show that those with negative perceptions did not have favourable experiences which may have limited their active participation, while those with positive perceptions had more favourable experiences which stimulated their participation. Ratios of positive to negative response in the two online surveys provide some evidence of this (see Appendix F). P25 and P28 were the most

negative of the selected research participants compared to P30 and P17 who were the most positive. Due to low participation rates, this finding cannot be supported by statistical analyses to confirm correlations. The relationship is not necessarily one of causation, in that it is not clear whether negative perceptions resulted in less active participation, or whether less active participation resulted in negative perceptions. The relationship of both to learning is also not clear, but participants like P25, who contributed actively to her country forum yet was largely ignored by the group, was one of the few survey respondents, and the only selected research participant, to disagree that the online interactions and collaboration with other students in the online forums had enhanced her learning in the course. P30, on the other hand, agreed that the online interactions and collaboration with other students in the online forums had enhanced his learning in the course.

The online tutor has a role to play in facilitating the process of students building a rapport with each other within their respective groups, and for creating a positive learning environment in which all contributions are valued in the process of learning. Greater visibility and monitoring of the online processes particularly in the role-play scenario could have increased participation and avoided some of the issues that students like P25 encountered. The facilitation of group processes is one that cannot be ignored in a collaborative student-centred learning environment.

8.1.3 The experience of deep, reflective learning

A community of inquiry requires not only sustained group processes that work towards common outcomes but more importantly that the group processes result in deep, reflective learning for those involved. Some felt dissatisfied with personal learning outcomes in the course. In the second online survey one student questioned the value of the contributions to group learning:

The groups were a huge collection of thoughts and ideas, and it was difficult to distinguish fact from idea, and what were and perhaps were not valid points. Perhaps where questions are posed, they could be answered at some point.

Other students expressed similar sentiments with one stating that the course was akin to learning by oneself in a public library. The data sources which recorded the actual learning of the students were the web forum transcripts for the seminar groups and

country forums. The perceived experience of learning in the course was recorded in the two online surveys and in the open-ended survey responses.

The indicators of cognitive presence were categorised into four stages of learning. The first stage of a triggering event that creates the need for inquiry was provided by the Course Coordinator in the form of questions in the online seminar notes and in the conflict resolution of the problem-solving activity of the online role play. The fourth stage of resolution was not reached in the seminar groups, and this is consistent with the findings reported in studies of similar learning activities. The online role-play activity was designed to provide the resolution to a problem in the form of the country position statements. The country position statements were submitted by team leaders of country forums to a special forum. As a result, resolutions to the inquiry process were primarily found in the *Country Position Statement* forum contributed at the end of the course. The seminar group and country forums contained evidence of learning primarily at the second and third stages of shared cognitive development: exploration and integration. The main shared cognitive processes of the seminar groups comprised the sharing of information, views, and ideas, and of connecting and synthesising the diversity of information, views, and ideas towards positions of personal or group consensus. The main shared cognitive processes of the country forums comprised brainstorming, sharing information, views, and ideas, and offering suggestions for consideration, and of connecting and synthesising ideas to create solutions for a common team resolution. The social processes of interaction and cohesion facilitated the group processes of shared cognitive development.

The strength of indicators of cognitive presence and social presence for the selected research participants has been summarised diagrammatically in Appendix E. The comparative data can be viewed in the tables and figures in the content analysis section of Chapter 6. The three most active participants in the seminar groups among the selected research participants were P1, P11, and P30. These three participants connected and synthesised the information and views expressed by others on a topic into a single coherent response. The only other participant to do this was P36 who posted two long messages to her seminar group, but did not continue to engage with the contributions of the group beyond her initial posts. The other two participants

least active in the seminar group discussions were P25, who mainly shared information and developed her own views and responses to a topic, and P29, who developed her own views and responses to a topic and offered suggestions for others to consider.

In the country forums, P17, P25, and P30 were the most active of the selected research participants, while least active were P11, P18, P28, and P36. As indicated earlier, P11 and P25 reversed levels of activity between the two stages of learning. This could have been the result of one activity being better suited to a particular learning style than the other, or it could have been the result of the nature of the activity itself as a motivating influence to participate. Apart from contributing higher levels of social activity to provide interactivity and cohesion within the group, P25 contributed in a similar fashion to both the seminar groups and the country forums. However, as discussed earlier, her contributions were largely ignored and not valued by the group. She mainly shared information, views, and ideas, and drew those of others together in her contributions. P11 was not very active but did offer suggestions for consideration and created solutions for the group. This was also reflective of P18 who, like P11, was not very active, and was consistent with both P17 and P30, who were actively engaged in the role-play scenario. Both P17 and P30 were highly interactive and cohesive, offered suggestions for consideration, and created solutions for the group. P28, who was relatively inactive, shared information, views, and ideas, but offered little else of cognitive value to the group. She admitted that the learning style of the online role play did not suit her (see 7.5.2). P36 shared information, views, and ideas, but also offered suggestions for consideration. However, she diverged from group consensus, and only posted two messages early to the country forum.

Perceived experience of learning was reflected in the online surveys. Most believed that they had brought to the course pre-conceived notions of nationalism, identity, human rights, sovereignty, and other related concepts covered in the course (8:23), that these ideas had been challenged by other learners through online interaction (5:25), and clarified through the online readings and interaction (2:30). Of the selected research participants, P28, P11, and P25 disagreed that they had brought pre-conceived notions to the course (S1Q13), but none disagreed that their ideas had

been challenged and clarified through interaction and the set readings (S1Q17 and S1Q18). Overall, there was a mixed reaction as to whether the students knew more about these concepts through learning in the course, but they were unsure as to how to apply them in different contexts (12:15). P5, P17, P30, and P36 disagreed while P18, P28 and P29 agreed (S1Q19). Most survey respondents felt sufficiently prepared to apply the concepts to the online scenario (12:18), but P25 and P28 did not (S1Q20). Most felt sufficiently prepared to role play in their allocated country forums, and to collaboratively develop a country position statement (8:23). Only P28 and P29 did not feel sufficiently prepared (S1Q21).

Most believed that the contributions of other learners in the course, and the lecturer's notes and instructions on the course website, had contributed significantly to their personal learning (6:22 and 4:27 respectively), but that the online moderator's participation hadn't (14:5). None of the selected research participants disagreed with the first two statements (S1Q28 and S1Q30), but P18, P28, P30, and P36 had remained neutral on the first, and P17 had remained neutral on the second. With regard to the online moderator's participation, P1, P17, and P29 felt that the online moderator had not contributed significantly to their personal learning, while most remained neutral; only P11 agreed (S1Q29). Agreement was consistent with the volume of contribution by each source of knowledge combined with the perceived level of content expertise of each. The online notes and readings have a level of instructional authority and amounted to a large volume of words, whereas the online contributions of others in the course perhaps did not convey the same level of instructional authority, but did amount to a large volume of information, drawn from and supported by authoritative sources, from which one could learn. The online moderator did not contribute much due to the student-centred nature of the learning tasks and time limitations.

Despite most of the selected research participants finding the expectations of the course unclear (S1Q32), they believed that the instructions and guidance provided by the lecturer had sufficiently prepared them for participation in the online simulation (S2Q16). Most agreed that the online simulation had provided them with a real-world context that they could identify with (S2Q17) and most found it relatively easy to apply the learning in the first part of the course to the online scenario and role play

(S2Q18). Most believed that the contributions of other students in the online learning environment had broadened their understanding of the course content (S2Q20). Expectations were clear for P5, P11, P17, and P30. P1, P17, and P28 felt unprepared for participation in the online simulation, but only P1 and P18 felt that they could not identify with the online simulation. P1 was the only one to disagree that the contributions of others had broadened her understanding of the course content.

The transformation of existing knowledge reflects deeper learning, and is the goal of collaborative knowledge building and experiential learning, rather than a purely transactional process of sharing viewpoints and expressing agreement or disagreement (see 2.2.9). One example of deeper transformative processes taking place was when P1 invested strong emotional interest in the seminar group topics, often disclosing her feelings with others in the group as she became increasingly negative about the state of the world. This led to interactions with others to help her work through her feelings of despair that moved beyond simple cognitive transactions to deep personal involvement requiring greater levels of response and understanding. In response to one seminar discussion topic, P17 explained how the role-play scenario had been a transformational experience for her:

One point in this week's reading I found interesting was the discussion of human rights and democracy – most of us consider the two vital to the other, but often this is not the case. In the past violations and human rights abuses have been perpetuated by nations firmly rooted or adopting democracy – in order for either stability or control. What is seen as good for the nation or community is not always a strict adherence to human rights.

This was evident in the role play which really made me appreciate the challenges facing the international community. As a 'delegate' of my assigned country, I had to take into account the probable feelings and wishes of the general populace and decide whether or not it fitted in with what I considered the best course of action. Even in this distinction I had to consider minority groups and the certainty that different people in the community would have differing opinions. This of course had to be weighed against the feeling and actions of other countries, as we had to either guess or discover where they stood in order to make our own position.

Before the role play I had always thought disparagingly about nations (including ours) that didn't stand up and respond to what the general feeling among the society was, but instead bow to international pressure. But this really made me reconsider this view, as sometimes standing up for what you think is right against a powerful nation or alliance can have economic and political

ramifications for your entire nation. It just brought the point home further that we don't live in an ideal world.

This demonstrates the strong reflexive connections she made between the learning in the seminar groups, and the application of that learning through the experience of the role-play scenario. It shows her awareness of how learning occurred for her in the course (see 3.3.2). This contrasts sharply with those who expressed in the online surveys that they did not perceive what took place in the course as learning. It was merely an exchange of views that did not change their world view or advance their knowledge, perhaps because they were not able to distinguish what was of value and what was not, both to the community of learners and to the course assessor. The learning opportunities available, and when and how they occurred in the course, was not clear to many. Neither was how individuals were contributing to the learning of others by simply responding to the requirements of a task.

This relates to another key characteristic of student-centred learning, that of autonomous, self-directed learning. One of the main concerns expressed by some participants in the online surveys was that they wanted to know what to do and when to do it, but were offered little guidance. Yet, setting the curriculum – what to do – and designing methods – how to do it – was the main focus of teaching presence in the online environment, and represented a grand design of scaffolded progression through the course to the attainment of its overall outcomes (see 5.1). The majority of research participants believed they had learned from both the online learning materials provided by the Course Coordinator, and from other students participating in the course, but less so from the online tutor. This suggests a combination of three things: students wanted stronger teaching presence and direction in the online learning environment once the course began (see Figure 8.1); students were unprepared to take responsibility for their own learning or shared collaborative learning, as with P28 (see 7.5.2); students lacked autonomous learning skills, or the ability to be self-directed in their learning by implementing strategies to achieve personal learning goals.

Many of the students did demonstrate abilities and skills that were useful for learning beyond the scope of the course. In general, shared knowledge construction is not bounded by the formal constraints of the course since participants drew on their own

experiences and sources of information beyond those provided within the course. The abilities and skills that students are able to demonstrate in a course should reflect the professional abilities and skills that will be required of them after graduation. The course under investigation in this study required students to develop or demonstrate such abilities and skills through the use of information literacy skills and expertise to support learning, team collaboration to solve problems, and leadership qualities to guide and direct team-based learning.

The capacity to draw information from sources beyond those provided within the course environment, to critically evaluate their content, to demonstrate their usefulness in support of an argument, and to integrate them into the shared learning endeavour demonstrate abilities and skills that are required beyond the course and beyond university studies into professional life. Students were expected in the seminar groups to support their claims by referencing their sources of information, and were encouraged to use resources beyond those provided within the course environment. Although some students jumped to unsupported conclusions from their claims (see 6.3.1), most students acknowledged and referenced their sources of information, even when referring to the content of others' messages. Some made reference to television and newspaper reports, while others drew on internet resources to support the comments and claims they made. Many drew on personal experience to make a point. This exchange of information broadened the scope of learning in the course since most students read the messages of others before contributing their own responses (see 6.2). Further, by drawing knowledge and expertise from the diverse fields represented in the course, students were able to extend views and apply knowledge in ways that broadened their learning, and made it personally relevant and meaningful. Many students demonstrated a capacity to critically assess the information shared in a group and, from her position of expertise, the online tutor intervened to challenge misleading views when they were offered.

The capacity to use one's expertise from another field of learning to inform shared understanding in a group also demonstrates a capacity for deep learning. Almost at the completion of her degree, P28 drew on her learning in the field of Psychology to inform or educate others in relation to a point that was made about international relations.

Finally, as I come from a psychology background I am also familiar with Maslow's hierarchy of needs and I have to agree with [student name]. The basic needs of all humans must be met first and should be held in the utmost importance. If these basic needs are not met first then higher needs cannot be met. If the basic needs are met first then you provide the individual with the ability to meet his/her own greater needs.

With students enrolled from a range of disciplines within the university, it should have enabled more opportunities for such integration of expertise. The fields of Journalism, Business, Management, Marketing, and Psychology all had specific interest in, but also unique perspectives for, international relations. Journalistic interest in international conflict would differ from Management and Marketing interests and again from those of Psychology. Using knowledge and perspectives from these diverse perspectives would have enriched the seminar discussions and the role-play scenario, but would have also provided an opportunity for students to play the role of expert.

Leadership was an attribute that was expected of students within the course and is a role often expected in teamwork, particularly in relation to problem-solving tasks. The role-play scenario offered such an opportunity to students through the appointment of a country leader to each of the country forums. The role of the leader was more extensive than that of other group members since leaders of country forums took responsibility for reporting their country's position to other countries in the *All Countries* forum, entering negotiations with other countries to form allegiances or otherwise, and reporting back to their groups for further discussion. The leader also posted the final assessable country position statement to the *Country Position Statement* forum at the conclusion of the role play. Despite the appointment of a designated leader, leadership was sometimes an assumed responsibility or a shared responsibility.

The designation of a leader, although an important process in team relations, was perhaps an unnecessary distraction from the main task. It formed a valid 'getting to know who's in my team' exercise which perhaps was seen as a necessary introduction to team participation, but was not resolved quickly in some groups and even led to the exclusion of some members, such as P25, who were driven by time restrictions rather than group processes. Flexibility, availability, and commitment to

collaborative processes seemed the necessary requirements of a successful team leader. A more informed process to resolve the leadership issue early in the course might have assisted in a more productive start to the role play, and allayed the tensions among some group members in appointing a leader and the anxieties in some groups about not having resolved the leadership issue quickly.

As discussed earlier, interaction was a crucial component in sustaining group processes that led to deeper levels of engagement. Interaction often requires the negotiation of meanings as students participate in community activity to achieve shared goals (see 2.2.5). The negotiation of meanings reveals gaps in student knowledge, and allows students the opportunity to contest existing knowledge and formulate and test hypotheses in relation to new (to the student) knowledge. As stated earlier, the constraints of the course limited the opportunities to develop such skills to any meaningful degree. No evidence was found to suggest that students demonstrated a gap in their own knowledge by disclosing new learning from the messages of other participants. Some students contested ideas by asking questions or by presenting divergent views from those expressed by others, but most presented their own views by consolidating and building on those of others. Some may have formulated and tested hypotheses through offering suggestions for consideration and creating solutions. These kinds of interaction help develop autonomous learning skills where the learner becomes self-aware of personal learning and implements strategies for development or change.

Students had opportunities to demonstrate and experience a range of capacities and skills that extended learning beyond the scope of the course which could be considered the principal goal of academic learning. The flexibility and capacity afforded by the online nature of the course and its mediating tools further enabled the development and demonstration of these abilities and skills. The ease with which students could locate information using the internet and integrate that information into their coursework created enormous benefits for all, but it still required the expertise of the users' information literacy skills, and range of cognitive and social skills, for the information to be used purposefully in the learning process. The constraints imposed on the course limited some opportunities.

8.1.4 The degree of flexibility experienced by participants

The course seemed flexible in its online offering which is best explained by the fact that the Course Coordinator had constructed a grand design which incorporated all of the resources, tasks, and teaching input required for students to progress through the course in a systematic, scaffolded manner at their own pace (see 5.1). This work was completed prior to the students entering the course environment. The nature of online learning allowed students to access the learning resources, and participate in discussions at internet access points, on or off campus, that were convenient for them in time and location. But the course took place within temporal and spatial bounds, and featured a pre-defined academic study and assessment load. Although participants were located in different places, to some degree, the course constrained them to operate in particular ways, and at particular times, to achieve pre-determined learning outcomes.

Much of the evidence to support student experience and attitudes to flexible learning was drawn from the two online surveys and the web data logs. The attitudes to online learning are presented first followed by a discussion of flexible learning drawn from evidence located in the web data logs, the instructional course materials, and the open-ended questions of the two online surveys.

Overall, there was a slightly negative reaction to the fact that the course was offered entirely online (17:15) but most of the selected research participants were positive (S1Q12). Only P5 and P25 did not like its online delivery, while P18 remained neutral. Most were quite adamant that it was easier to learn in face-to-face situations than in online environments (27:4). Only P1 and P17 differed, while P19 and P30 remained neutral (S1Q27). Many found the structure of the course confusing (26:6), and many did not find the instructions and guidance provided by the lecturer for the online scenario and role play clearly stated, or well presented (13:10). P5 and P30 did not find the structure confusing (S1Q31), and P5, P11, P25, and P30 found the instructions provided by the lecturer clearly stated and well presented (S2Q14).

Many looked for alternative modes of communication than within the online environment when engaging in the online role play (14:13), but of the selected research participants, only P17 and P5 admitted to doing so (S2Q12). P5 was a

member of the country forum France, which met in on-campus meetings on several occasions. While many survey respondents did not believe that multimedia facilities would have improved their online experience (11:7), many of the selected research participants agreed that it would; P5 was in strong agreement. The only ones to disagree were P1, P5, and P30. Most of the survey respondents did agree, however, that it would have been beneficial if the lecturer's input, including instructions and guidance, were in the form of recorded video segments throughout the course to enhance the text-based environment (16:5). The selected research participants in disagreement were P1 and P30, with P25 remaining neutral (S2Q15).

Most would have preferred to do the role-playing simulation in face-to-face mode than in online mode (16:5). P11 and P30 disagreed (S2Q27). Most agreed that if they had the opportunity to meet with other students in the course, it would have assisted with their participation in the online environment (17:7). P1, P28, and P30 disagreed (S2Q28). Nevertheless, many believed that there was more support from other students for their learning in the online environment than there would have been in face-to-face contexts (11:8). Of the selected research participants, only P11 and P30 agreed (S2Q29). Most found it easier to communicate ideas online than in face-to-face teaching contexts (12:8), but found it more difficult to understand the ideas and views expressed by others in the online learning environment than in face-to-face learning contexts (11:4). Only P25 and P29 disagreed with the first statement (S2Q30), and P5, P25, and P29 disagreed with the second statement (S2Q31).

The expectations set out in the planned curriculum required students to perform tasks in set ways and at set times (see Figure 6.1 and Figure 6.2). In the first stage of the course, the students were required to read study notes and set readings before addressing questions and responding to other students in the seminar discussions (see 5.1). A course that represented a quarter of a study load demanded a reasonable amount of time from students in each two week period of the semester, particularly when the role-play scenario began and ran concurrently with the final three seminar topics (see Figure 5.1). The escalating nature of the conflict scenario over an intensive five week study period, and the number of country forums involved, added to the complexity of the problem-solving task, and the time requirements to ensure quality participation and outcomes. The task-driven nature of the course reduced the

amount of choice and flexibility afforded to students. This resulted in students finding more efficient ways of working through the role-play task than the web forums, such as meeting face-to-face and using synchronous communications, before recording the outcomes in the online learning environment for further reflection and discussion. At least one group used the web forums synchronously by inviting group members to contribute at particular times. Although flexibility of time, and sometimes location, were constrained by the task, the course offered in face-to-face mode would have been less flexible.

Amount and complexity of information

Although collaboration is integral to student-centred constructivist learning, somewhat paradoxically, the need for it reduced flexibility in the online space. Rather than choose times that suited them, the students had to be available to participate and respond at particular times, especially in the role-play scenario, to ensure an on-going conversation that contributed to the shared learning goals of the community. Student contribution to the seminar groups, although collaborative, was assessed on individual contributions so students could largely ignore the contributions of others, especially if they were early contributors to a topic. In the role-play scenario, the assessable task was the collaboratively produced *Country Position Statement*. Students who took responsibility for the achievement of the group outcome contributed actively on a regular basis and encouraged involvement or demanded commitment from other group members. The students were concerned with achieving high grades and knew that the quality of the group outcome reflected personally on their contribution to learning (see 6.2 and 7.3.2). This often resulted in frustration if other group members were not as concerned with grades or as involved in the group process (see 6.2, 7.4.1 and 7.5.2). Due to the intensive nature and complexity of the role play, regular commitment was required. Students needed to participate in group processes several times a week for the duration of the role play. This reduced flexibility of time commitment in that if an idea was suggested for consideration or a decision needed immediate attention, logging in once a week would have been inadequate. In face-to-face mode, students could have shared information verbally, debated decisions, suggested ideas for others to consider, and created solutions within a concentrated block of time, and then taken these away for

further reflection and consideration before the next meeting. In online mode, students were constrained by the time it took for individuals to make themselves available to consider and respond to a post before the conversation could move forward.

The reduced flexibility was produced by a combination of the tools used for communication in the environment and the requirements of the planned tasks. The patterns of student participation (see 6.2) provided evidence that the majority of students only contributed as instructed. Most posted to the seminar discussions on the Friday that it was due, and little was contributed in between. These patterns of participation did not offer much time for constructive debate: as one student commented in the online survey, most simply agreed with others. However, the example of P5 shows that even though there was continual agreement expressed in her messages, it was simply to acknowledge that she had read the contributions of others before moving the conversation forward or in another direction. After expressing agreement, she would often diverge and present different viewpoints for consideration (P28 and P18 contributed in a similar way – see 6.3.1). Nevertheless, time and the amount of information contributed prevented constructive debate from developing to a reasonable extent. As the topics were developmental, previous comments could be drawn into later debates, but the kind of interaction that involves the negotiation of meanings in communities of practice that lead to deeper levels of understanding were limited by the time constraints and number of participants involved (see 8.1.3).

Attempting to use text-based threaded discussion tools in an asynchronous manner to perform an intensive and complex interactive team-based role play led to frustration for many students. One of the main complaints about the course reported in the open-ended survey questions was the lack of commitment from some group members, and the lack of accountability to the collaborative processes of the group task (see 6.3.2). This is not a problem restricted to online learning environments, and can happen in any group assessment task. The amount and complexity of information that students had to contend with was another complaint, but it contradicted the first in that greater involvement would have generated more information and further complexity. In the role-play scenario, students used whatever means they agreed were best to accomplish the problem-solving task at hand. No such need arose in the seminar

group discussions which suited the asynchronous nature of the task. One student made the comment in the open-ended question in one of the surveys that a course is only flexible when it allows students the option of working when they want, how they want, and where they want (see 6.4 and Appendix K). This student could not afford internet access at home, lived far from campus, and had to drive to a campus for access to the course content and discussions. Thus, the tools that mediate communication and information flows in an online course must suit the nature of the assigned task and also allow a variety of access methods.

At an individual level, students for whom online delivery should have allowed greater flexibility sometimes failed to take advantage of it. P25 worked full-time and studied part-time. Unlike full-time students, her work commitments did not allow her to participate during business hours so her studies were relegated to evenings and weekends. It was advantageous for her to make the most of the time opportunities available to her, but she had not realised that full-time students would stop participating during the mid-semester break soon after the role-play scenario had begun to gain momentum. Her many requests for feedback or comment were ignored until finally a student explained why no posts had occurred during the break. For P25, the two-week break was an unnecessary interruption to her study commitments. Students made comments in the online surveys that they were not informed of who was in their country forum, or even how many were allocated to their forum. Clearly there was a need for social awareness and connection in the country forums, since the role play required collaborative effort. For P25, a lack of social connection over the two-week break led to feelings of exclusion from the online community, and feelings of frustration and abandonment at the lack of response.

If students are to participate flexibly in online learning, the online tutor is also expected to participate in the same way. The online tutor was one of the least accessible participants in the learning space because her availability was restricted to particular times. She was available in a two hour timeslot once a week and limited her contribution to the consultative space of the *Noticeboard and Information* forum. She participated in the seminar group discussions, but in a limited way. It is most likely that she participated in the seminar group discussions because she was required to read participant contributions for assessment purposes, whereas only the

Country Position Statement forum was assessed at the conclusion of the role-play scenario, and not their participation in the role-play scenario. It may also have been due to the shift in responsibility from teacher-directed instruction to student-directed instruction in the two stages of learning. Nevertheless, this poses questions of the ability to resource online courses in such a way that an instructor is not only available to students on a regular basis, but is also able to engage in the learning processes in a facilitative and supportive manner. There was evidence that the Course Coordinator participated more flexibly and actively in both stages of the online course during the pilot study because she was available for a period of time each day to participate, whereas casual staff, as was the case in the principal study, were limited to the hours for which they were paid.

8.2 Conclusions

The first research question – How does the design of an online course create a flexible student-centred learning experience? – was largely addressed in Chapter 5. The online learning environment was structurally designed to progress learners through the course from beginning to end, and to provide the necessary resources and support for group learning processes to occur. An online tutor was employed to facilitate the group processes within web forums once the course commenced. The onus was on students to progress their learning within the course environment to meet the assigned assessment tasks.

The second research question – How do undergraduate university students at an Australian university experience such an online course, both collaboratively and individually? – revealed that students did not necessarily understand or follow the ‘grand design’ of the planned curriculum as imagined or intended by the instructional designer. Students deviated from planned processes, including contributing in ways that were different to set instructions and using means other than those provided within the environment to achieve the outcomes of group tasks.

In some respects, my findings align with those of a study conducted at a similar time by Lu and Jeng (2006) that investigated in-service teachers participating online in a postgraduate course of study. The study analysed two groups, one in which an online

moderator facilitated group processes, and another in which students were left to study for themselves without an online facilitator. One of three findings reported in Lu and Jeng's study was that online discourse is a collective process including knowledge confirmation and knowledge construction, and that group knowledge construction shown in online discourse is not necessarily equal to individual knowledge construction. Another of the findings was that Section A (instructor as both facilitator and co-participant) had more postings regarding new knowledge construction (from Phase II to Phase V) than did Section B. The Section A instructor applied facilitation approaches more frequently emphasising conceptual changes than the instructor of Section B. However, students' perceived learning and satisfaction did not show significant difference between the two courses in the study.

My study indicated that students, for a variety of reasons, engaged as individuals in diverse ways in the collaborative group processes of the assigned tasks in the two stages of learning in the online course. Individual contributions to the shared learning endeavours were mostly valued by other participants. Those who simply brainstormed ideas or exchanged views in the web forums provided opportunities for others to progress the ideas and views to a more advanced understanding through connection and synthesis. The ideas also provided impetus for creating solutions to solve problems. As a result, learning occurred collectively as consensus was reached and solutions were generated.

Most students were motivated and committed to learn. In the first online survey most expressed a keen interest in international affairs, even though not as many thought the course was as important as other courses in their degrees. Although clearly stated in the instructions to both the seminar group discussions and the role-play scenario, students were mostly concerned about the clarity of expectations in the course. In light of the evidence, the most likely explanation is that students were uncertain of how they should engage in discourses that facilitate collaborative learning in a text-based asynchronous learning environment, and what that learning should look like for them personally and for the group. The online tutor assessed them on their individual contributions to the collaborative learning process in the seminar group discussions, and on the group product of the country position statement in the role play scenario. The study revealed that students who actively engaged in sustained

group processes performed better in the collective learning experience than those who were not so actively engaged, and that those who connected and synthesised ideas in the seminar groups and who helped create solutions in the role-play scenario contributed more to the collective learning experience than those who simply brainstormed ideas or exchanged views.

In order to do well in an online course, and not view online learning as a simple matter of sharing and agreeing with ideas and views, students must develop the discourses and strategies that will help them move beyond interactional processes to transformative processes. They must develop the capacity for higher order learning and deeper engagement in the collaborative group processes of an assigned activity or task. In student-centred learning environments, the responsibility falls to the learner, with facilitation and correction as required from a content expert. Student leadership within collaborative tasks then assumes an important role. P30 was the most positive and active member of the selected research participants, and was motivated and self-driven within the environment to advance group processes towards the set learning goals. Perhaps P30 could be viewed as having the required characteristics for leadership within a group, but then it is a matter of how P30 might have inspired and motivated others to contribute in ways that were productive for the group.

If educators are genuinely concerned that learning occurs for each of the students in their care, then instructional designers and e-moderators should understand how students learn and how to engage them in the learning process so that each gains a degree of metacognitive awareness; otherwise, educators only attend to instructional design and assessment of learning without due consideration for the learning processes that occur between. Student-centred learning places the onus for learning and its outcomes on collaborative group processes that individual students engage in, but as Oxford et al. (2005) (see 3.3.3) and Lu and Jeng (2006) point out in their respective studies, a democratic-participatory style of teaching provides the best learning experience and outcomes for students. Nevertheless, greater student accountability in collaborative learning tasks also needs to be addressed. Wiki spaces have been used in place of web forums in recent courses to address accountability concerns as activity is recorded in more accessible and readily analysable ways.

8.3 Limitations

The implications and conclusions drawn from this study relate to courses that discuss broad notions and concepts to which there are many and varied responses. The responses are contested and defended using individual experience and prior knowledge, and supported by evidence from research data and academic literature. The learning from such conceptual development is then applied to a ‘real world’ scenario in the form of experiential learning. Where students engage in learning that has discrete and incontestable knowledge and where tasks require one correct outcome or response, the teaching and learning principles espoused in this study may not apply.

The study represented only one case with a small number of individual cases selected for analysis within. In addition, a relatively small number of participants took part in the study, and in the online surveys. It was not feasible to do any meaningful comparative analyses using statistical tools. The amount of words produced for coding and categorisation was substantial, but the process of content analysis reduced the volume of data to manageable units. This process also involved a simplification of the complexity in the dataset. For example, it was impossible to ascertain whether one student asking a question was as contextually significant to the learning process as another student asking a question. One question may have been purely social and related to the setting of a meeting time, while another question could have drawn the cognitive focus of the group to an issue that may have advanced learning for the group. In terms of the amount of words coded for a question, the percentage may have been minimal compared to the connection and synthesis of ideas, for which an entire message could have been coded. However, a relationship may have existed between the two – the asking of a question could instigate the connection and synthesis of ideas. Narrative synthesis represented an enriching process that addressed this limitation to a certain extent by linking the various sources of data for greater insight into individual cases.

Intra-rater reliability of the coding of data was not conducted and could have improved the reliability of the study. The vertical coding stripes and the highlighting of coded text in QSR nVivo were deemed sufficient visual confirmation that text was accurately coded during the coding process (see 4.3.5). Once coding was complete

for all transcripts and indicators, the node documents containing coded text were viewed to ensure consistency (see 4.3.5). For example, opening the node document on ‘Asking Questions’ or ‘Brainstorming’ would present a collation of all text from all transcripts that had been coded according to those indicators. It was relatively easy to determine whether the right kind of text and the right amount of text had been coded in each case. Where inconsistencies occurred, these were corrected by revising the coded text in QSR nVivo.

Testing of reliability and validity of survey questions was not conducted due to the relatively low numbers of research participants involved, the variety of questions asked, and the way in which the data resulting from the surveys was used. In hindsight, the testing of reliability and validity of survey questions would have strengthened the claims made from the survey data, and would have offered opportunities for statistical analyses beyond means and frequencies, such as inferential analyses to find correlations in the data, and perhaps combine analyses across the various data sources.

8.4 Lessons learned for instructional design and teaching online

The knowledge and insights gained in the study have implications for those who are responsible for ensuring the best conditions for the learning of the students in their care:

1. instructional designers of online courses
2. instructors of online courses, and
3. institutions resourcing online learning

The three sections that follow draw on the learning experiences of the students who participated in this study.

8.4.1 Implications for instructional designers of online courses

Expectations of student participation and how participation might vary between different types of tasks should be made explicit to students. The clarity of expectations was a primary concern for students, despite repeated statements of course requirements recorded in the online study notes, in the teaching and learning spaces, and in the *Noticeboard and Information* forum. For most, this was the first fully online course they had taken, and certainly the first role-play scenario they had engaged in online. Many would have encountered online discussions in other courses in blended modes of instruction, but many of these online provisions were primarily support for face-to-face learning, and simply included PowerPoint presentations of lectures, notes on readings, and discussion forums for student use if students wanted to extend discussion beyond face-to-face tutorial groups or workshops. The situation in 2013 at the same university is very different to 2006 in the conception and use of online learning spaces, and students are more accustomed to technologies for social networking and learning in fully online courses.

In the seminar discussions, the Course Coordinator asked students to provide three dot-points in response to the set questions included in the online study notes that were part of the set readings for each topic. Students were then asked to respond to the dot-points posted by one or two other students. The expectation was that every student would respond directly to the readings before interacting with others. Not one research participant in any of the six seminar groups dot-pointed a response to the set readings, so it seems reasonable to assume that students deviated from this primary expectation set by the Course Coordinator and reinforced by the online tutor. Many students provided essay-style responses that exceeded the 300 word limit for a message posted to the seminar groups. Others agreed with and elaborated on these views. This suggests that students had a preference or tendency to expound and explain their views to ensure clarity for others and, as discussed in the previous section, demonstrate their understanding of the topic for assessment purposes, rather than provide brief dot-points. Their preference for longer messages could also have reflected a desire for social connection in a collaborative group process, and to reduce the number of times they viewed and posted messages in a fortnight. If conciseness and brevity of response are required, then the purposes of participation

should be clearly explained and preferred models of communication presented. Assessment criteria should also be presented that reflect these requirements.

The volume of information published and generated in an online learning course should be manageable and in accessible formats. The amount of information built into the course was of concern to students and relates directly to the previous point. This study has shown that the learners brought unique but complementary experiences, skills, and understandings to the collaborative learning experience. In the collaboration, they adopted various roles aimed at set learning goals to provide a group experience that was richer than the sum of individual learning. The online learning environment, including its instructional content, resources, and methods, provided opportunities for the learners to actively and collaboratively engage in a knowledge building task, and to cooperate in teams to apply their learning to a related problem-solving task. Of most concern to the students was the amount of information confronting them on entry to the course (close to 30,000 words), and the amount continuously being produced in an intensive text-based course of study (close to 30,000 words per seminar group which excludes the varying amounts of words produced in the country forums). The intention of the instructional designer was to limit the volume of information produced by students by instructing them to limit their contributions to three dot points in the seminar forums, and this was further reinforced by the online tutor. The fact that students did not follow these instructions suggests that the purpose of the assigned task and the criteria for individual assessment needed to be made clear to students. As stated above, the types of interaction expected of students could be exemplified in sample messages and interactions to put students at ease with communicating in such ways. Other forms of technology-mediated communication could be explored as long as flexibility and access are considered, including access to records of interaction.

Online course designers should consider ways of minimising the degree of complication built into online courses. The opening statements of most students to the seminar groups expressed a degree of apprehension concerning the up-coming role-play scenario, and many online survey responses alluded to the organisational complexity involved in the course. Introducing the role-play scenario prior to the mid-semester break should have allowed time for students to orient themselves to

their allocated countries and to the nature of the conflict and the learning task, and to introduce themselves and designate a country leader before the role-play scenario intensified after the mid-semester break. However, the evidence suggests that the organisational complexity and intensity of the task was too challenging when run in conjunction with the on-going seminar discussions. Completion of the first stage of learning prior to the mid-semester break would have provided the students with a gap for reflection on learning before its application to the role play. It would have reduced the complication of engaging simultaneously in the two stages of learning and provided focus for both. If group leaders had been assigned in country forums based on performance in the first stage of learning, it would have reduced the task complexity of having to elect a group leader from within, particularly when new groups had been formed. Students knowing who was assigned to each group and how many participants were involved in each would have made accountability and commitment easier.

Mediating technologies must suit the nature of group processes in the assigned collaborative learning task. The mediating communication tools added to the complexity of interactions in that threads of communication were not recorded in ways that reflected natural conversation and turn-taking. In addition, asynchronous communication tools can reduce the immediacy of social presence needed for problem-solving tasks like the role-play scenario. The text-based asynchronous threaded discussions in the web forums allowed for the recording of conversations for later reflection and were ideal for the seminar discussions. However, more synchronous means were sought by students in the role-play scenario due to the problem-solving nature of the task. Decisions had to be reached in a short space of time. Virtual meeting or virtual classroom software available at the time of the data collection at *Uni Technovation* had the potential to bring students into an online meeting space for collaborative decision making tasks, and employed interactive multimedia tools such as video, audio, interactive whiteboard, and text chat facilities. Even text-based chat room software available within the LMS at the time of data collection allowed the recording of synchronous conversations for further deliberation. However, none of these facilities were used in the course. Policies

relating to student management of the facilities may have prevented their use. If so, these policies require careful revision to permit student management of the facilities.

The degree of flexibility should be considered in the design of curriculum, including the nature of the assigned tasks, and the technologies that mediate the learning processes. The degree of flexibility was somewhat reduced in the role-play scenario with the need for set meeting times to facilitate decision-making processes. Some students considered location important for such meetings by holding on-campus meetings. Location would not be such a concern if suitable synchronous technologies were employed. With recent developments in smart mobile technologies and smart TV technologies, these kinds of meetings are possible from a greater range of locations at relatively little cost to the students using a variety of tools that increase flexibility, particularly when small group sizes are involved. Even the use of collaborative online wiki spaces would have facilitated the joint-production of a country position statement without the need for meeting at set times and locations. At the time of the data collection, these options were not available (see 5.1).

Online course designs should incorporate exemplification of participatory and interactive patterns of engagement, based on the variety of learning styles and methods of engagement, to clarify the expectations of learning. Most students seemed to lack a metacognitive awareness that could assist them in becoming effective contributors to collaborative student-centred learning tasks (see 2.2.9 and 3.3.2). Since the students in this study were not experts in the field of Education it would be unreasonable to expect them to have such awareness, or to be able to articulate it as it related to their own participation in the course. Indeed, the online tutor may have also lacked such awareness in relation to the students in her care. Most research participants agreed that they had learned from others and from the resources provided, and the online tutor seemed satisfied with the contributions to the shared learning process, so it would appear that the course had achieved successful learning outcomes for the majority. The lack of clarity that students complained about in the online surveys seemed to be an individual response to understanding what was expected of them in contributing to a collaborative learning process. The students contributed what they already knew from personal experience or in response to what they had read. They expressed agreement with others who

shared similar views and added their own understandings to these views. Modelling or exemplifying expectations and designing collaborative tasks that assisted students in understanding how they should contribute to group processes would have helped develop autonomous learning skills and simplify the expectations of student-centred learning. Facilitating discourse and direct instruction in the Community of Inquiry model are regarded by Garrison and his team as the means for raising metacognitive awareness in students (see 3.3.2 and 3.3.3). Negotiating the curriculum and its outcomes with students at the commencement of the course would have further advanced the goals of collaborative student-centred learning.

The relative distancing of the instructor from the learning process requires careful consideration in planning online courses. Despite the limited availability of the online tutor in this study, she made regular purposeful and relevant contributions to facilitate and support learning in the course. This included her contributions to a variety of forums to motivate and encourage learning within the planned curriculum of the instructional webpage materials and associated resources and tasks, and to correct misconceptions when required. Students reported the need or desire for greater instructional presence but, as discussed earlier in this chapter, there existed a range of underlying reasons for this. It is important for instructional designers to consider ways of catering for the perceived need for improved instructional access and visibility without compromising the principles and goals of student-centred constructivist learning. Dixon and Senior's (2011) study captures moments or instances of transformative learning enabled by teacher-student interactions (see 2.2.9 and 3.2). These brief interactive instances transform the learning situation for students by revealing new insights for them in the learning process. This 'becoming' of the student is viewed by those who espouse transformative learning as the goal of student-centred learning. The planning of space (see 3.3.1) and provision of enabling technologies contribute significantly to this end.

8.4.2 Implications for instructors of online courses

An online tutor has a role to play in assisting with the social aspects of learning.

An online tutor can assist in the development of interaction and social cohesion in groups, and also monitor levels of affective behaviour amongst individual participants. A more visible and participatory role from the commencement of the course in setting the climate for learning and assisting students with the adjustment to new ways of participating in learning could have provided a greater sense of teaching presence, and limited a sense of abandonment or distancing from the student-centred learning processes. The students should also accept their responsibility, as some did in the study, for playing an instructional and leadership role. The online tutor can help generate community commitment to shared learning goals and reassurance that suitable roles and processes are being used to achieve those goals, while students can support each other in understanding the requirements of the task and the various roles needed in relation to achieving its outcomes. Supporting effective communication amongst students can ensure greater accountability for all involved.

In addition to setting the climate for learning, an online tutor has an important role to play in helping to motivate students and engage them at an individual level in the learning process.

As a person with authority, the online tutor, can influence student attitudes within the environment both positively and negatively. P36 was already feeling vulnerable due to late participation in the seminar group, yet tried hard to make amends. But this attempt to commit to the group and identify as a member might have been unwittingly thwarted by the online tutor chastising the group for making long contributions, for which P36 was guilty. Similarly P28 needed support in the unstructured learning environment of the role-play scenario, yet the online tutor simply set the climate for learning and did not participate further except to praise the group for its efforts. The role of the online tutor in a student-centred learning endeavour should do more than praise the efforts of those who perform well and correct those who hold misconceptions. The role of the online tutor should be to recognise and support the vulnerability of some, and recognise and exemplify the strengths of others to the benefit of all within each learning community. Without a positive sense of collaboration from every member of the group, student-centred learning cannot be as effective.

An online tutor has a role to play in facilitating student participation, but requires the professional expertise and the time within the course to do so.

Exemplification of learning strategies supported by visual aids and explanations of how individuals might variously contribute to a collaborative learning process could be offered as an introduction to the course to assist students with their participation. Students should be introduced to the notion of student-centred learning if they are to engage effectively in its processes. From an individual perspective, because only one message was posted per topic in most cases, students may have thought that they were not contributing anything new to the experience, whereas a lecturer in a traditional teaching model could have imparted expert knowledge that might have helped them develop or transform current understandings. It seemed evident from comments in the online survey responses that students were unfamiliar with student-centred learning processes and how they occur, or that they did not recognise when or how learning occurred for them. But there were exceptions. As reported earlier in this chapter, P17 was an example of a student who recognised when and how learning occurred for her, and connected both stages of learning in the course (see 8.1.3). Her sharing of this experience could have helped others in their understanding of the learning process. It seems that what is needed is for students to develop an understanding of how they can contribute to the shared learning processes so that deeper levels of understanding can be produced for all who participate. Students also need to understand how this learning process can contribute to better learning outcomes for all, and how it can develop lifelong learning skills that can be applied in academic and professional life beyond the course and program.

An online tutor should be specific in what is praiseworthy in the shared learning process, and ensure that all students in every group have access to this exemplified knowledge. The online tutor offered general comments of praise to those groups that were performing well, but this knowledge could have been specific and shared. Students who received the praise knew that how they were participating was what the online tutor wanted, but were not necessarily aware of what they were doing specifically to elicit the praise. If this knowledge was made available for all, then other groups could adjust their participation accordingly.

8.4.3 Implications for institutions

Online courses with a focus on collaborative student-centred learning can create efficiencies by allowing large enrolments of diversely located students with the assistance of an online instructor. Once the course has been developed with the provision of suitable mediating technologies for the assigned tasks, an online instructor can be employed to facilitate learning, and provide expert input where required. Students would benefit from having direct and regular access to the online instructor in the teaching and learning spaces of the course. In fact, the lack of teaching presence in the web forums seemed to be a disappointment for students in this study. Whereas a tutor might be available to students for two hours a week in on-campus workshops, an online tutor should be available for longer periods, at least one hour per day with intensive tasks and large cohorts, to monitor student progress and attend to issues that might arise. This requires the adequate resourcing of online courses.

Staff training is required in the effective use of mediating technologies in planned curricula, but students also require some training. There seems to be an assumption that younger people have greater knowledge of the technologies used for learning. That might be the case for many, but what younger students may not understand is how their use of such technologies might enhance their learning, or how their communication contributes to effective socially distributed learning. This metacognitive awareness needs to be made explicit in the nature of the assigned tasks and in the modelling of appropriate communications. Staff training, therefore, needs to incorporate these understandings.

Equal opportunity issues should be considered when using new technologies as exemplified in one student's complaint that he was unable to afford internet access at home and had to travel to campus for access. The expectation in 2012 would be that it is the responsibility of students to ensure that they have regular and reliable access to the internet when enrolling in an online course of study. However, in 2006, this was the only course offered fully online in the research participants' respective degrees, and for some, completion of the course was a requirement in their programs. The institution at which the course was offered had an equal opportunities policy that ran counter to the requirement for students to have regular and reliable internet

access. However, reliable, high-speed internet access was available on all campuses of the institution, and so students could use campus resources. But, again, this went against the desire of the institution to allow students flexibility of when, where, and how learning took place. If students do not have access to smart mobile or television technologies or cannot afford internet access for intensive participation in a role-play scenario, while others can and do, then more inclusive solutions should be considered by higher education institutions and instructional designers in their employ. This could involve the provision of such services on campus, perhaps available in campus libraries as a resource for booking or borrowing, to allow equality of provision and access.

8.5 Reflections on the research

This section offers reflections on aspects of the research design and processes used in the study, and recommendations for further research.

The study used Garrison and his team's Community of Inquiry model to explore the nature of the student learning experience in an online undergraduate course. The categories of cognitive presence, social presence, and teaching presence had been tested independently in previous studies, but not combined. As the model implies that student experience lies at the nexus of the three categories of presence, the study attempted to apply the indicators for each of the categories to the coding of data sources, and compare them to provide a more complete picture of online learning in the course under investigation. The application of the model to online resources and discussion transcripts using the coding indicators was helpful in elucidating patterns of individual and collective participation, and highlighting points of interest for a fine grained qualitative analysis of the data. The coded data using the indicators from cognitive and social presence foregrounded the ways in which groups and individuals participated in learning processes. The coded data using the indicators from teaching presence foregrounded the nature and attention given to instructional aspects of the online course. Corroboration with other sources of data helped provide possible explanations for the varying patterns of participation among individual students.

Combining the categories was not without some problems. The most problematic aspect of combining or comparing categories was with the units of measurement. The units for social presence were necessarily small, but often repeated throughout a message, while the units for cognitive and teaching presence were large, and often constituted the entire message. It was difficult to ascertain what value one unit represented over another unit. If a message was entirely social and brief, did it contain less significance in the collaborative learning process for different individuals than a long message that shared information of cognitive value in the learning process? What the application of the units of measurement did show was the relative importance of an indicator or category to one student compared to that of another student to reveal the focus of the nature of participation for each student. It also allowed for relative comparison of patterns between groups, and differences in patterns of participation between the two stages of learning which reflected the different processes and outcomes of the allocated tasks.

The value groups and individuals placed on interacting in particular ways at particular stages of conversation was revealed by the application of indicators of cognitive and social presence. This could be progressed through the application of conversational analysis to include the value other participants placed on interactional patterns. Conversational analysis could reveal patterns of interaction in the group to see which participants' views are taken up while others are ignored. This would perhaps show what kinds of participation were valued by students in the collaborative learning process. Critical discourse analysis (CDA) could be incorporated to reveal where sources of power lie within the community and why. Informed by understandings derived from such analyses, the online tutor could better assist groups and individuals to reach greater learning potential.

The online surveys were offered at two stages of the course to provide insights and possible explanations for points of interest in the content analysis. The questions were posed to inform the interpretation of the content analysis of cognitive, social, and teaching presence. The use of a five-point likert scale in surveys is common practice in research and was employed in this study to allow students the option of choosing a neutral position. However, certain survey questions in this study produced a high number of responses for the neutral position. The use of a sliding

scale of six positions may have forced students into choosing a position other than neutral, but it might also have resulted in students not responding at all. Nevertheless, the high number of neutral positions selected for particular questions suggested that students were reluctant to answer those questions. The possible reasons for this could be explored to ensure a higher response rate.

Learning styles presented in Chapter 2 (see 2.2.9) could have been associated with the various combinations of indicators of cognitive presence and social presence to categorise the individual learning styles of selected individual cases. The various learning styles demonstrate how individuals contribute to the collective learning endeavour, and could offer insights into which learning styles facilitate which cognitive and social processes within the group.

Leadership and commitment to collaborative endeavours were revealed as important aspects of the course in the findings. Leaders had to be appointed by each country forum in the role-play scenario, and the leaders became responsible for each group's negotiations and outcomes. Only two leaders, both male, were selected for analysis, but 12 participants were identified as having been appointed as group leader or demonstrated leadership qualities. For example, P30 was supported strongly in his role by P40 who seemed to share the leadership responsibilities without wanting the position. An analysis of leadership in relation to learning in communities of inquiry would generate deeper understanding of how student-centred learning communities perform. It would also be of value to determine the extent to which power relations shift in a group when different mediating technologies are employed.

Further research could also investigate the sets of skills and knowledge that the students bring with them to the learning process compared to the sets of skills and knowledge they depart with, and how self-aware students are of their personal learning and development through participation in the course. This would help ascertain the extent to which student-centred learning of the kind examined in this present study can develop new knowledge and skills in individual learners, with consideration of the role of the instructor and the mediating technologies in the process.

8.6 Final comments

My study contributes to the field of online learning in higher education by employing a comprehensive research strategy to offer insights into how individuals contribute to collaborative online learning processes to increase the potential for higher order learning and perspective transformation to occur, not just at group level but for all individuals involved. To achieve this, metacognitive awareness must be raised in a distributed learning environment where knowledge is available in a variety of forms and resources, and cognition is advanced through varied group processes, depending on task requirements and mediating technologies. This has implications for further research into online learning environments and activities that involve culturally diverse student populations.

As stated earlier (see 4.3.4), the theories that informed this research allowed for an explanation of the case to provide insights into pedagogical processes and associated learner experiences for the benefit of online course designers and instructors operating in similar higher education settings. The case was specific to the institution in which the LMS was in operation to inform the potential design, development, and operation of literally thousands of similar undergraduate courses still on offer at the institution. However, similar online courses are offered in higher education institutions around the world, particularly in the fields of Business, International Studies, and Political Science. The study offers insights into the design and teaching of such courses. The study also advances methods for researching the effectiveness of such courses in terms of how they are experienced by students.

The study was conducted over the time span of a decade. Technologies have changed significantly over the period, and have developed towards social networking and mobile applications. The course in this study used the second version of the LMS at *Uni Technovation*, based on Web 2.0 technologies. The university has since moved to a new form of LMS incorporating Web 3.0 technologies. Despite the changing technologies, many of the principles of teaching and learning explored in this study remain prominent in and applicable to the higher education sector in Australia. The adoption of online teaching and learning has increased, and continues to do so. Many online courses in higher education continue to use text-based asynchronous communications and to adopt student-centred flexible learning arrangements.

Further, the developments in technology afford greater flexibility and possibility in relation to the kind of course investigated in this study. However, the principles of teaching and learning must be carefully considered in the use of any technologies to ensure that effective learning for all students takes place.

In summary, the course provided the necessary opportunities for personal learning to occur but not all students were positioned to take best advantage of the opportunities afforded them. With increased variety and functionality of technological provision within online course environments, the challenge for instructional designers and moderators of such courses is to make effective use of the technologies available to them in planning, guiding, and supporting learners to effective outcomes without taking over responsibility for their learning. The challenge to universities is to adequately resource and support such technological and instructional provision to enhance the quality of student experience in online courses.

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Appendices

Appendix A: Information sheet

Thursday, 15 September, 2005

Project title: Learning in new socio-cultural spaces

My name is Greg Restall and I am doing research under the supervision of Associate Professor Ilana Snyder, Faculty of Education, towards a PhD at Monash University in Melbourne, Victoria.

The aim of this research is to gain a better understanding of the learning needs of all students, but in particular international students, within online learning environments. Universities around the world are increasingly developing online environments for teaching and learning. The purpose of this research study is to investigate what promotes or inhibits student learning within collaborative and participative online learning environments and what additional learning benefits or obstacles there might be for international students. The findings of the research will be valuable for future developments of online learning environments.

I hope that it will provide understandings that will help (*Uni Technovation*) and other Australian universities to provide a better learning experience for all students, but in particular international students.

I am seeking participation from as many students as possible enrolled in the (*Learning to Resolve Global Conflicts 201*) course in the (*International Studies faculty*) at (*Uni Technovation*) in 2 online surveys and permission to access online discussion contributions. In addition, I am seeking participation from some international students, preferably on-campus, in interviews towards the end of the course. Interviews should take no longer than 30 minutes and will be conducted over the phone for off-shore students and on campus for internal students. Completing the two online questionnaires should take 10-15 minutes each and can be done at home or at university via the internet at your convenience.

The information you provide will be anonymous and only the combined results of all participants will be published.

If you have any queries or would like to be informed of the aggregate research finding, please contact telephone (+61 x) xxxx xxxx or fax (+61 x) xxxx xxxx.

You can complain about the study if you don't like something about it. To complain about the study, you need to phone (+61 3) xxxx xxxx. You can then ask to speak to the secretary of the Human Ethics Committee and tell him or her that the number of the project is 2003/583. You could also write to the secretary. That person's address is:

The Secretary

The Standing Committee on Ethics in Research Involving Humans

PO Box No 3A

Monash University

Victoria 3800

Telephone +61 3 xxxx xxxx Fax +61 3 xxxx xxxx

Email: SCERH@adm.monash.edu.au

Thank you.

_____ (your signature)

Greg Restall

(+61 x) xxxx xxxx

Appendix B: Consent form

Informed consent form

Project title: Learning in new socio-cultural spaces

- ☐ I agree to take part in the above Monash University research project.
- ☐ I do not agree to take part in the above Monash University research project.

I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records. I understand that agreeing to take part means that I am willing to:

- complete two online questionnaires asking me about my learning in the course (10 mins each)
- allow the researcher to have access to my written submissions in the online learning environment
- allow the researcher to have access to my patterns of participation in the online learning environment

I also understand that I may be asked by the researcher to be interviewed and that the interview will be audio-taped, but that participation in the interview is entirely voluntary and that every precaution will be taken to protect the identity of the interviewee.

I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. I understand that I will be given a transcript of data concerning me for my approval before it is included in the write up of the research. I also understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

Name:

Signature:

Date:

Please place the signed form in the box provided in Room XX, or return the signed form by post to:

Appendix C: Explanation of indicators in the Col framework

Cognitive presence indicators

Table 1. Triggering events

Descriptor	Indicators	Sociocognitive processes
Evocative	Recognising the problem	Presenting background information that culminates in a question
	Sense of puzzlement	Asking questions Messages that take discussion in new direction

Example:

It has been argued that the only way to deliver effective distance education is through a systems approach. However, this approach is rarely used. Why do you think that is?

Table 2. Exploration

Descriptor	Indicators	Sociocognitive processes
Inquisitive	Divergence – within the online community	Unsubstantiated contradiction of previous ideas
	Divergence – within a single message	Many different ideas/themes presented in one message
	Information exchange	Personal narratives/descriptions/facts (not used as evidence to support a conclusion)
	Suggestions for consideration	Author explicitly characterises message as exploration—e.g., “Does that seem about right?” or “Am I way off the mark?”
	Brainstorming	Adds to established points but does not systematically defend/justify/develop addition
	Leaps to conclusions	Offers unsupported opinions

Example:

One reason I think it is seldom used is that it is too complicated to get cooperation. Another may be the mind-sets of those in charge to change practices.

Table 3. Integration

Descriptor	Indicators	Sociocognitive processes
Tentative	Convergence – among group members	Reference to previous message followed by substantiated agreement, e.g., “I agree because...” Building on, adding to others’ ideas
	Convergence – within a single message	Justified, developed, defensible, yet tentative hypotheses
	Connecting ideas, synthesis	Integrating information from various sources—textbook, articles, personal experience
	Creating solutions	Explicit characterisation of message as a solution by participant

Example:

We also had trouble getting cooperation. Often the use of new tools requires new organisational structures. We addressed these issues when we implemented a systems approach, and I think that’s why we were successful.

Table 4. Resolution

Descriptor	Indicators	processes
Committed	Vicarious application to real world	None
	Testing solutions	Coded
	Defending solutions	

Example:

A good test of this solution would be to ... and then assess how ...

Social presence indicators

Table 1. Affective

Category	Indicators	Definition	Example
Affective	Expression of emotions	Conventional expressions of emotion, or unconventional expressions of emotion, includes repetitious punctuation, conspicuous capitalisation, emoticons.	“I just can’t stand it when...!!!” “ANYBODY OUT THERE!”
	Use of humour	Teasing, cajoling, irony, understatements, sarcasm.	The banana crop in Edmonton is looking good this year)
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability.	“Where I work, this is what we do...” “I just don’t understand this question”

Table 2. Interactive

Category	Indicators	Definition	Example
Interactive	Continuing a thread	Using reply feature of software, rather than starting a new thread.	Software dependent, e.g., “Subject: Re” or “Branch from”
	Quoting from others’ messages	Using software features to quote others’ entire messages or cutting and pasting selections of others’ messages	Software dependent, e.g., “Martha writes:” or text prefaced by less-than symbol <.
	Referring explicitly to others’ messages	Direct references to contents of others’ posts.	“In your message, you talked about Moore’s distinction between...”
	Asking questions	Students ask questions of other students or the moderator.	“Anyone else had experience with WEBCT?”
	Complimenting, expressing appreciation	Complimenting others or contents of others’ messages.	“I really like your interpretation of the reading.”
	Expressing agreement	Expressing agreement with others or content of others’ messages.	“I was thinking the same thing. You really hit the nail on the head.”

Table 3. Cohesive

Category	Indicators	Definition	Example
Cohesive	Vocatives	Addressing or referring to participants by name.	"I think John made a good point." "John, what do you think?"
	Addresses or refers to the group using inclusive pronouns	Addresses the group as <i>we, us, our</i> group.	"Our textbook refers to..." "I think we veered off track..."
	Phatics, salutations	Communication that serves a purely social function; greetings, closures.	"Hi all" "That's it for now" "We're having the most beautiful weather here"

Teaching presence indicators

Table 1 Coding scheme for instructional design and organisation

Indicators	Examples
Setting curriculum	“This week we will be discussing...”
Designing methods	“I am going to divide you into groups, and you will debate. . .”
Establishing time parameters	“Please post a message by Friday...”
Utilizing medium effectively	“Try to address issues that others have raised when you post”
Establishing netiquette	“Keep your messages short”

Table 2 Coding scheme for facilitating discourse

Indicators	Examples
Identifying areas of agreement/disagreement	“Joe, Mary has provided a compelling counter-example to your hypothesis. Would you care to respond?”
Seeking to reach consensus/understanding	“I think Joe and Mary are saying essentially the same thing”
Encouraging, acknowledging, or reinforcing student contributions	“Thank you for your insightful comments”
Setting climate for learning	“Don't feel self-conscious about ‘thinking out loud’ on the forum. This is a place to try out ideas after all.”
Drawing in participants, prompting discussion	“Any thoughts on this issue?” “Anyone care to comment?”
Assess the efficacy of the process	“I think we're getting a little off track here”

Table 3 Coding scheme for direct instruction

Indicators	Examples
Present content/questions	“Bates says...what do you think”
Focus the discussion on specific issues	“I think that’s a dead end. I would ask you to consider...”
Summarize the discussion	“The original question was ...Joe said...Mary said...we concluded that...We still haven’t addressed...”
Confirm understanding through assessment and explanatory feedback.	“You’re close, but you didn’t account for... ..this is important because...”
Diagnose misconceptions	“Remember, Bates is speaking from an administrative perspective, so be careful when you say ...”
Inject knowledge from diverse sources, e.g., textbook, articles, internet, personal experiences (includes pointers to resources)	“I was at a conference with Bates once, and he said... You can find the proceedings from the conference at http://www.... ”
Responding to technical concerns	“If you want to include a hyperlink in your message, you have to ...”

Appendix D: Survey questions

Survey 1

- 1 What is the code of the program you are enrolled in?
- 2 Age group: under 20, 20-29, over 30
- 3 Gender: male, female
- 4 Are you a domestic (Australian) or international student?
- 5 I have lived in a country other than Australia: yes, no
- 6 I have visited a country other than Australia: yes, no
- 7 I have learned a language other than English: yes, no
- 8 English is my native language: yes, no
- 9 I enrolled in this course because I have a keen interest in international affairs.
- 10 This course isn't as important to me as the other courses in my degree.
- 11 I enrolled in this course because my options were limited.
- 12 I like the fact that the course is offered entirely online.
- 13 I brought to the course pre-conceived notions of nationalism, identity, human rights, sovereignty and other related concepts covered in the course.
- 14 I hadn't thought much about the concepts introduced in the course before enrolment in the course.
- 15 The course has been different to what I initially expected.
- 16 My ideas have been challenged by the readings for the weekly tasks and online tutorial groups.
- 17 My ideas have been challenged by other learners through online interaction in the tutorial groups.
- 18 My ideas about nationalism, identity, human rights, sovereignty and so on have been clarified through reading and interaction in the course.
- 19 I know more about these concepts now but I am unsure as to where I stand in relation to their application in different contexts.
- 20 I feel sufficiently prepared to apply the concepts to the online scenario.
- 21 I feel sufficiently prepared to role play in my allocated country forum and to collaboratively develop a country position statement.
- 22 When responding to tasks in the online tutorials, I felt that my contributions were ignored by others or not treated seriously.
- 23 I made an effort to respond to the contributions of others in the online tutorial.
- 24 When responding to tasks in the online tutorials, I focused specifically on the task and gave a considered individual response rather than developing a rapport with other learners and taking into account or being influenced by the responses of others.
- 25 I have preferred to read the contributions of others before submitting my own response to the weekly tasks.
- 26 It has been difficult to build a rapport with other learners in the online environment.
- 27 I find it easier to learn in an online environment than in face-to-face situations.
- 28 The contributions of other learners in this course has contributed significantly to my personal learning.
- 29 The moderator's participation in the course has contributed significantly to my personal learning.
- 30 The lecturer's notes and instructions provided on the course web site have contributed significantly to my personal learning in the course.

- 31 I have found the structure of the course confusing.
- 32 I have found the expectations of the course unclear.
- 33 What aspects of the course have prepared you well for participation in the online simulation? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the scenario, etc.)
- 34 What aspects of the course could be improved to prepare you better for participation in the online simulation? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the scenario, etc.)

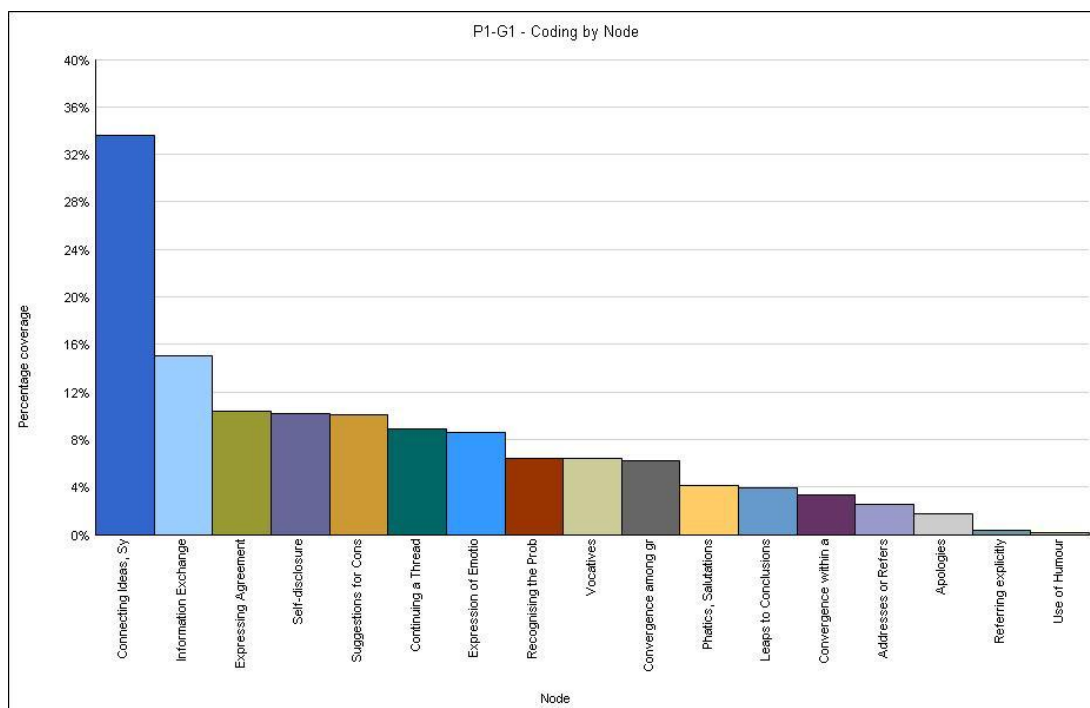
Survey 2

- 1 What is the code of the program you are enrolled in?
- 2 Age group: under 20, 20-29, over 30
- 3 Gender: male, female
- 4 Are you a domestic (Australian) or international student?
- 5 I have lived in a country other than Australia: yes, no
- 6 I have visited a country other than Australia: yes, no
- 7 I have learned a language other than English: yes, no
- 8 English is my native language: yes, no
- 9 The online scenario and role play stimulated my desire to actively participate and learn in the course.
- 10 The course content as a whole stimulated my desire to actively participate and learn in the course.
- 11 The online interactions and collaboration with other students in the online forums has enhanced my learning in the course.
- 12 I communicated with other students participating in the simulation by phone or email or other forms of communication other than those provided by the online course environment.
- 13 Multimedia facilities such as audio headsets or video webcams would have improved my participation in the course.
- 14 The instructions and guidance provided by the lecturer for the online scenario and role play were clearly stated and well presented.
- 15 It would have been beneficial if the lecturer's input including instructions and guidance were in the form of recorded video segments throughout the course to enhance the text-based environment.
- 16 The instructions and guidance provided by the lecturer prepared me sufficiently for my participation in the online simulation.
- 17 The online simulation has provided a real-world context that I could identify with.
- 18 I found it relatively easy to apply the learning in the first part of the course to the online scenario and role play.
- 19 I felt that I contributed well to the online role play and the development of a country position statement.
- 20 The contributions of other students in the online learning environment have broadened my understanding of the course content.
- 21 All members of the country forum to which I was assigned contributed well to the development of the country position statement.
- 22 The intentions and expectations of other participants in my country forum were clear to me.
- 23 I found it easy to follow the contributions submitted to the country forums by other group members.
- 24 I have found it easy to express my own views.

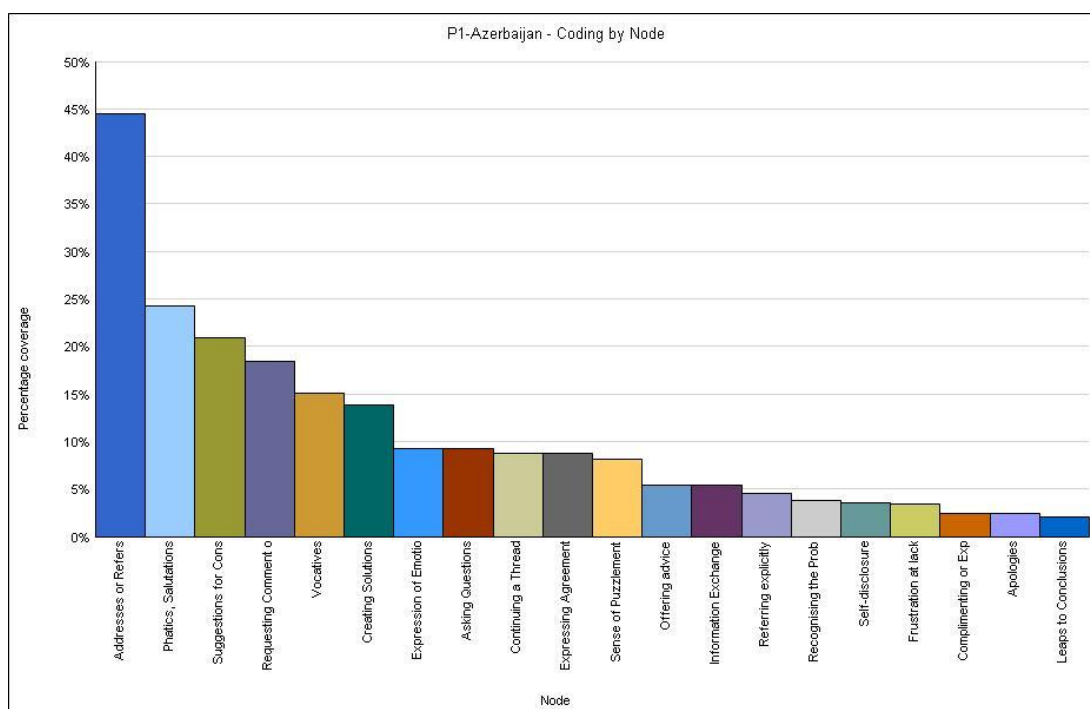
- 25 I thought my own views were received well by other group members.
- 26 I thought my own contributions to the country forum were valued by other group members.
- 27 I would prefer to do the role-playing simulation in face-to-face mode than in online mode.
- 28 If I could have the opportunity to meet with other students in the course, it would assist with my participation in the online environment.
- 29 I feel there is more support from other students for my learning in the online environment than in face-to-face contexts.
- 30 I find it easier to communicate my ideas online than in face-to-face teaching contexts.
- 31 I find it easier to understand the ideas and views expressed by others in the online learning environment than in face-to-face learning contexts.
- 32 Overall, the course was a valuable learning experience, but studying online has taken much more of my time than a face-to-face version of the course would have.
- 33 What aspects of the course worked well for you? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the simulation, etc.)
- 34 What aspects of the course could be improved? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the scenario, etc.)

Appendix E: Summary charts

P1—G1 views: 265 posts: 9 number of words: 2,650

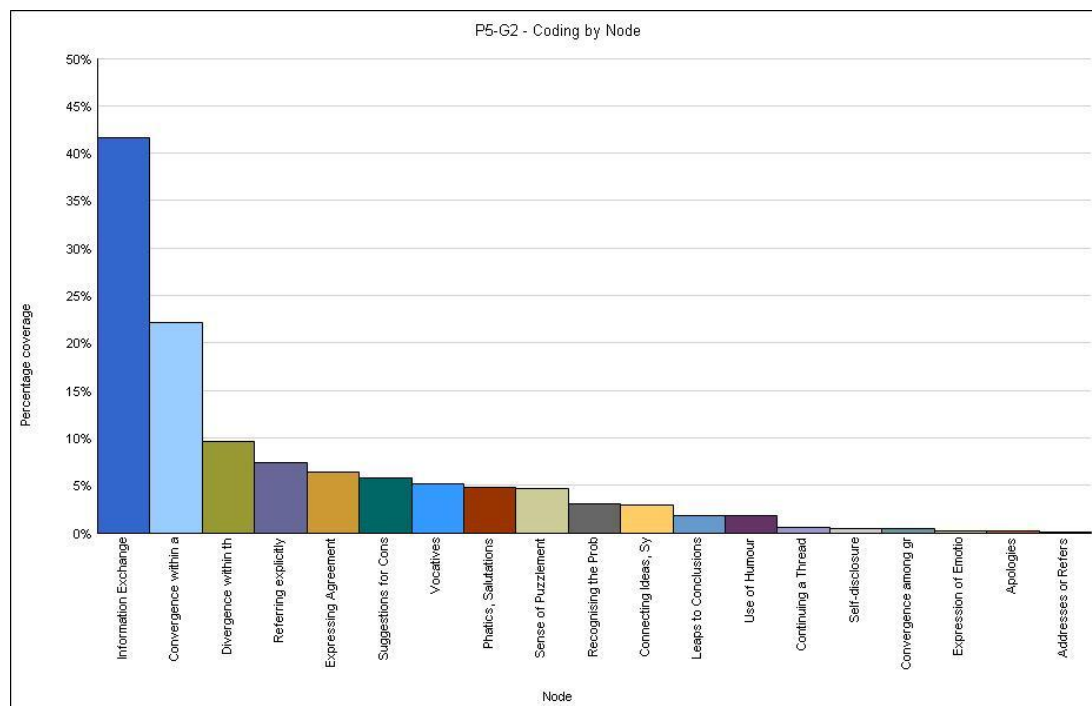


P1—Azerbaijan views: 172/55/8 posts: 15 number of words: 1,558

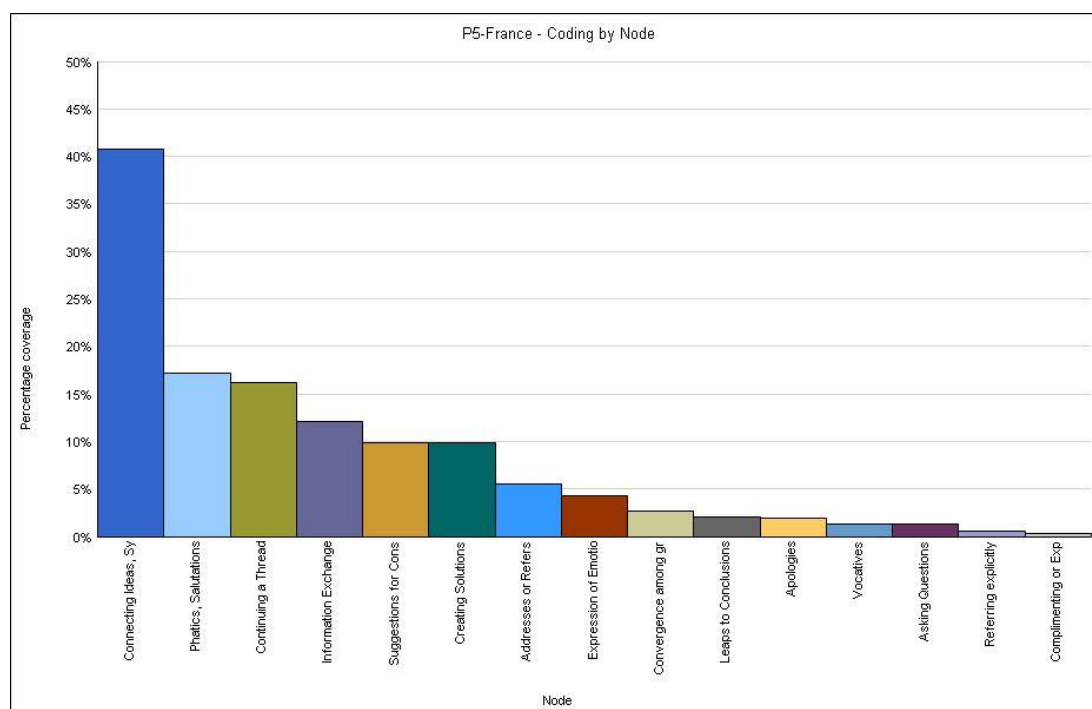


P1: **Total views: 500** **Total posts: 24** **Total words: 4,208**

P5—G2 views: 223 posts: 7 number of words: 1,839

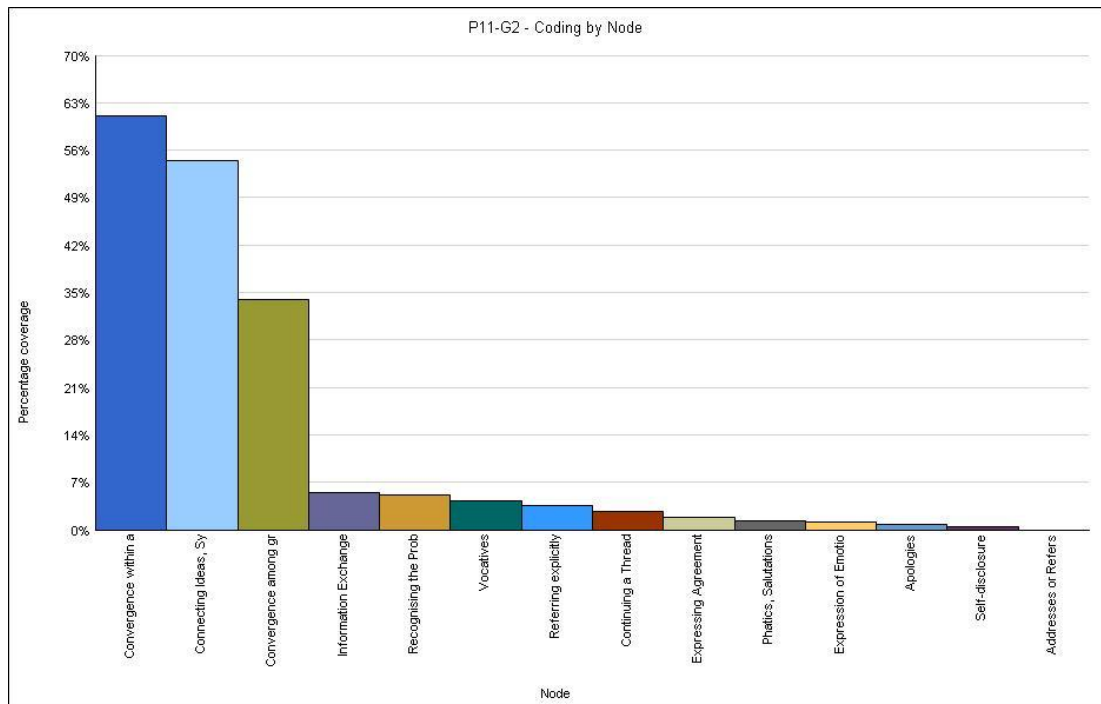


P5—France views: 188/37/31 posts: 12 number of words: 1,684

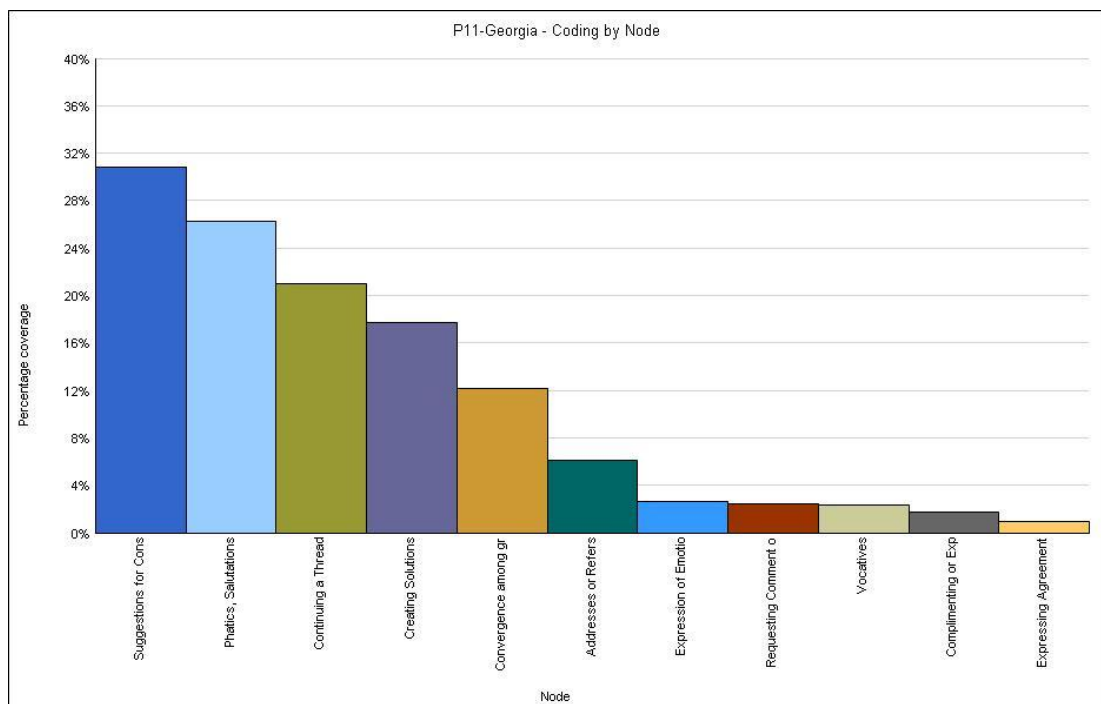


P5: **Total views: 479** **Total posts: 19** **Total words: 3,523**

P11—G2 views: 294 posts: 7 number of words: 3,324

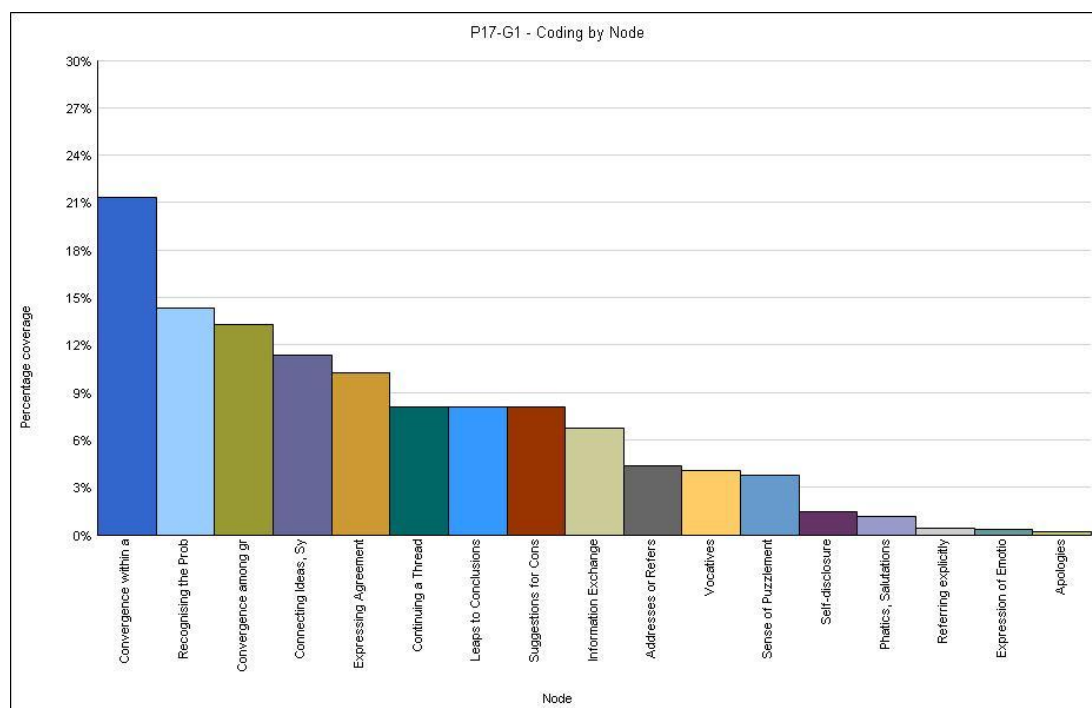


P11—Georgia views: 133/66/16 posts: 7 number of words: 497

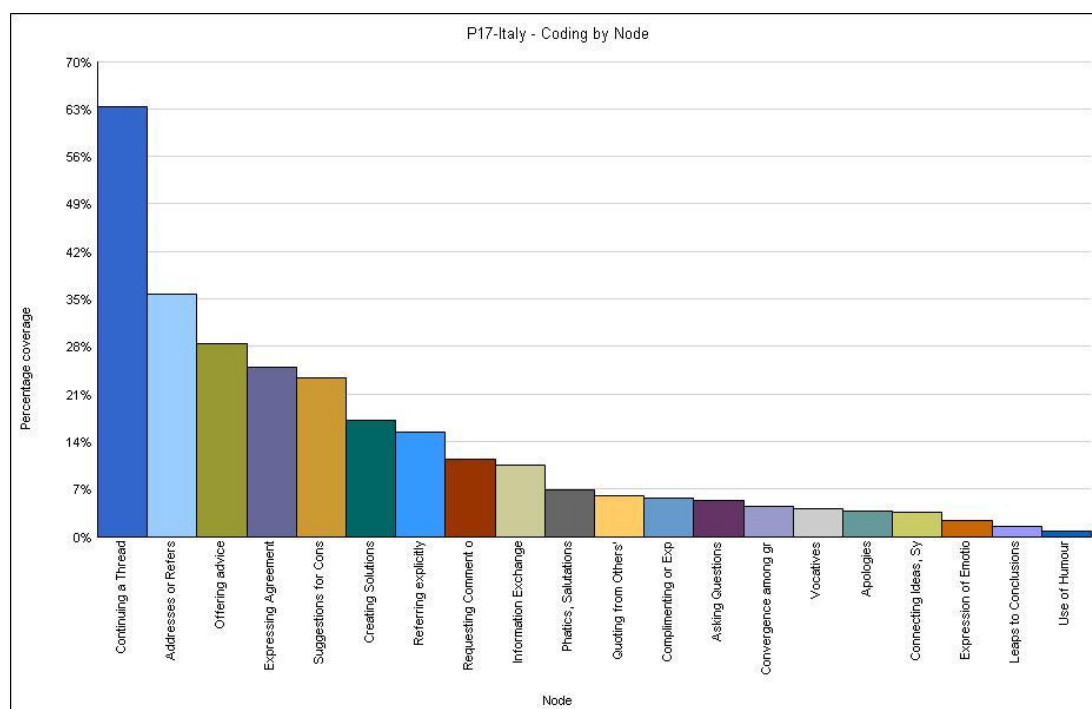


P11: Total views: 509 Total posts: 14 Total words: 3,821

P17—G1 views: 174 posts: 8 number of words: 2,238

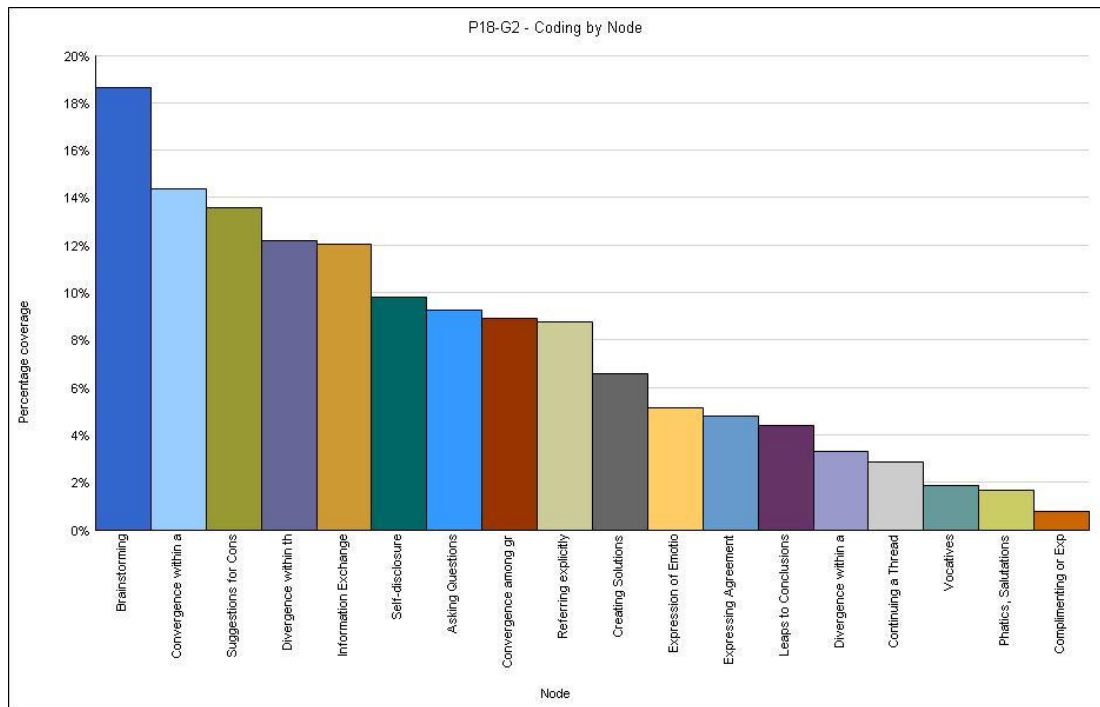


P17—Italy views: 533/79/14 posts: 39 number of words: 1,775

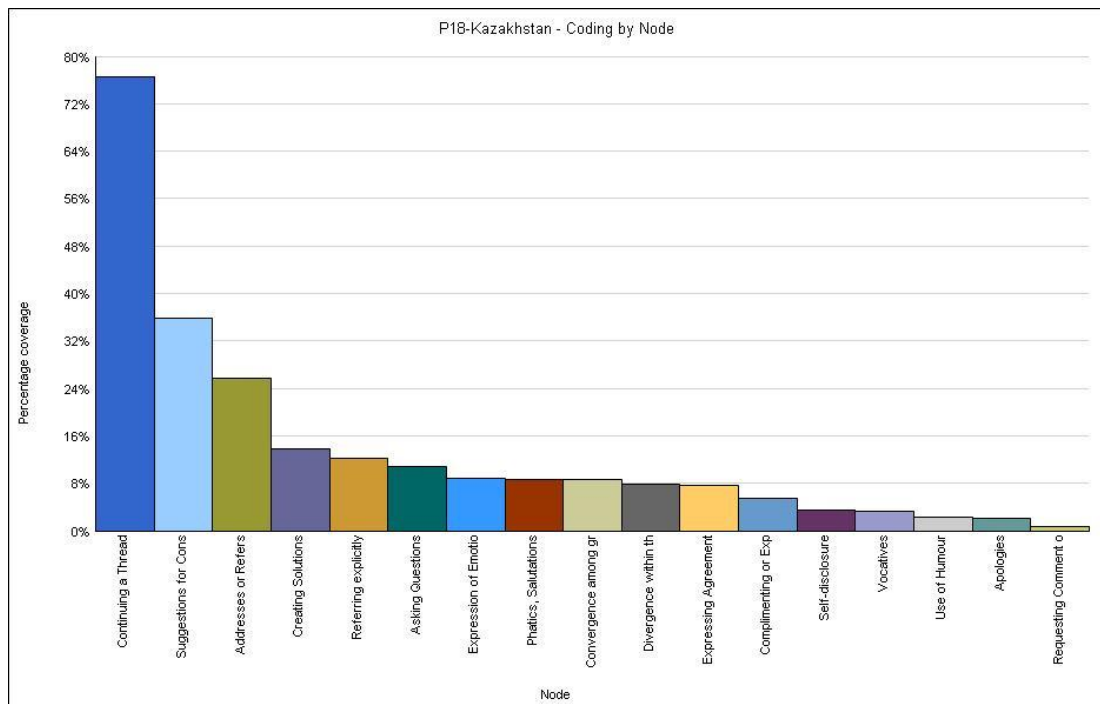


P17: Total views: 800 Total posts: 47 Total words: 4,013

P18—G2 views: 142 posts: 13 number of words: 1,450

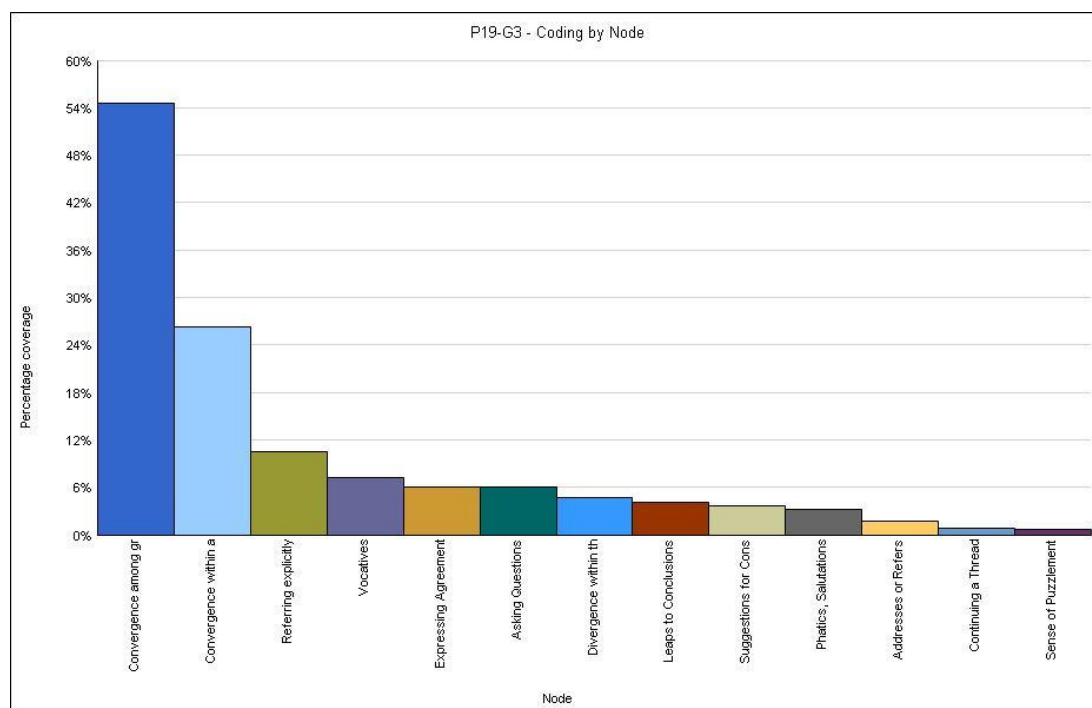


P18—Kazakhstan views: 108/22/23 posts: 11 number of words: 948

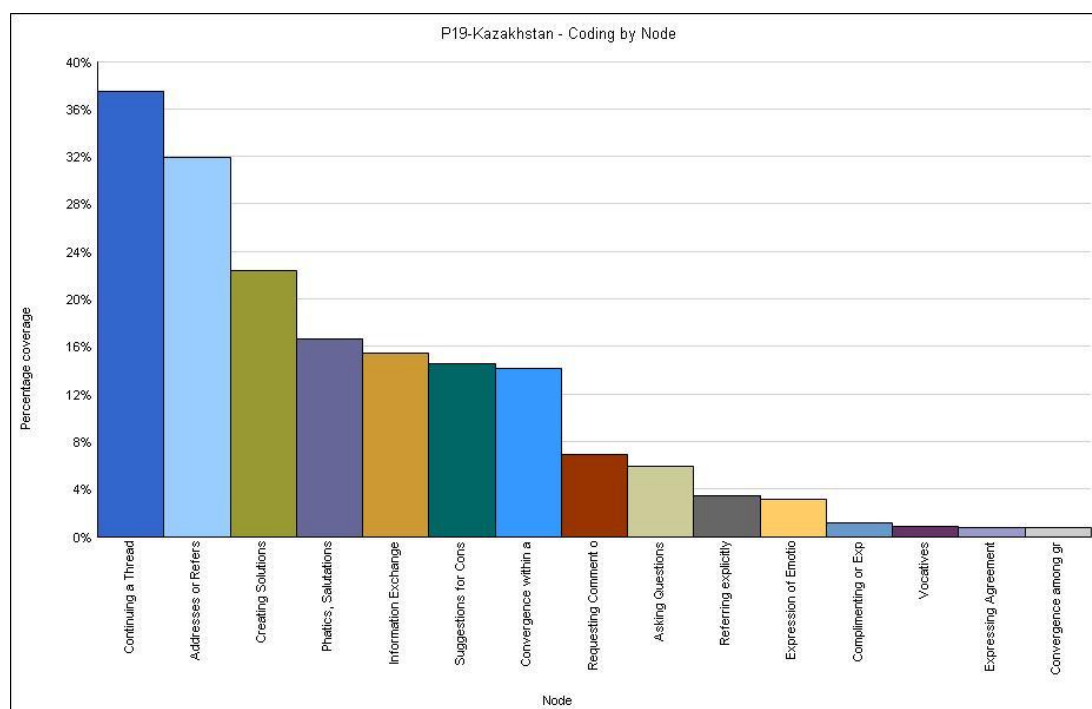


P18: Total views: 295 Total posts: 24 Total words: 2,398

P19—G3 views: 234 posts: 7 number of words: 2,493

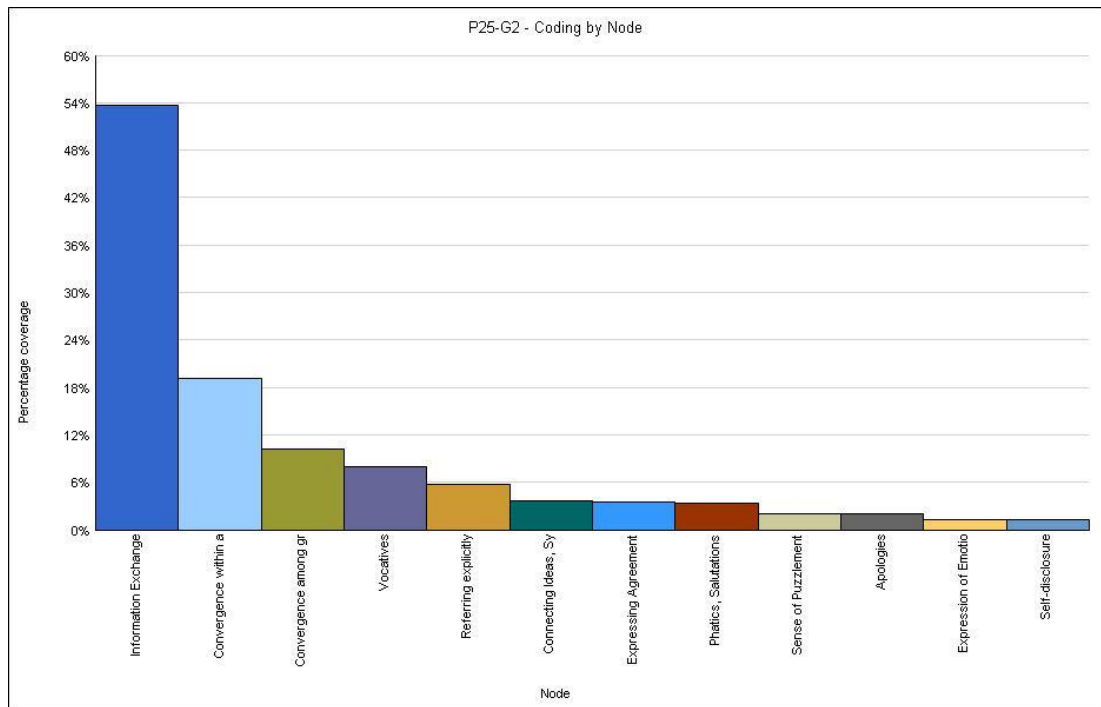


P19—Kazakhstan views: 146/115/10 posts: 12/4/1 number of words: 2,351

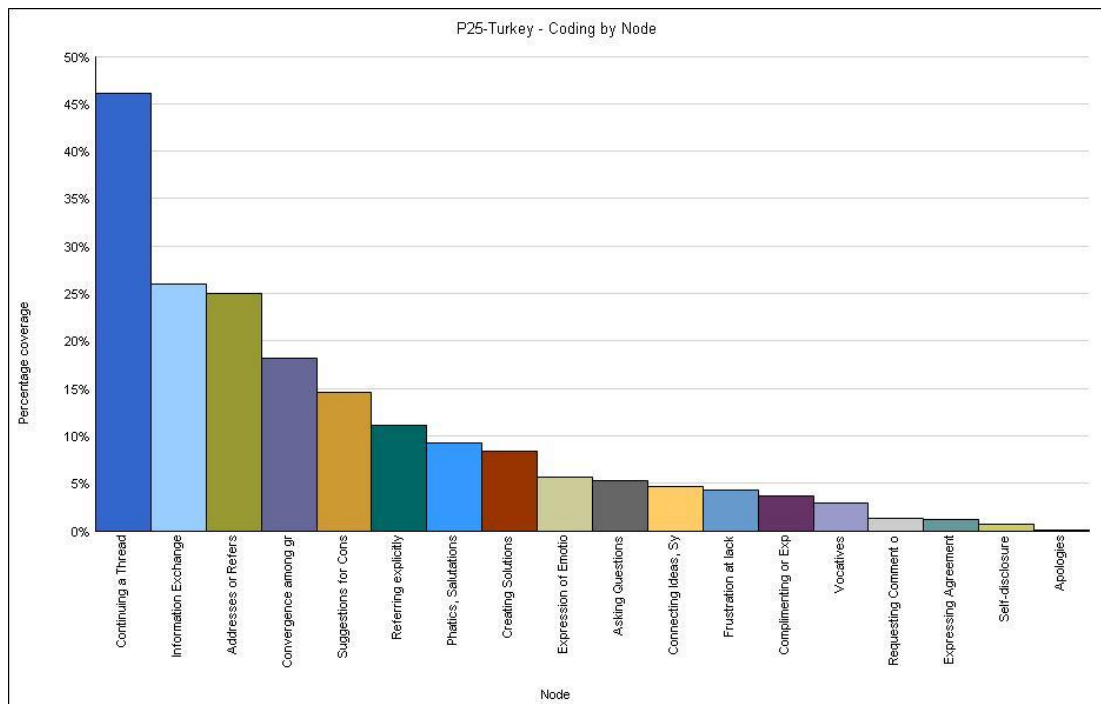


P19: Total views: 505 Total posts: 24 Total words: 4,844

P25—G2 views: 207 posts: 4 number of words: 1,007

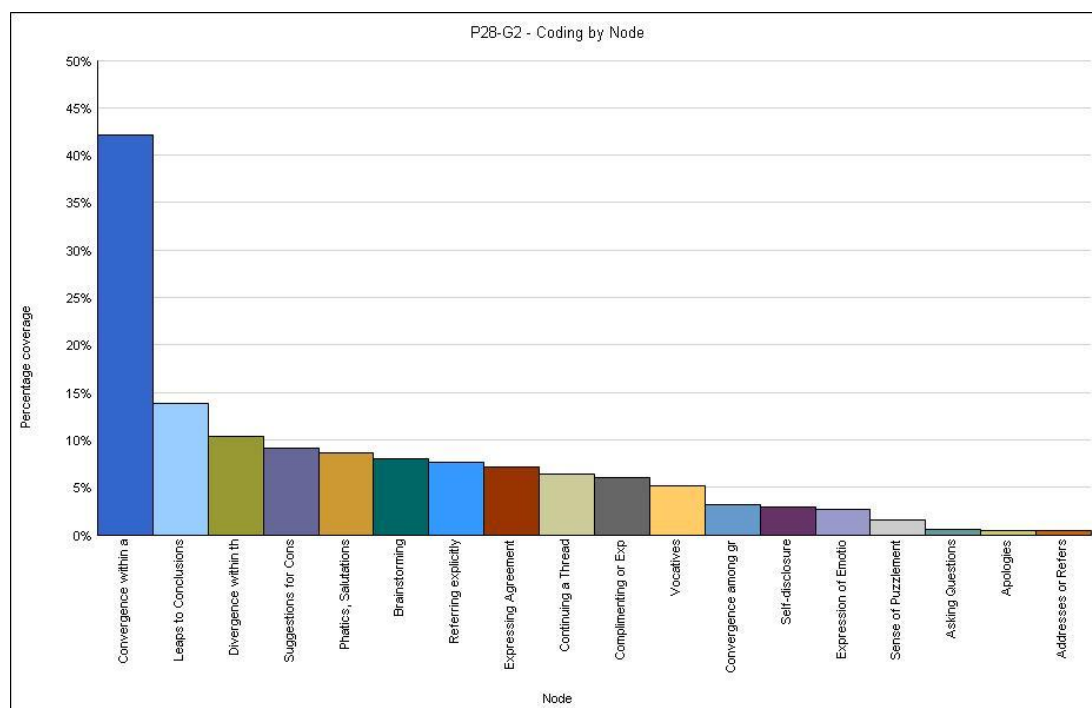


P25—Turkey views: 322/235/21 posts: 16 number of words: 4,013

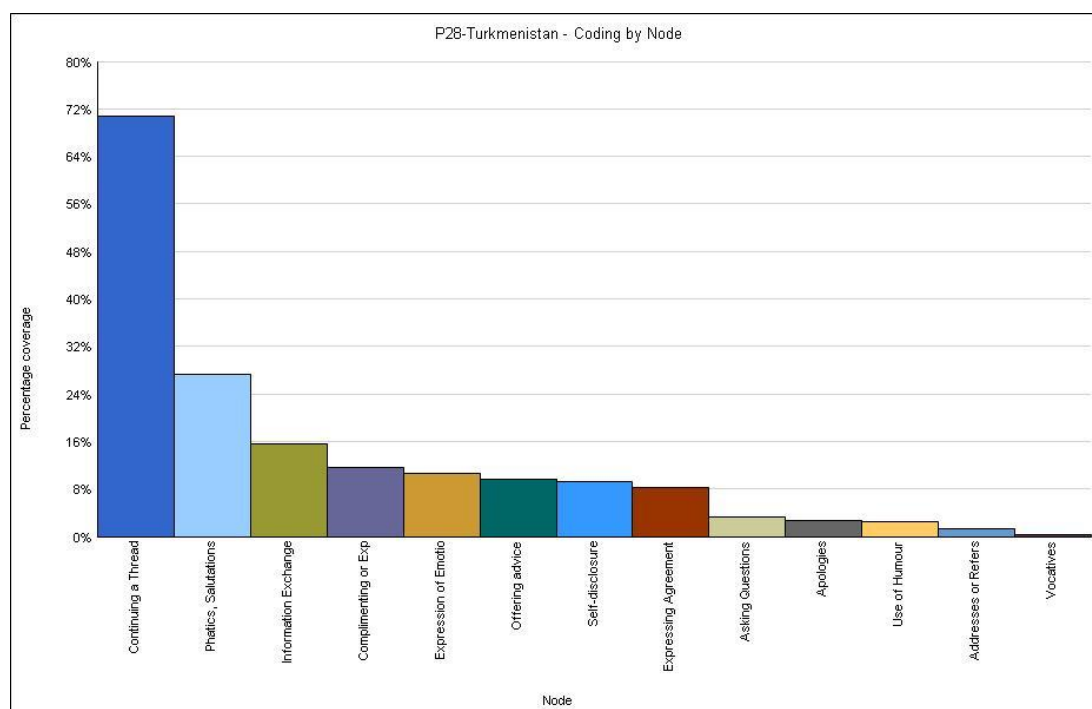


P25: Total views: 785 Total posts: 20 Total words: 5,020

P28—G2 views: 166 posts: 9 number of words: 1,766

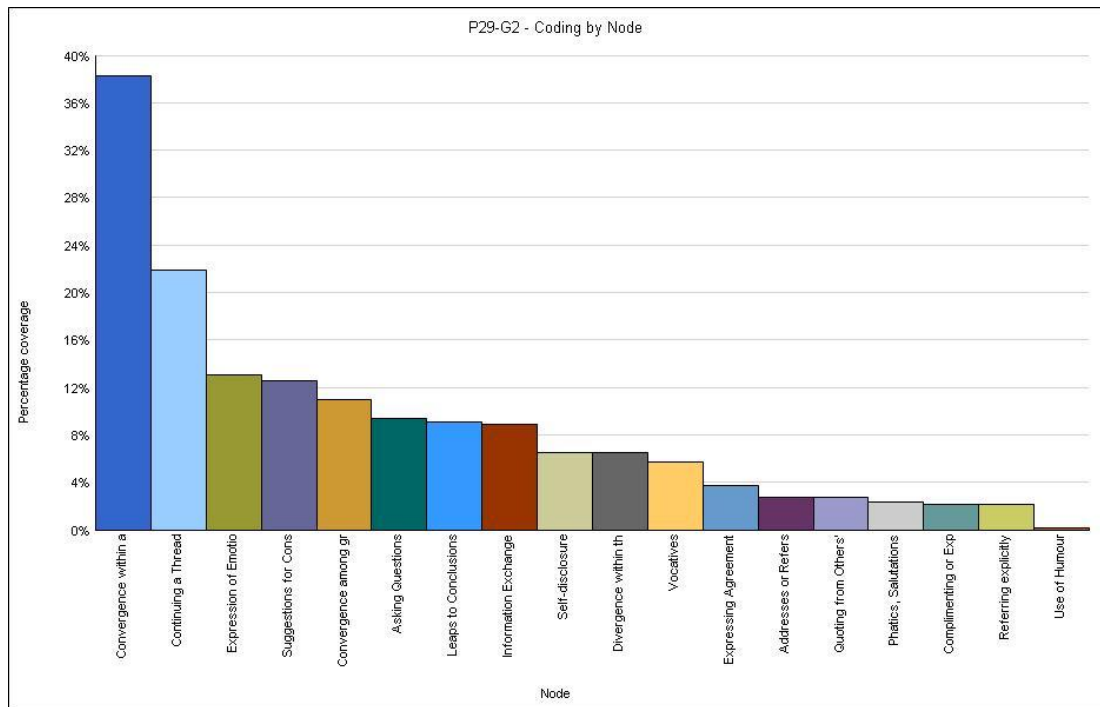


P28—Azerbaijan views: 96/22/1 posts: 5 number of words: 388

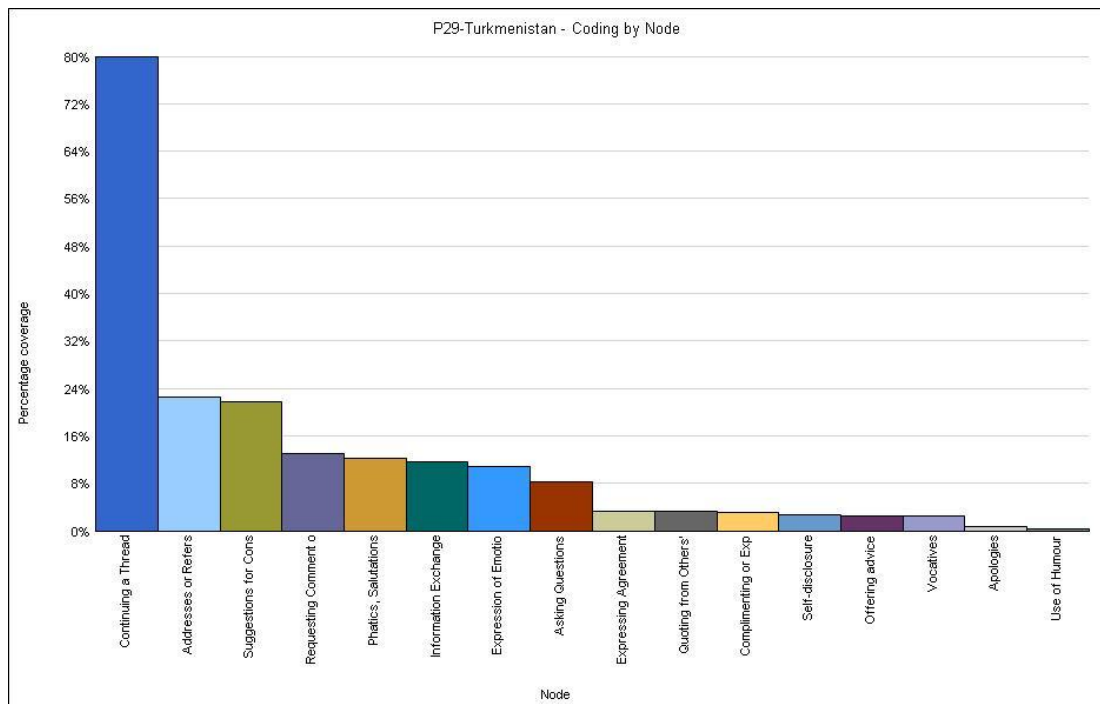


P28: Total views: 285 Total posts: 14 Total words: 2,154

P29—G2 views: 293 posts: 9 number of words: 1,048

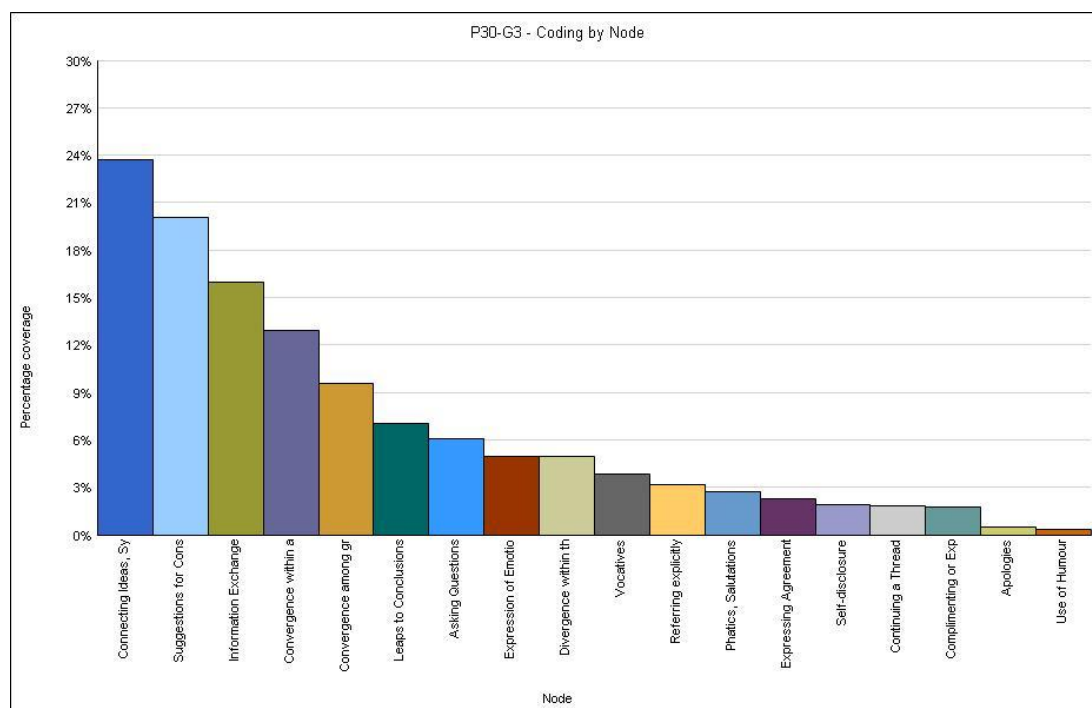


P29—Turkmenistan views: 458/135/35 posts: 20 number of words: 1,420

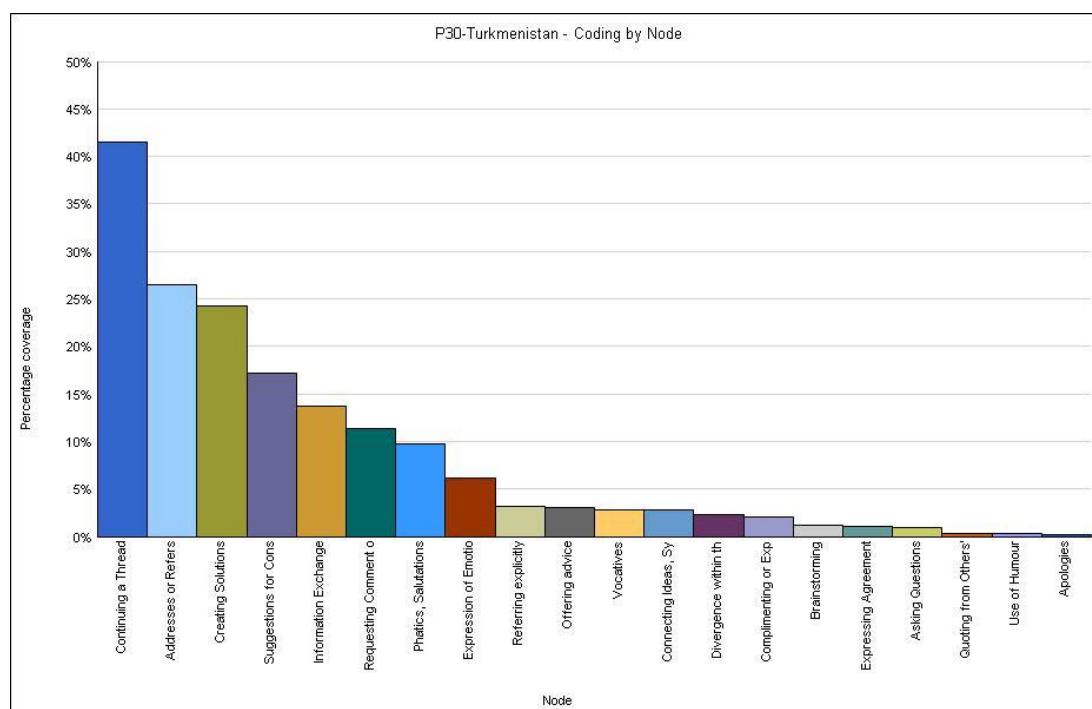


P29: Total views: 921 Total posts: 29 Total words: 2,468

P30—G3 views: 811 posts: 15 number of words: 2,939

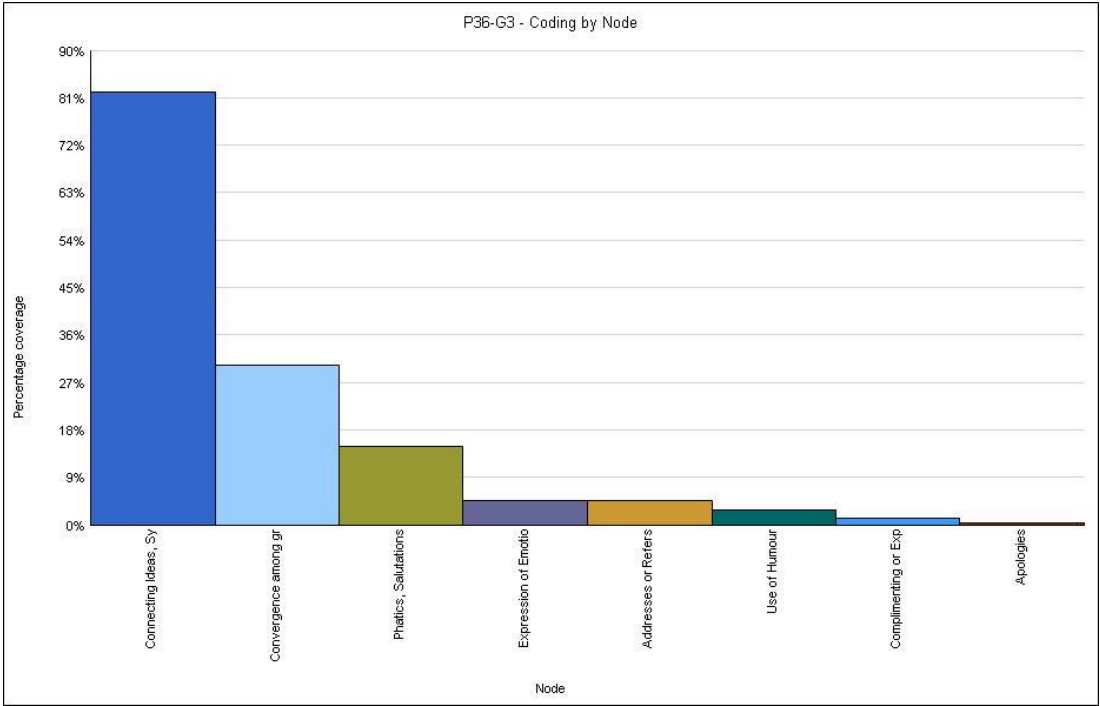


P30—Turkmenistan views: 891/281/35 posts: 43/3/1 number of words: 5,460

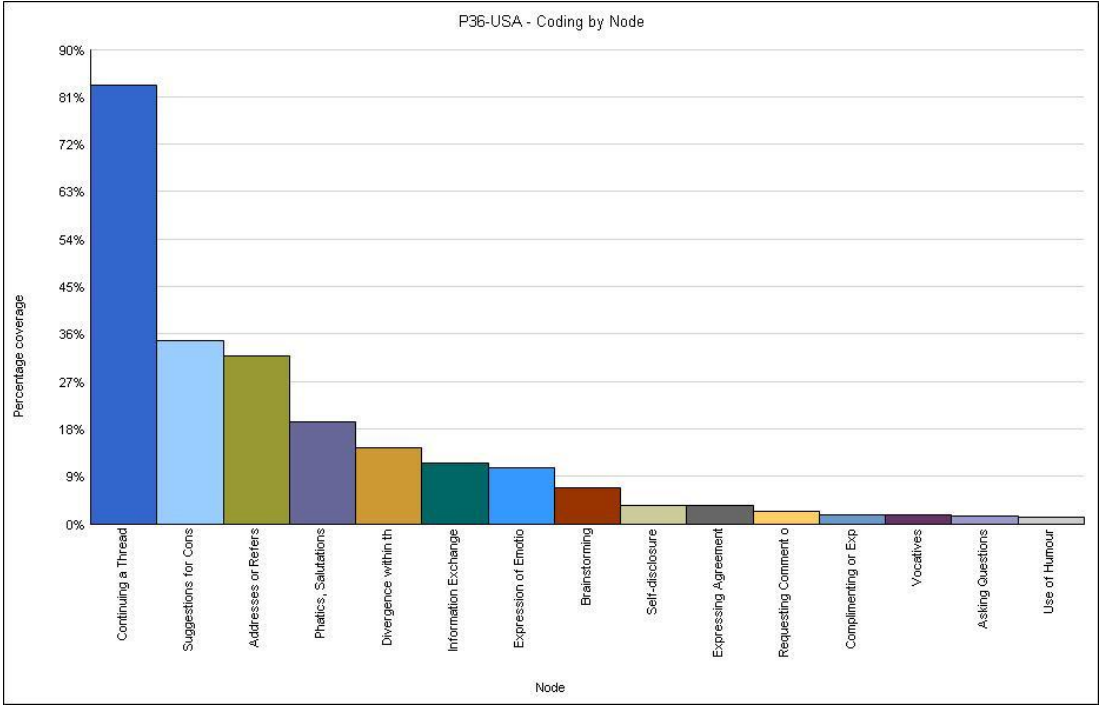


P30: Total views: 2,018 Total posts: 62 Total words: 8,399

P36—G3 views: 37 posts: 2 number of words: 777



P36—USA views: 35/19/0 posts: 7 number of words: 847



P36: **Total views: 91** **Total posts: 9** **Total words: 1,624**

Appendix F: Summary of survey data for selected research participants

Survey 1: Frequencies with negative values reversed

	P1	P5	P11	P17	P18	P19	P25	P28	P29	P30	P36	SD	D	N	A	SA	-ve	+ve
Q9	2	4	5	4	5	5	3	2	4	5	4	0	2	1	4	4	2	8
Q10	2	2	4	1	5	1	3	2	3	4	2	2	4	2	2	1	6	3
Q11	2	1	5	4	4	2	2	2	2	1	2	2	6	0	2	1	8	3
Q12	4	1	5	5	3	4	1	4	2	4	5	2	1	1	4	3	3	7
Q13	5	4	2	5	4	4	2	1	4	4	4	1	2	0	6	2	3	8
Q14	4	2	4	4	2	5	2	2	4	4	4	0	4	0	6	1	4	7
Q15	4	5	3	4	4	4	4	4	4	2	4	0	1	1	8	1	1	9
Q16	5	4	5	4	4	3	4	3	3	4	4	0	0	3	6	2	0	8
Q17	4	4	4	4	3	3	3	3	4	5	4	0	0	4	6	1	0	7
Q18	4	4	5	4	3	4	4	3	4	4	4	0	0	2	8	1	0	9
Q19	1	4	3	4	2	3	3	2	2	4	4	1	3	3	4	0	4	4
Q20	3	4	4	4	3	4	2	2	4	4	4	0	2	2	7	0	2	7
Q21	3	4	4	4	4	4	4	2	2	5	4	0	2	1	7	1	2	8
Q22	5	4	3	4	2	4	3	3	2	5	4	0	2	3	4	2	2	6
Q23	5	4	4	4	4	4	3	4	4	4	0	0	0	1	8	1	0	9
Q24	3	4	2	4	1	3	2	4	4	4	3	1	2	3	5	0	3	5
Q25	4	4	4	4	4	5	4	4	4	2	4	0	1	0	9	1	1	10
Q26	1	2	2	3	2	2	2	2	2	4	2	1	8	1	1	0	9	1
Q27	4	1	1	4	1	3	1	2	1	3	2	5	2	2	2	0	7	2
Q28	4	4	4	4	3	4	4	3	4	3	3	0	0	4	7	0	0	7
Q29	2	3	4	2	3	3	3	3	2	3	3	0	3	7	1	0	3	1
Q30	4	4	5	3	4	5	4	4	4	4	4	0	0	1	8	2	0	10
Q31	2	5	2	2	3	2	3	2	2	4	2	0	7	2	1	1	7	2
Q32	2	5	4	4	3	2	2	2	1	4	2	1	5	1	3	1	6	4
SD	2	3	1	1	2	1	2	1	2	1	0							
D	6	3	4	2	4	4	7	11	8	2	6							
N	3	1	3	2	8	6	8	6	2	3	3							
A	9	14	10	17	8	9	7	6	12	14	13							
SA	4	3	6	2	2	4	0	0	0	4	1							
-ve	8	6	5	3	6	5	9	12	10	3	6							
+ve	13	17	16	19	10	13	7	6	12	18	14							
Diff	5	11	11	16	4	8	-2	-6	2	15	8							

Survey 2: Frequencies with negative values reversed

	P1	P5	P11	P17	P18	P19	P25	P28	P29	P30	P36	SD	D	N	A	SA	-ve	+ve
Q9	2	5	4	3	-	-	3	2	4	5	-	0	2	2	2	2	2	4
Q10	2	4	4	2	-	-	2	2	4	4	-	0	4	0	4	0	4	4
Q11	4	4	5	3	-	-	2	4	5	4	-	0	1	1	4	2	1	6
Q12	1	5	2	4	-	-	2	1	2	1	-	3	3	0	1	1	6	2
Q13	2	5	4	4	-	-	1	4	4	2	-	1	2	0	4	1	3	5
Q14	4	2	2	4	-	-	2	4	3	2	-	0	4	1	3	0	4	3
Q15	4	2	2	2	-	-	3	2	1	4	-	1	4	1	2	0	5	2
Q16	2	4	4	2	-	-	4	2	4	4	-	0	3	0	5	0	3	5
Q17	2	5	5	4	-	-	4	2	4	4	-	0	2	0	4	2	2	6
Q18	4	3	4	3	-	-	3	4	3	4	-	0	0	4	4	0	0	4
Q19	5	5	4	4	-	-	4	2	4	5	-	0	1	0	4	3	1	7
Q20	2	4	4	4	-	-	4	4	5	3	-	0	1	1	5	1	1	6
Q21	1	2	2	4	-	-	3	2	1	2	-	2	4	1	1	0	6	1
Q22	4	3	4	3	-	-	4	2	2	2	-	0	3	2	3	0	3	3
Q23	2	1	2	2	-	-	2	2	1	3	-	2	5	1	0	0	7	0
Q24	5	5	4	4	-	-	4	4	5	5	-	0	0	0	4	4	0	8
Q25	4	5	4	4	-	-	3	4	4	5	-	0	0	1	5	2	0	7
Q26	5	5	4	4	-	-	2	4	4	5	-	0	1	0	4	3	1	7
Q27	4	4	2	4	-	-	5	4	5	2	-	0	2	0	4	2	2	6
Q28	4	2	2	2	-	-	1	4	1	4	-	2	3	0	3	0	5	3
Q29	2	3	4	3	-	-	2	2	1	4	-	1	3	2	2	0	4	2
Q30	4	3	4	3	-	-	1	4	2	4	-	1	1	2	4	0	2	4
Q31	3	2	3	3	-	-	1	3	2	4	-	1	2	4	1	0	3	1
Q32	2	3	2	3	-	-	2	4	2	2	-	0	5	2	1	0	5	1
SD	2	1	0	0	0	0	4	1	5	1	0							
D	9	5	8	5	0	0	8	10	5	6	0							
N	1	5	1	8	0	0	5	1	2	2	0							
A	9	5	13	11	0	0	6	12	8	10	0							
SA	3	8	2	0	0	0	1	0	4	5	0							
-ve	11	6	8	5	0	0	12	11	10	7	0							
+ve	12	13	15	11	0	0	7	12	12	15	0							
Diff	1	7	7	6	0	0	-5	1	2	8	0							

Appendix G: Documents coded in QSR nVivo

Country forum transcripts

The screenshot displays the QSR nVivo software interface. The left sidebar shows a tree view of sources, with 'Country Forums' selected under 'Internals'. The main window displays a table of country forum transcripts. The table has columns for Name, Nodes, References, Created On, Created By, Modified On, and Modified By. The data is organized alphabetically by country name.

Name	Nodes	References	Created On	Created By	Modified On	Modified By
All Countries Discussion	5	73	28/05/2007 2:31 PM	GCR	29/01/2009 9:34 AM	GCR
Azerbaijan RolePlay	22	155	28/05/2007 2:31 PM	GCR	7/10/2009 12:19 PM	GCR
Belarus RolePlay	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Country Position Statement Kazakhstan	1	1	5/03/2009 10:17 PM	GCR	5/03/2009 10:22 PM	GCR
Country Position Statement Turkmenistan	1	1	5/03/2009 10:17 PM	GCR	5/03/2009 10:21 PM	GCR
Country Position Statement USA	1	1	5/03/2009 10:18 PM	GCR	5/03/2009 10:25 PM	GCR
Country Position Statements	1	6	28/05/2007 2:31 PM	GCR	29/01/2009 10:10 AM	GCR
France RolePlay	16	94	28/05/2007 2:31 PM	GCR	21/12/2009 12:38 PM	GCR
Georgia RolePlay	15	124	28/05/2007 2:31 PM	GCR	30/01/2010 2:36 PM	GCR
Germany RolePlay	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Greece RolePlay	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Hungary RolePlay	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Iran RolePlay	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Italy RolePlay	20	171	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Kazakhstan RolePlay	22	400	28/05/2007 2:31 PM	GCR	29/01/2009 3:39 PM	GCR
P11-Georgia	11	25	30/01/2010 6:26 PM	GCR	30/01/2010 6:28 PM	GCR
P17-Italy	20	171	30/01/2010 6:28 PM	GCR	30/01/2010 6:29 PM	GCR
P18-Kazakhstan	17	77	30/01/2010 6:38 PM	GCR	30/01/2010 6:45 PM	GCR
P19-Kazakhstan	15	107	30/01/2010 6:39 PM	GCR	30/01/2010 6:46 PM	GCR
P1-Azerbaijan	22	132	7/10/2009 12:14 PM	GCR	7/10/2009 12:19 PM	GCR
P25-Turkey	18	193	30/01/2010 6:48 PM	GCR	30/01/2010 6:52 PM	GCR
P28-Turkmenistan	13	27	30/01/2010 6:55 PM	GCR	30/01/2010 7:11 PM	GCR
P29-Turkmenistan	16	103	30/01/2010 6:56 PM	GCR	30/01/2010 7:16 PM	GCR
P30-Turkmenistan	21	304	30/01/2010 6:57 PM	GCR	30/01/2010 7:17 PM	GCR
P36-USA	15	57	30/01/2010 6:57 PM	GCR	30/01/2010 7:19 PM	GCR
P5-France	15	60	21/12/2009 12:36 PM	GCR	21/12/2009 12:38 PM	GCR
Russia RolePlay	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Spain RolePlay	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Turkey RolePlay	18	306	28/05/2007 2:31 PM	GCR	30/01/2010 6:52 PM	GCR
Turkmenistan RolePlay	21	718	28/05/2007 2:31 PM	GCR	30/01/2010 7:07 PM	GCR
Tutor Armenia	0	0	7/01/2009 6:04 PM	GCR	7/01/2009 6:04 PM	GCR
Tutor Azerbaijan	4	5	7/01/2009 6:04 PM	GCR	29/01/2009 10:31 AM	GCR
Tutor Belarus	0	0	7/01/2009 6:04 PM	GCR	7/01/2009 6:04 PM	GCR
Tutor France	2	2	7/01/2009 6:04 PM	GCR	29/01/2009 10:22 AM	GCR
Tutor General Discussion (all countries)	3	3	7/01/2009 6:04 PM	GCR	29/01/2009 10:25 AM	GCR
Tutor Georgia	2	2	7/01/2009 6:04 PM	GCR	29/01/2009 10:25 AM	GCR
Tutor Germany	0	0	7/01/2009 6:04 PM	GCR	7/01/2009 6:04 PM	GCR
Tutor Greece	0	0	7/01/2009 6:04 PM	GCR	7/01/2009 6:04 PM	GCR
Tutor Hungary	0	0	7/01/2009 6:04 PM	GCR	7/01/2009 6:04 PM	GCR
Tutor Iran	0	0	7/01/2009 6:04 PM	GCR	7/01/2009 6:04 PM	GCR
Tutor Italy	3	6	7/01/2009 6:04 PM	GCR	29/01/2009 10:31 AM	GCR

Instructional resources

The screenshot shows the NVivo software interface with the 'Instructional Resources' search results displayed in the main table. The left sidebar shows a tree view of the project structure, including 'Internals', 'Country Forums', 'Country Profiles', 'Seminar Groups', 'Teaching Input', 'Externals', 'Memos', and 'Framework Matrices'. The main table lists the following resources:

Name	Nodes	References	Created On	Created By	Modified On	Modified By
An introduction to the online scenario	2	2	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Assessment summary	2	7	15/06/2007 3:55 PM	GCR	12/01/2009 10:34 AM	GCR
Case Study 1	3	4	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Communication	1	1	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Course Expectations	2	7	15/06/2007 3:55 PM	GCR	12/01/2009 10:42 AM	GCR
Course Overview	1	1	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Divided World	1	1	22/02/2009 7:26 PM	GCR	22/02/2009 7:26 PM	GCR
EReader Links	2	2	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Essay	3	4	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Global Challenges	1	1	22/02/2009 7:26 PM	GCR	22/02/2009 7:26 PM	GCR
Global Justice and Sovereignty	1	1	22/02/2009 7:26 PM	GCR	22/02/2009 7:26 PM	GCR
Human Rights	1	1	22/02/2009 7:26 PM	GCR	22/02/2009 7:26 PM	GCR
Identity	1	1	22/02/2009 7:26 PM	GCR	22/02/2009 7:26 PM	GCR
Nationalism	1	1	22/02/2009 7:26 PM	GCR	22/02/2009 7:26 PM	GCR
Online Task 1	2	3	15/06/2007 3:55 PM	GCR	12/01/2009 11:21 AM	GCR
Online Task 2	2	2	15/06/2007 3:55 PM	GCR	12/01/2009 11:21 AM	GCR
Online Task 3	2	2	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Online Task 4	2	4	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Online Task 5	2	4	15/06/2007 3:55 PM	GCR	12/01/2009 11:25 AM	GCR
Online Tasks	2	2	15/06/2007 3:55 PM	GCR	12/01/2009 11:42 AM	GCR
Role Play Instructions	3	4	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Selected Useful Books	2	2	15/06/2007 3:55 PM	GCR	23/02/2009 3:37 PM	GCR
Semester Schedule	1	1	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Seminar Instructions	4	4	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
Tasks and Assessment	2	7	15/06/2007 3:55 PM	GCR	12/01/2009 12:16 PM	GCR
The Scenario	3	4	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
The Scenario Continue1	1	1	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
The Scenario Continue2	2	2	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
The Scenario Continues	1	1	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
TOPIC 1	2	4	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
TOPIC 2	2	2	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR
TOPIC 3	2	2	15/06/2007 3:56 PM	GCR	15/07/2008 2:52 PM	GCR
TOPIC 4	2	2	15/06/2007 3:56 PM	GCR	15/07/2008 2:52 PM	GCR
TOPIC 5	2	2	15/06/2007 3:56 PM	GCR	15/07/2008 2:52 PM	GCR
TOPIC 6	2	2	15/06/2007 3:56 PM	GCR	15/07/2008 2:52 PM	GCR
United Nations Draft Resolution	1	1	15/06/2007 3:56 PM	GCR	15/07/2008 2:52 PM	GCR
Web links	1	1	15/06/2007 3:56 PM	GCR	15/07/2008 2:52 PM	GCR
Welcome	2	2	15/06/2007 3:56 PM	GCR	15/07/2008 2:52 PM	GCR
What are we trying to achieve	2	6	15/06/2007 3:55 PM	GCR	15/07/2008 2:52 PM	GCR

The bottom status bar shows 'GCR 39 Items' and the system clock indicates '9:24 PM 28/06/2012'.

Country profiles

PhD 2006 Data Converted.nvp - Nivo

FileHomeCreateExternal DataAnalyzeExploreLayoutView

GoRefreshOpenPropertiesEditPasteCopyCutMergeFormatParagraphStylesEditing

Reset SettingsSelectTextRegionPDF SelectionFindReplaceDeleteInsert

Sources

Internals

Country Forums

Instructional Resources

Country Profiles

Seminar Groups

Teaching Input

Externals

Memos

Framework Matrices

Look for:

Search InCountry ProfilesFind NowClearAdvanced Find

Country Profiles

Name	Nodes	References	Created On	Created By	Modified On	Modified By
Armenia	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Azerbaijan	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Belarus	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
France	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Georgia	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Germany	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Greece	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Hungary	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Iran	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Italy	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Kazakhstan	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Romania	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Russia	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Spain	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Turkey	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Turkmenistan	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR
Ukraine	1	1	22/02/2009 7:14 PM	GCR	22/02/2009 7:14 PM	GCR
United Kingdom	1	1	22/02/2009 7:20 PM	GCR	22/02/2009 7:20 PM	GCR
United States of America	1	1	22/02/2009 7:20 PM	GCR	22/02/2009 7:20 PM	GCR
Uzbekistan	1	1	22/02/2009 7:19 PM	GCR	22/02/2009 7:19 PM	GCR

Sources

Nodes

Classifications

Collections

Queries

Reports

Models

Folders

GCR 20 Items

EN9:25 PM28/06/2012

Seminar group transcripts

PhD 2006 Data Converted.nvp - Nivo

File Home Create External Data Analyze Explore Layout View

Go Refresh Open Properties Edit Paste Copy Cut Merge Format Paragraph Styles Editing

Look for: Search In: Seminar Groups Find Now Clear Advanced Find

Seminar Groups

Name	Nodes	References	Created On	Created By	Modified On	Modified By
Group 1 Conversation	23	477	28/05/2007 2:30 PM	GCR	8/10/2009 3:43 PM	GCR
Group 2 Conversation	26	599	28/05/2007 2:30 PM	GCR	8/10/2009 3:40 PM	GCR
Group 3 Conversation	24	670	28/05/2007 2:30 PM	GCR	30/01/2010 6:11 PM	GCR
Group 4 Conversation	0	0	28/05/2007 2:30 PM	GCR	15/07/2008 2:52 PM	GCR
Group 5 Conversation	0	0	28/05/2007 2:30 PM	GCR	15/07/2008 2:52 PM	GCR
Group 6 Conversation	0	0	28/05/2007 2:30 PM	GCR	15/07/2008 2:52 PM	GCR
NoticeBoard Message Query	15	137	28/05/2007 2:30 PM	GCR	30/01/2010 6:23 PM	GCR
P11-G2	14	42	8/10/2009 3:25 PM	GCR	8/10/2009 3:39 PM	GCR
P11-NMQ	3	4	30/01/2010 6:15 PM	GCR	30/01/2010 6:22 PM	GCR
P17-G1	17	37	8/10/2009 3:40 PM	GCR	8/10/2009 3:46 PM	GCR
P17-NMQ	0	0	30/01/2010 6:16 PM	GCR	30/01/2010 6:16 PM	GCR
P18-G2	18	55	8/10/2009 3:25 PM	GCR	8/10/2009 3:39 PM	GCR
P18-NMQ	0	0	30/01/2010 6:16 PM	GCR	30/01/2010 6:16 PM	GCR
P19-G3	13	58	8/10/2009 3:46 PM	GCR	8/10/2009 3:56 PM	GCR
P19-NMQ	0	0	30/01/2010 6:17 PM	GCR	30/01/2010 6:17 PM	GCR
P1-G1	17	67	7/10/2009 11:58 AM	GCR	7/10/2009 12:08 PM	GCR
P1-NMQ	8	14	7/10/2009 12:21 PM	GCR	30/01/2010 6:15 PM	GCR
P25-G2	12	27	8/10/2009 3:26 PM	GCR	8/10/2009 3:39 PM	GCR
P25-NMQ	5	5	30/01/2010 6:18 PM	GCR	30/01/2010 6:23 PM	GCR
P28-G2	18	49	8/10/2009 3:26 PM	GCR	8/10/2009 3:39 PM	GCR
P28-NMQ	3	3	30/01/2010 6:18 PM	GCR	30/01/2010 6:20 PM	GCR
P29-G2	18	40	8/10/2009 3:27 PM	GCR	8/10/2009 3:39 PM	GCR
P29-NMQ	0	0	30/01/2010 6:19 PM	GCR	30/01/2010 6:19 PM	GCR
P30-G3	18	90	8/10/2009 3:47 PM	GCR	8/10/2009 3:56 PM	GCR
P30-NMQ	6	7	30/01/2010 6:19 PM	GCR	30/01/2010 6:23 PM	GCR
P36-G3	8	19	8/10/2009 3:48 PM	GCR	30/01/2010 6:11 PM	GCR
P36-NMQ	0	0	30/01/2010 6:19 PM	GCR	30/01/2010 6:19 PM	GCR
P5-G2	19	45	7/10/2009 3:48 PM	GCR	8/10/2009 3:24 PM	GCR
P5-NMQ	0	0	30/01/2010 6:14 PM	GCR	30/01/2010 6:14 PM	GCR
Seminar Discussion	0	0	28/05/2007 2:31 PM	GCR	15/07/2008 2:52 PM	GCR
Tutor Group 1	11	31	7/01/2009 6:05 PM	GCR	31/01/2012 7:39 PM	GCR
Tutor Group 2	9	30	7/01/2009 6:05 PM	GCR	31/01/2012 7:40 PM	GCR
Tutor Group 3	12	42	7/01/2009 6:05 PM	GCR	31/01/2012 4:58 PM	GCR
Tutor Group 4	0	0	7/01/2009 6:05 PM	GCR	7/01/2009 6:05 PM	GCR
Tutor Group 5	0	0	7/01/2009 6:05 PM	GCR	7/01/2009 6:05 PM	GCR
Tutor Group 6	0	0	7/01/2009 6:05 PM	GCR	7/01/2009 6:05 PM	GCR
Tutor Noticeboard and Information	13	235	7/01/2009 6:05 PM	GCR	24/02/2009 1:11 PM	GCR

GCR 37 Items

EN 9:25 PM 28/06/2012

Appendix H: Sample coding of documents in QSR nVivo

Coding stripes in Seminar Group 3 transcript

The screenshot displays the QSR nVivo software interface. The top menu bar includes File, Home, Create, External Data, Analyze, Explore, Layout, and View. Below the menu is a toolbar with various icons for navigation, analysis, and visualization. The main window is divided into several panes. On the left, the 'Sources' pane shows a tree view of data sources, including Internals, Country Forums, Instructional Resources, Country Profiles, Seminar Groups, Teaching Input, Externals, Memos, and Framework Matrices. The 'Seminar Groups' pane is currently selected, showing a table of seminar groups with columns for Name, Nodes, References, Created On, Created By, Modified On, and Modified By. The 'Group 3 Conversation' is selected, and its transcript is displayed in the main text area. The transcript contains two paragraphs of text. To the right of the text, there are vertical coding stripes of various colors (red, green, blue, yellow, purple) representing different codes applied to the text. The bottom status bar shows 'GCR: 37 Items', 'Nodes: 24', 'References: 670', 'Read-Only', 'Line: 3347', 'Column: 0', and a zoom level of 100%.

Name	Nodes	References	Created On	Created By	Modified On	Modified By
Group 1 Conversation	23	477	28/05/2007 2:30 PM	GCR	8/10/2009 3:43 PM	GCR
Group 2 Conversation	26	599	28/05/2007 2:30 PM	GCR	8/10/2009 3:40 PM	GCR
Group 3 Conversation	24	670	28/05/2007 2:30 PM	GCR	30/01/2010 6:11 PM	GCR
Group 4 Conversation	0	0	28/05/2007 2:30 PM	GCR	15/07/2008 2:52 PM	GCR
Group 5 Conversation	0	0	28/05/2007 2:30 PM	GCR	15/07/2008 2:52 PM	GCR
Group 6 Conversation	0	0	28/05/2007 2:30 PM	GCR	15/07/2008 2:52 PM	GCR

- Has anyone else noticed that two pages are missing from the first reading?

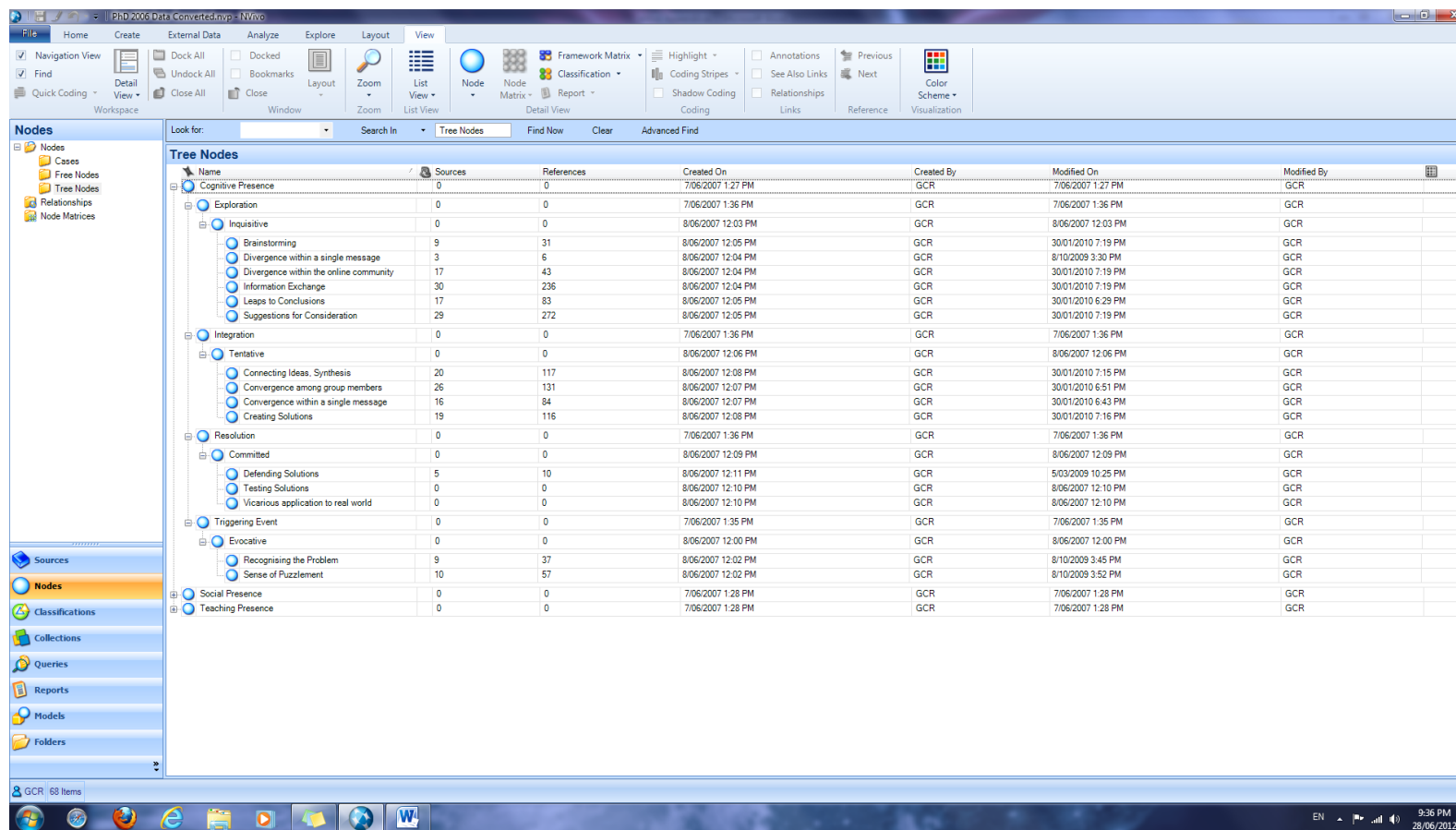
- I think there is a definite need to take globalisation into account when analysing international relations. As the borders between states become more porous in the flow of trade, money, communications and people, the traditional approach to analysis based on relations between states could be too simplistic. For example, although 'realist' philosophies and methods of some governments may be behind some current conflicts, for example in Afghanistan, Lebanon and Gaza, it is not the governments of those countries that are being attacked (or is it in the case of Palestine? Should Hamas be considered a state actor now? Certainly some governments don't seem to think so...) Analysis of these conflicts would not be accurate if state-based analysis was undertaken - after all, al-Qaeda in Afghanistan, and Hizbollah in Lebanon are not state-based actors, regardless of if they receive financial or military backing from other states.

- I had no idea that NGOs even had such rigid processes in deciding what causes they support around the world. It is understandable I guess - there are only so many NGOs with a finite amount of resources, and people will associate their organisation with whatever causes they support. However, it is tragic that some causes will never get the coverage that they deserve, because they are not fashionable or media-savvy. I do believe in the 'CNN Effect', and it can have positive effects, for example assisting in fundraising after the Indian Ocean tsunami. But normally, smaller scale natural or humanitarian disasters only grab our attention for a day or two, if that. Who hears anything anymore about the aftermath of the earthquake in Yogyakarta or the tsunami in Pangandaran in Java? And only yesterday I received a letter from World Vision that the area where I sponsor a child in Chile has been devastated by floods and landslides for the past month - tens of people have died, thousands displaced and the World Vision projects in the area destroyed - I had no idea that this had even happened, and World Vision haven't been able to get in touch with family of the child that I sponsor - they presume they are safe though. It did make me wonder about all the events that happen in the world that escape our attention. Or is it just better to concentrate on our own backyard? That's something I struggle to find an answer to.

Sorry I've written so much! I'll try to restrain myself next time...

Appendix I: Indicators for categories of presence in QSR nVivo

Indicators for cognitive presence



The screenshot displays the QSR nVivo software interface. The main window shows a table of 'Tree Nodes' under the 'Cognitive Presence' category. The table includes columns for Name, Sources, References, Created On, Created By, Modified On, and Modified By. The nodes are organized into a hierarchical tree structure on the left, with 'Cognitive Presence' at the top, followed by 'Exploration', 'Integration', 'Resolution', 'Triggering Event', and 'Evocative'. Each node has a corresponding row in the table with its associated data.

Name	Sources	References	Created On	Created By	Modified On	Modified By
Cognitive Presence	0	0	7/06/2007 1:27 PM	GCR	7/06/2007 1:27 PM	GCR
Exploration	0	0	7/06/2007 1:36 PM	GCR	7/06/2007 1:36 PM	GCR
Inquisitive	0	0	8/06/2007 12:03 PM	GCR	8/06/2007 12:03 PM	GCR
Brainstorming	9	31	8/06/2007 12:05 PM	GCR	30/01/2010 7:19 PM	GCR
Divergence within a single message	3	6	8/06/2007 12:04 PM	GCR	8/10/2009 3:30 PM	GCR
Divergence within the online community	17	43	8/06/2007 12:04 PM	GCR	30/01/2010 7:19 PM	GCR
Information Exchange	30	236	8/06/2007 12:04 PM	GCR	30/01/2010 7:19 PM	GCR
Leaps to Conclusions	17	83	8/06/2007 12:05 PM	GCR	30/01/2010 6:29 PM	GCR
Suggestions for Consideration	29	272	8/06/2007 12:05 PM	GCR	30/01/2010 7:19 PM	GCR
Integration	0	0	7/06/2007 1:36 PM	GCR	7/06/2007 1:36 PM	GCR
Tentative	0	0	8/06/2007 12:06 PM	GCR	8/06/2007 12:06 PM	GCR
Connecting Ideas, Synthesis	20	117	8/06/2007 12:08 PM	GCR	30/01/2010 7:15 PM	GCR
Convergence among group members	26	131	8/06/2007 12:07 PM	GCR	30/01/2010 6:51 PM	GCR
Convergence within a single message	16	84	8/06/2007 12:07 PM	GCR	30/01/2010 6:43 PM	GCR
Creating Solutions	19	116	8/06/2007 12:08 PM	GCR	30/01/2010 7:16 PM	GCR
Resolution	0	0	7/06/2007 1:36 PM	GCR	7/06/2007 1:36 PM	GCR
Committed	0	0	8/06/2007 12:09 PM	GCR	8/06/2007 12:09 PM	GCR
Defending Solutions	5	10	8/06/2007 12:11 PM	GCR	5/03/2009 10:26 PM	GCR
Testing Solutions	0	0	8/06/2007 12:10 PM	GCR	8/06/2007 12:10 PM	GCR
Vicarious application to real world	0	0	8/06/2007 12:10 PM	GCR	8/06/2007 12:10 PM	GCR
Triggering Event	0	0	7/06/2007 1:35 PM	GCR	7/06/2007 1:35 PM	GCR
Evocative	0	0	8/06/2007 12:00 PM	GCR	8/06/2007 12:00 PM	GCR
Recognising the Problem	9	37	8/06/2007 12:02 PM	GCR	8/10/2009 3:45 PM	GCR
Sense of Puzzlement	10	57	8/06/2007 12:02 PM	GCR	8/10/2009 3:52 PM	GCR
Social Presence	0	0	7/06/2007 1:28 PM	GCR	7/06/2007 1:28 PM	GCR
Teaching Presence	0	0	7/06/2007 1:28 PM	GCR	7/06/2007 1:28 PM	GCR

Indicators for social presence

PhD 2006 Data Converted.nvp - NVivo

File Home Create External Data Analyze Explore Layout View

Navigation View Find Quick Coding Dock All Undock All Close All Workspace

Node Node Matrix Framework Matrix Classification Highlight Annotations Previous Next Color Scheme

Look for: Search In: Tree Nodes Find Now Clear Advanced Find

Name	Sources	References	Created On	Created By	Modified On	Modified By
Cognitive Presence	0	0	7/06/2007 1:27 PM	GCR	7/06/2007 1:27 PM	GCR
Social Presence	0	0	7/06/2007 1:28 PM	GCR	7/06/2007 1:28 PM	GCR
Affective	0	0	7/06/2007 1:36 PM	GCR	8/06/2007 11:14 AM	GCR
Expression of Emotions	37	544	7/06/2007 2:20 PM	GCR	30/01/2010 7:19 PM	GCR
Frustration at lack of response or participation	7	11	14/06/2007 2:25 PM	GCR	30/01/2010 6:51 PM	GCR
Offering Reassurance	1	5	24/02/2009 10:56 AM	GCR	24/02/2009 1:08 PM	GCR
Self-disclosure	26	155	7/06/2007 2:21 PM	GCR	30/01/2010 7:19 PM	GCR
Use of Humour	21	55	7/06/2007 2:21 PM	GCR	30/01/2010 7:19 PM	GCR
Cohesive	0	0	7/06/2007 1:37 PM	GCR	8/06/2007 11:10 AM	GCR
Addresses or Refers to the group using inclusiv	31	796	7/06/2007 2:25 PM	GCR	30/01/2010 7:19 PM	GCR
Apologies	27	111	7/06/2007 2:26 PM	GCR	30/01/2010 7:09 PM	GCR
Phatics, Salutations	40	792	7/06/2007 2:25 PM	GCR	30/01/2010 7:19 PM	GCR
Vocatives	38	517	7/06/2007 2:24 PM	GCR	30/01/2010 7:19 PM	GCR
Interactive	0	0	7/06/2007 1:37 PM	GCR	8/06/2007 11:29 AM	GCR
Asking Questions	30	253	7/06/2007 2:24 PM	GCR	30/01/2010 7:19 PM	GCR
Complimenting or Expressing Appreciation	30	232	7/06/2007 2:24 PM	GCR	30/01/2010 7:19 PM	GCR
Continuing a Thread	34	592	7/06/2007 2:22 PM	GCR	30/01/2010 7:19 PM	GCR
Expressing Agreement	31	286	7/06/2007 2:26 PM	GCR	30/01/2010 7:19 PM	GCR
Offering advice	14	70	14/06/2007 2:43 PM	GCR	30/01/2010 7:15 PM	GCR
Quoting from Others' Messages	9	27	7/06/2007 2:23 PM	GCR	30/01/2010 7:11 PM	GCR
Referring explicitly to others' messages	31	301	7/06/2007 2:23 PM	GCR	30/01/2010 7:16 PM	GCR
Requesting Comment or Feedback	22	250	14/06/2007 2:07 PM	GCR	30/01/2010 7:19 PM	GCR
Teaching Presence	0	0	7/06/2007 1:28 PM	GCR	7/06/2007 1:28 PM	GCR

GCR 63 Items

EN 9:37 PM 28/06/2012

Indicators for teaching presence

FileHomeCreateExternal DataAnalyzeExploreLayoutView

Navigation View

Find

Quick Coding

Dock All

Undo All

Close All

Detail View

Workspace

Docked

Bookmarks

Layout

Zoom

Zoom

Zoom

List View

List View

List View

Node

Node Matrix

Report

Framework Matrix

Classification

Report

Highlight

Coding Stripes

Shadow Coding

Annotations

See Also Links

Relationships

Previous

Next

Reference

Color Scheme

Visualization

Nodes

Look for: Search In Tree Nodes Find Now Clear Advanced Find

Tree Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Cognitive Presence	0	0	7/06/2007 1:27 PM	GCR	7/06/2007 1:27 PM	GCR
Social Presence	0	0	7/06/2007 1:28 PM	GCR	7/06/2007 1:28 PM	GCR
Teaching Presence	0	0	7/06/2007 1:28 PM	GCR	7/06/2007 1:28 PM	GCR
Direct Instruction	0	0	7/06/2007 1:37 PM	GCR	7/06/2007 1:37 PM	GCR
Confirm Understanding through Assessment an	0	0	6/01/2009 4:32 PM	GCR	6/01/2009 4:33 PM	GCR
Diagnose Misconceptions	2	7	6/01/2009 4:32 PM	GCR	31/01/2012 7:39 PM	GCR
Focus the Discussion on Specific Issues	3	8	6/01/2009 4:30 PM	GCR	31/01/2012 7:40 PM	GCR
Inject Knowledge from Diverse Sources	2	3	6/01/2009 4:33 PM	GCR	31/01/2012 7:39 PM	GCR
Present Content or Questions	3	11	6/01/2009 4:30 PM	GCR	31/01/2012 7:40 PM	GCR
Responding to Technical Concerns	1	2	6/01/2009 4:33 PM	GCR	24/02/2009 1:05 PM	GCR
Summarise the Discussion	0	0	6/01/2009 4:31 PM	GCR	6/01/2009 4:31 PM	GCR
Facilitating Discourse	0	0	7/06/2007 1:37 PM	GCR	6/01/2009 4:26 PM	GCR
Assess the Efficacy of the Process	3	3	6/01/2009 4:29 PM	GCR	31/01/2012 7:40 PM	GCR
Drawing in Participants, Prompting Discussion	12	17	6/01/2009 4:29 PM	GCR	31/01/2012 7:40 PM	GCR
Encouraging, Acknowledging or Reinforcing Stu	7	36	6/01/2009 4:28 PM	GCR	31/01/2012 7:40 PM	GCR
Identifying Areas of Agreement or Disagreemen	1	1	6/01/2009 4:26 PM	GCR	31/01/2012 4:40 PM	GCR
Seeking to reach consensus or understanding	0	0	6/01/2009 4:27 PM	GCR	6/01/2009 4:27 PM	GCR
Setting Climate for Learning	3	12	6/01/2009 4:28 PM	GCR	31/01/2012 7:40 PM	GCR
Instructional Design and Organisation	0	0	7/06/2007 1:37 PM	GCR	6/01/2009 4:23 PM	GCR
Clarifying Procedures	8	59	8/01/2009 1:42 PM	GCR	31/01/2012 7:40 PM	GCR
Designing Methods	26	29	6/01/2009 4:24 PM	GCR	12/01/2009 12:32 PM	GCR
Establishing Netiquette	6	10	6/01/2009 4:25 PM	GCR	31/01/2012 7:40 PM	GCR
Establishing Time Parameters	24	54	6/01/2009 4:24 PM	GCR	24/02/2009 1:07 PM	GCR
Setting Curriculum	50	64	6/01/2009 4:23 PM	GCR	31/01/2012 7:40 PM	GCR
Utilising Medium Effectively	1	1	6/01/2009 4:24 PM	GCR	12/01/2009 12:13 PM	GCR

Sources

Nodes

Classifications

Collections

Queries

Reports

Models

Folders

GCR 63 Items

EN 9:38 PM 28/06/2012

325

Appendix J: Survey 1 questionnaire and results

View response for survey – Online Survey 1

Total number of respondents: 39

1. Question: What is the code of the program you are enrolled in?

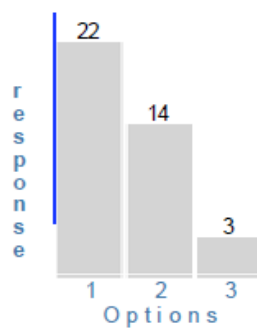
(These codes have been omitted so that the course or program cannot be identified.)

2. Question: Age Group

Option 1: Under 21

Option 2: 21-29

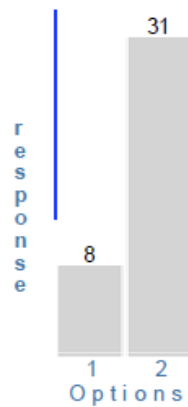
Option 3: 30 or over



3. Question: Gender

Option 1: Male

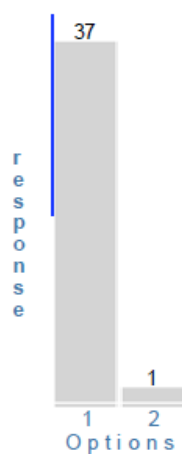
Option 2: Female



4. Question: Are you a domestic (Australian) or international student?

Option 1: domestic

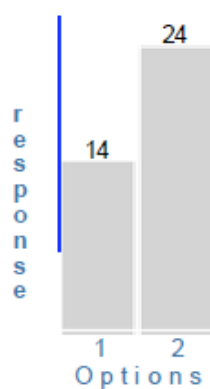
Option 2: international



5. Question: I have lived in a country other than Australia

Option 1: Yes

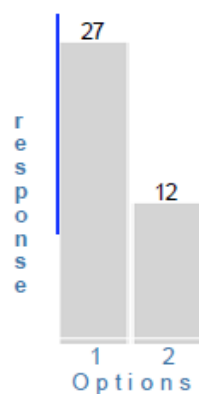
Option 2: No



6. Question: I have visited a country other than Australia

Option 1: Yes

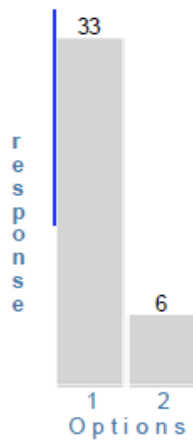
Option 2: No



7. Question: I have learned a language other than English

Option 1: Yes

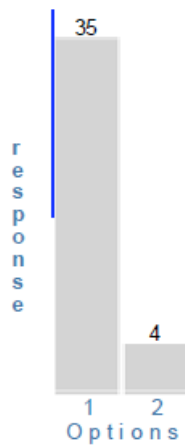
Option 2: No



8. Question: English is my native language

Option 1: Yes

Option 2: No



9. Question: I enrolled in this course because I have a keen interest in international affairs.

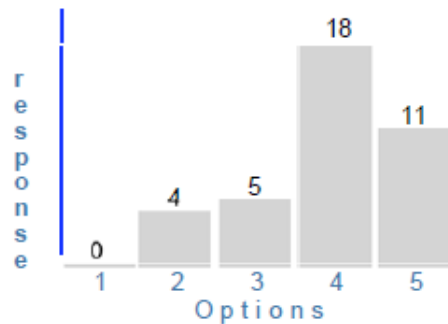
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



10. Question: This course isn't as important to me as the other courses in my degree.

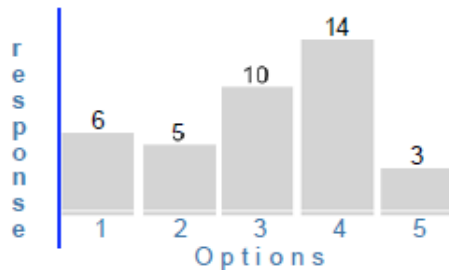
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



11. Question: I enrolled in this course because my options were limited.

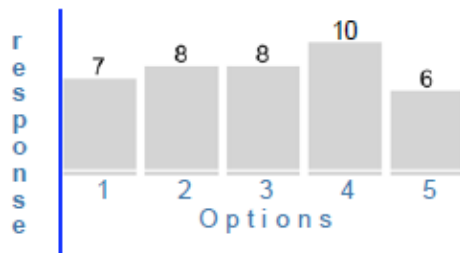
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



12. Question: I like the fact that the course is offered entirely online.

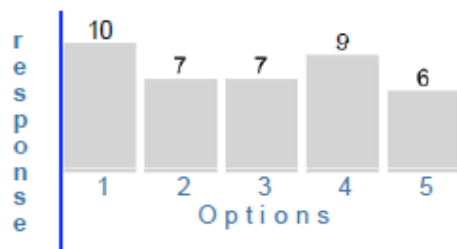
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



13. Question: I brought to the course pre-conceived notions of nationalism, identity, human rights, sovereignty and other related concepts covered in the course.

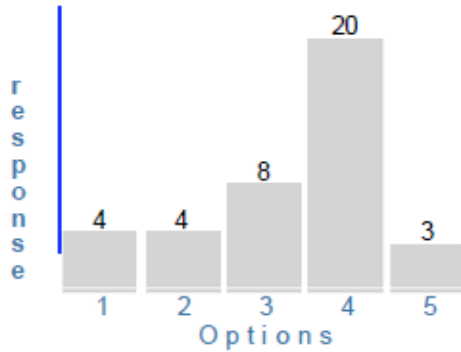
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



14. Question: I hadn't thought much about the concepts introduced in the course before enrolment in the course.

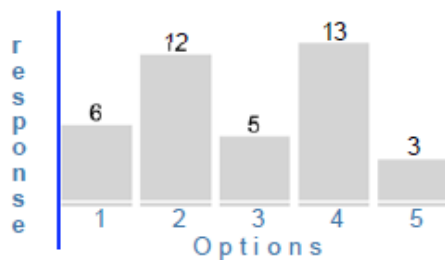
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



15. Question: The course has been different to what I initially expected.

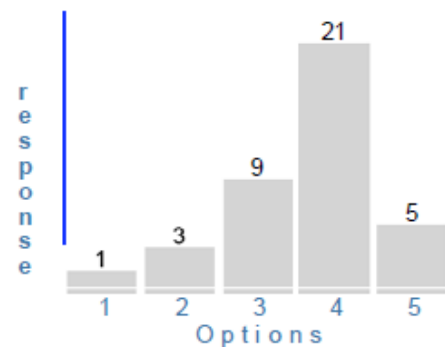
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



16. Question: My ideas have been challenged by the readings for the weekly tasks and online tutorial groups.

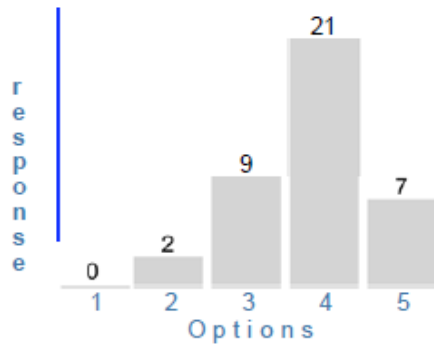
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



17. Question: My ideas have been challenged by other learners through online interaction in the tutorial groups.

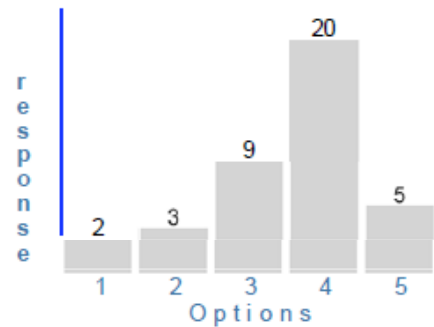
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



18. Question: My ideas about nationalism, identity, human rights, sovereignty and so on have been clarified through reading and interaction in the course.

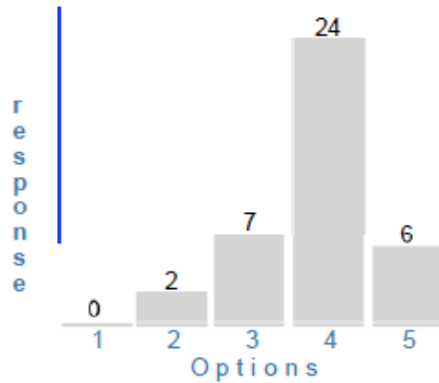
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



19. Question: I know more about these concepts now but I am unsure as to where I stand in relation to their application in different contexts.

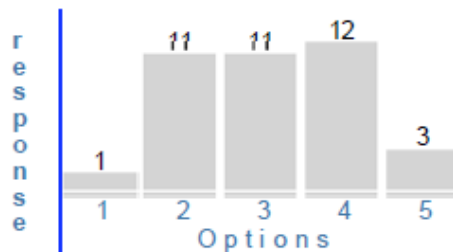
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



20. Question: I feel sufficiently prepared to apply the concepts to the online scenario.

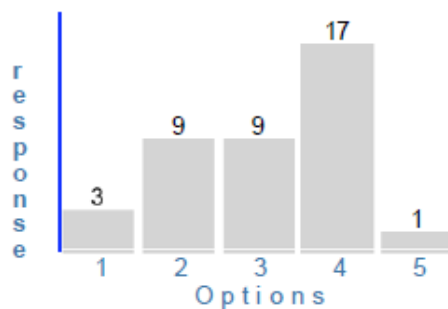
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



21. Question: I feel sufficiently prepared to role play in my allocated country forum and to collaboratively develop a country position statement.

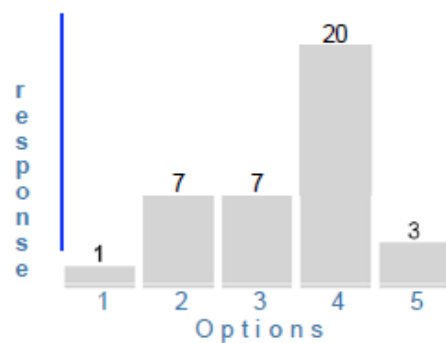
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



22. Question: When responding to tasks in the online tutorials, I felt that my contributions were ignored by others or not treated seriously.

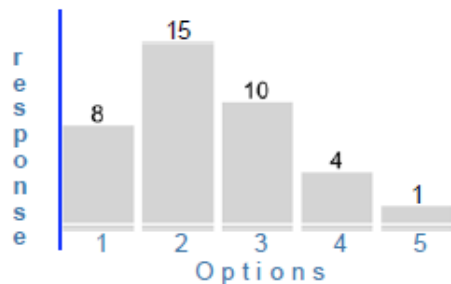
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

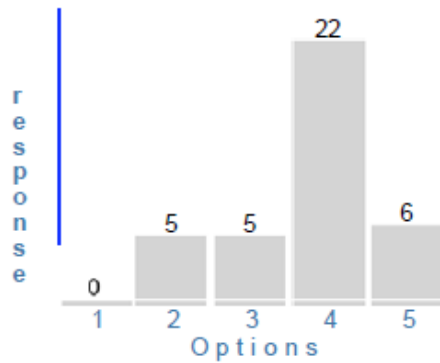
Option 4: somewhat agree

Option 5: strongly agree



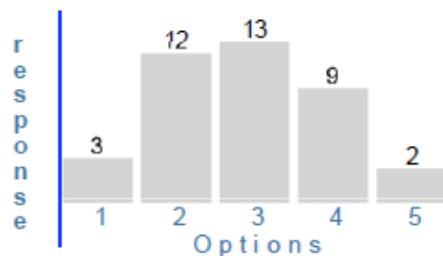
23. Question: I made an effort to respond to the contributions of others in the online tutorial.

- Option 1: strongly disagree
- Option 2: somewhat disagree
- Option 3: neither disagree nor agree
- Option 4: somewhat agree
- Option 5: strongly agree



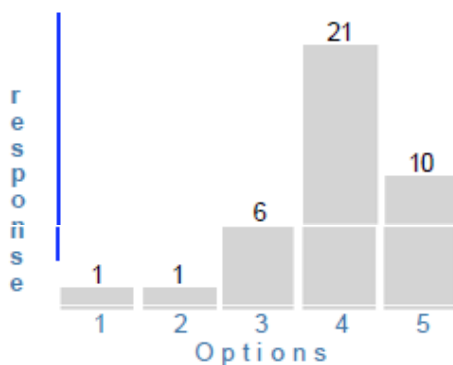
24. Question: When responding to tasks in the online tutorials, I focused specifically on the task and gave a considered individual response rather than developing a rapport with other learners and taking into account or being influenced by the responses of others.

- Option 1: strongly disagree
- Option 2: somewhat disagree
- Option 3: neither disagree nor agree
- Option 4: somewhat agree
- Option 5: strongly agree



25. Question: I have preferred to read the contributions of others before submitting my own response to the weekly tasks.

- Option 1: strongly disagree
- Option 2: somewhat disagree
- Option 3: neither disagree nor agree
- Option 4: somewhat agree
- Option 5: strongly agree



26. Question: It has been difficult to build a rapport with other learners in the online environment.

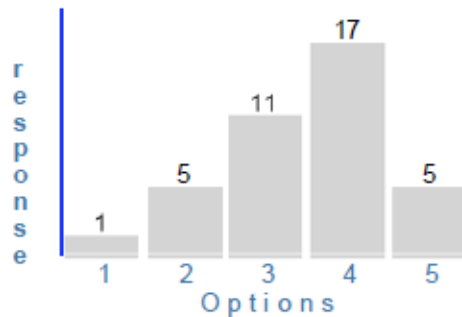
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



27. Question: I find it easier to learn in an online environment than in face-to-face situations.

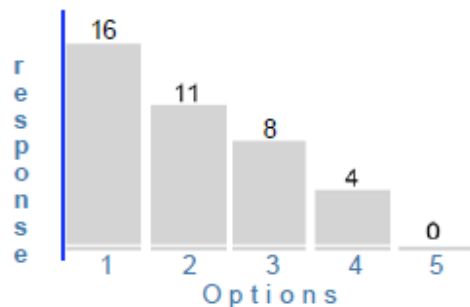
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



28. Question: The contributions of other learners in this course has contributed significantly to my personal learning.

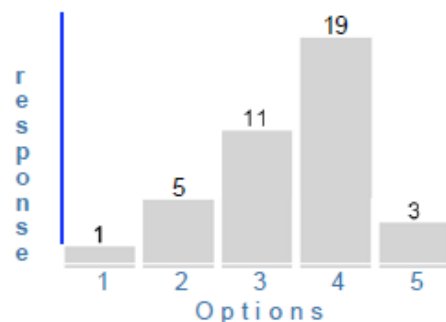
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



29. Question: The moderator's participation in the course has contributed significantly to my personal learning.

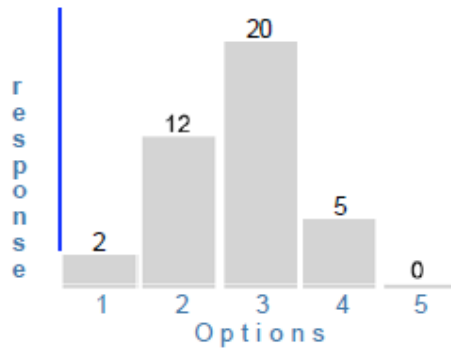
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



30. Question: The lecturer's notes and instructions provided on the course web site have contributed significantly to my personal learning in the course.

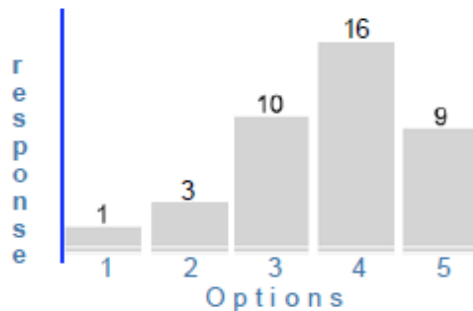
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



31. Question: I have found the structure of the course confusing.

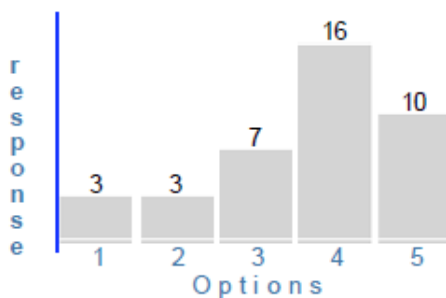
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



32. Question: I have found the expectations of the course unclear.

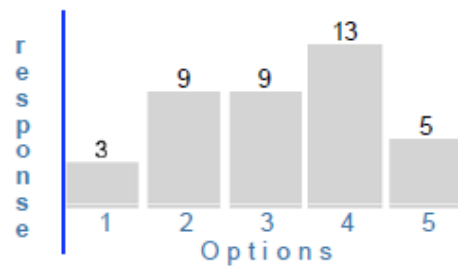
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



33. Question: What aspects of the course have prepared you well for participation in the online simulation? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the scenario, etc.)

- 1.
2. Communication and collaboration with others
- 3.
4. Reading resources and additional reading resources. Additionally, teaching input and lecture notes. Online discussions force you to understand the concepts and interact and communicate with others to gain different views and perceptions.
5. the online modules are good as are the readings - well prepared - unlike other online work I have been involved in
6. None really. It is very unclear what our discussions should target. I usually end up rambling because there is not much direction. Also, we are only meant to write 300 words ish but some people basically write essays and this confuses me on what we are expected to do.
7. talking with other students online about what is expected etc
8. None. It was my prior computing knowledge that helped me greatly with this course.
- 9.
10. I think the role play scenario is an excellent way to bring together students who may be physically far apart and involve everybody.
11. The interactive seminar discussion page.
12. Well thought out scenario, easy to follow and to find information on
13. Primarily the readings and forum discussion for each topic.
14. the available online resources and texts have been particularly useful. Having all the answers from a range of others in the general discussion page has also helped spell things out a bit clearer
- 15.
16. Through discussion online with the Tutor and other online individuals.
17. the lecture notes are clear, well-structured and easy to understand
18. I don't think I am prepared for the online situation.
19. communication with tutor and others, discussions, scenario
20. It's good that Snjezana has sent us reminder emails of what to do when, else I'm sure a lot of us would have forgotten things.
- 21.
22. The detailed list of expectations provided by the tutors is very clear. Also, the group work relieves some pressure as learning and knowledge are shared. Despite some difficulty in meeting together online, the willingness of my group members to discuss and participate has helped me to understand the task and the issues it involves.
23. The availability to respond to these online discussions is a lot to attend then going to class. The problem is that not all people respond early and some not at all.
24. Good links and help in finding further resources. Good idea for online discussion board, although there was a lot of confusion.
25. The only thing that has helped me in preparing for the online simulation is everything which I have gathered myself, and what is expected online (such as online seminar reading, contributions and responses).
- 26.
27. I found the separate discussion boards useful so that questions and discussion for one assignment doesn't get all jumbled in together.
28. communication with others in the group. understanding the concepts more through the online tutorials.
29. there is loads of information available and many things are repeated to ensure that we understand what is expected of us
30. not really anything. to be honest, the scenario structure was pretty confusing in itself. Is this level of interaction really required? we do postings once a fortnight. this is never required in other external courses.

31. communication with other students (to clear up what we think is expected of us) and the instructions provided

32.

33. Discussion boards, instructions for scenario, added readings and links regarding the issue

34. The case study on a republic which was formerly in the USSR was an excellent preparation for understanding some of the dynamics in international relations in the Russian region. The readings have also been significant in preparation for this task. I found plenty of information about my country's position in relation to the simulation and could make a confident contribution. It is easy to miss important parts of the group discussion and decision making. It's hard to get every one online together : some are here in Adelaide but others are overseas.

35. I like being able to read everyone's responses to topics as it broadens my knowledge.

36. Readings

37.

38.

39. not many aspects have helped well, instructions were not that clear and the discussions were not helpful either.

34. Question: What aspects of the course could be improved to prepare you better for participation in the online simulation? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the scenario, etc.)

1.

2. resources (a little boring and overwhelming at times)

3.

4. Less group collaboration, for example in the case of the country discussions as I find it hard to communicate with others in an online environment, especially when something needs to be handed up as I found that it was hard to get things done with a whole group. I would prefer to work individually.

5. I have been very happy with the course so far - maybe a little more input from the moderators on group discussion boards - just to confirm if we are on the right track or not.

6. More teaching input and clearer direction or purpose for the activities. There are some questions on the lecture sites but if you answered all of them, you would far exceed the word limit. These kind of contradictory instructions are very confusing.

7. More background on scenario in each topic (identity, human rights, etc), as I had no idea about Chechnya before I started the online simulation.

8. A better site layout. This can be seen on any major company's website, the way they organise it with links along the top and to the left. The layout in general of the online sites is quite horrific. It takes too long to 'learn' and work your way around the site.

9.

10.

11. Personally I have not found the course structure confusing at all, but others have. Maybe this needs to be made more clear for others so there is less confusion.

12. More clear indication as to what is expected of us in our group discussions

13. A clearer understanding of what is expected each week, and better group organization.

14. I don't really know. the resources are all there, I think the greatest problem, perhaps only personally, is I find the themes a little harder to process in the online environment, and although the scenario is a practical way to put them into context, trying to do this with incomplete understanding has been somewhat challenging

15.

16. possibly make this course as an internal rather than external. the reason being is that it is so broad and complexed, that individuals such as myself not knowing English as the first language, it is hard to understand what is required from an individual.

17. the readings are long, complex and difficult to understand
18. I think overall the whole thing needs to be simpler to understand and we need to get better feedback from the online tutor, we haven't really heard anything back from her which makes it difficult to know if we are heading in the right direction.
19. make tasks and due dates more obvious from onset of course
20. More clarity in tasks! Maybe everything's split up a bit too much on the website? I found the scenario task incredibly hard to get my head around at first.
21. teaching input could be improved...i have found that the online tutor has not always been clear and that sometimes, the 'clarification' given has only been more confusing. Expectations and tasks could also be made much clearer. In fact most things relating to this online course have not been as clear as one would have hoped, and honestly, it has been a bit confusing.
22. Access to chat rooms as well as discussion boards might be useful as they allow real-time conversation which would be more efficient for online "meetings".
23. If your group isn't motivated to get together for the group. Communication is harder because if someone is busy for a few days and unable to get online, it is hard to communicate.
24. The discussion site was more confusing than helpful. I found that the teaching input was sufficient but not helpful. The teacher responded fast to emails and questions but wasn't clear in defining our questions...hence the confusion continued. Also, the online scenario and the course website was very confusing to find everything. Possibly, it could be tidied up so things are more clear. There are too many links, its confusing.
25. I definately do not like the online courses. They are incredibly confusing, and just make it 20 times easier for people to forget things and, especially with work, other committments etc. I think everyone I know, unless they do not work, feels the stress of this type of course. I also believe that I dont get the quality of learning that I would like from my degree with this wishy-washy course, and therefore I don't think that this course justifies paying \$400-600 or however much it is. I do think, however, that the idea is a good one. Especially for those people who do work all the time and do want something that is a little easier for them, so they can work from home, etc. The couse could be improved by having meetings, such as one at the beginning, one in week 3, week 8 etc, so that the tutorial class can meet up and discuss and question. Also, the assignbment is really annoying with the week 7, 8, 9, online scenario task, becuae we have tried twice to meet up with others in our country group and only 1 other and myself showed up. Unfair!! And no one will ever know it...
- 26.
27. It might have been easier to be in the same groups for the scenario and the online tutorial discussion. The introduction to the concept may have been better explained in more deatil, I was a little unsure of exactly what we were meant to be doing the first time I read it.
28. maybe if there was an example of the content and level of discussion we should undertake that we could access.
29. there is too much to prepare for, it seems that more time needs to be spent on it than other online courses i have done
30. not having an online simulation. or not having fortnightly postings...ts just TOO MUCH!!!
31. there is so much text on the website that its easy to get confused... clearer instructions would be helpful. the online scenario is great though, its probably the best assessment piece i've done so far in my degree
- 32.
33. Need to have a better idea of what is expected from week to week
34. I really would have preferred a face to face meeting. Online discussions are rather like speleology without proper illumination.
35. Clearer explanations as to what we have to do. It is all a bit jumbled.
36. Online just isn't the same
- 37.

38.

39. MORE INFORMATION!!! Clear guidelines and expectations, and access to tutors

Appendix K: Survey 2 questionnaire and results

View response for survey - POLI 2009 Online Survey 2

Total number of respondents: 28

1. Question: What is the code of the program you are enrolled in?

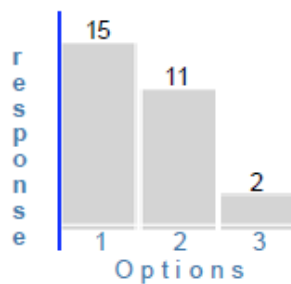
(These codes have been omitted so that the course or program cannot be identified.)

2. Question: Age Group

Option 1: Under 21

Option 2: 21-29

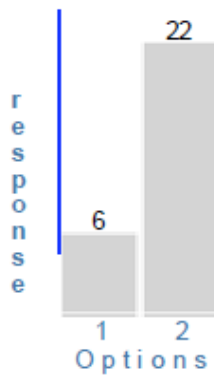
Option 3: 30 or over



3. Question: Gender

Option 1: Male

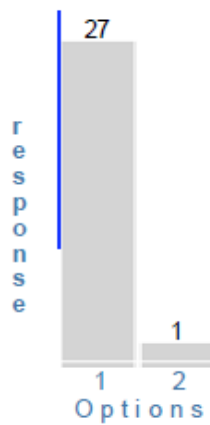
Option 2: Female



4. Question: Are you a domestic (Australian) or international student?

Option 1: domestic

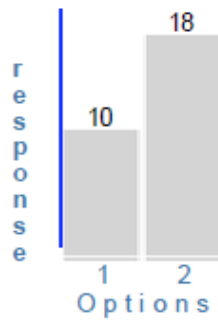
Option 2: international



5. Question: I have lived in a country other than Australia

Option 1: Yes

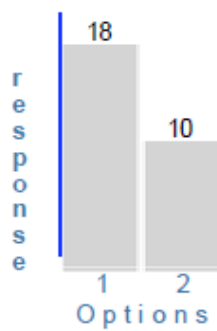
Option 2: No



6. Question: I have visited a country other than Australia

Option 1: Yes

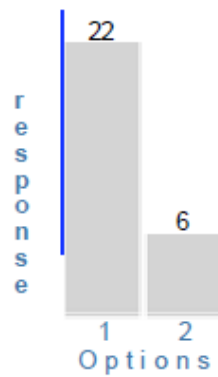
Option 2: No



7. Question: I have learned a language other than English

Option 1: Yes

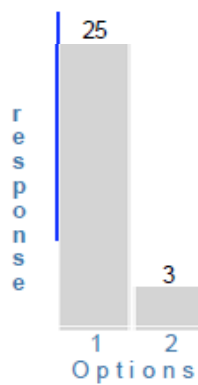
Option 2: No



8. Question: English is my native language

Option 1: Yes

Option 2: No



9. Question: The online scenario and role play stimulated my desire to actively participate and learn in the course.

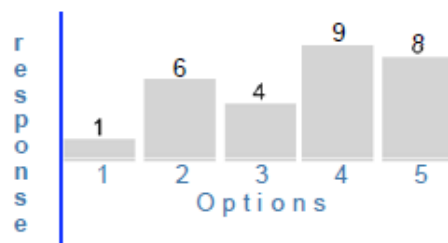
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



10. Question: The course content as a whole stimulated my desire to actively participate and learn in the course.

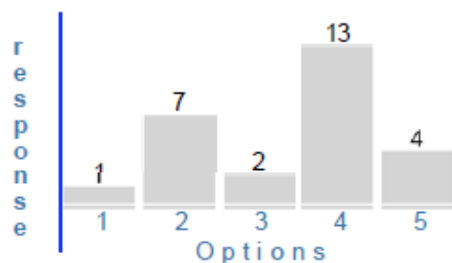
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



11. Question: The online interactions and collaboration with other students in the online forums has enhanced my learning in the course.

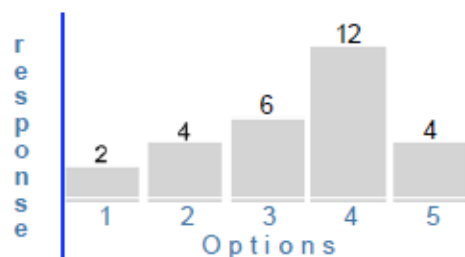
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



12. Question: I communicated with other students participating in the simulation by phone or email or other forms of communication other than those provided by the online course environment.

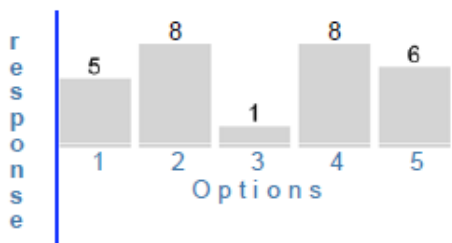
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



13. Question: Multimedia facilities such as audio headsets or video webcams would have improved my participation in the course.

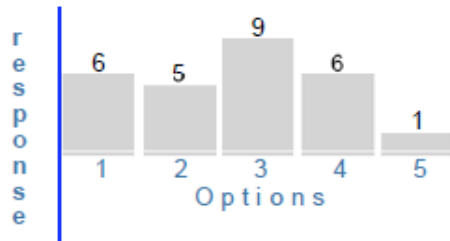
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



14. Question: The instructions and guidance provided by the lecturer for the online scenario and role play were clearly stated and well presented.

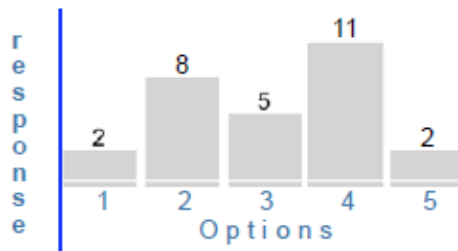
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



15. Question: It would have been beneficial if the lecturer's input including instructions and guidance were in the form of recorded video segments throughout the course to enhance the text-based environment.

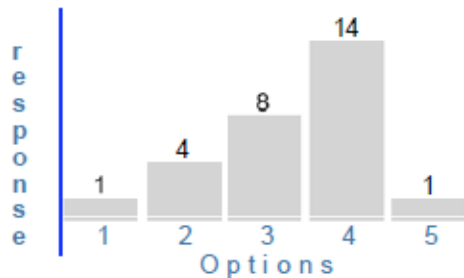
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



16. Question: The instructions and guidance provided by the lecturer prepared me sufficiently for my participation in the online simulation.

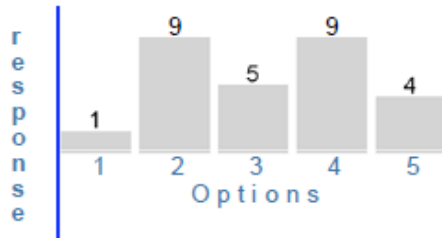
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



17. Question: The online simulation has provided a real-world context that I could identify with.

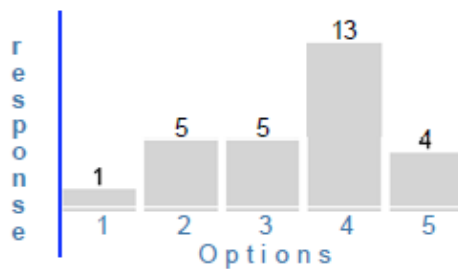
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



18. Question: I found it relatively easy to apply the learning in the first part of the course to the online scenario and role play.

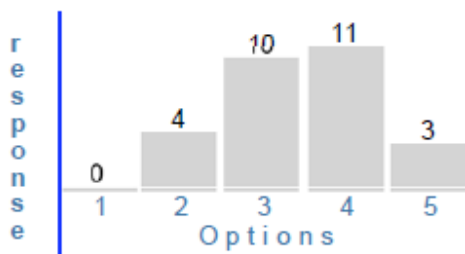
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



19. Question: I felt that I contributed well to the online role play and the development of a country position statement.

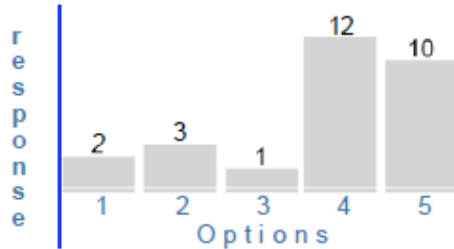
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



20. Question: The contributions of other students in the online learning environment have broadened my understanding of the course content.

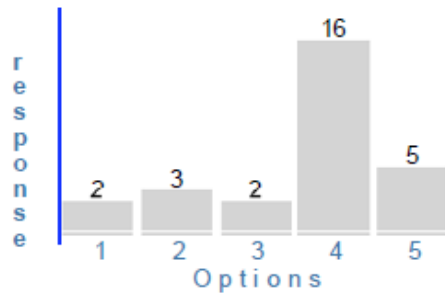
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



21. Question: All members of the country forum to which I was assigned contributed well to the development of the country position statement.

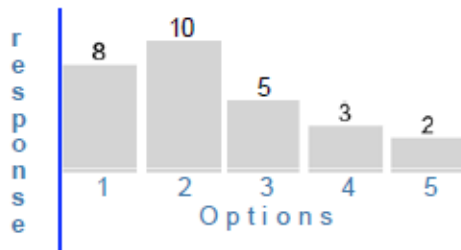
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



22. Question: The intentions and expectations of other participants in my country forum were clear to me.

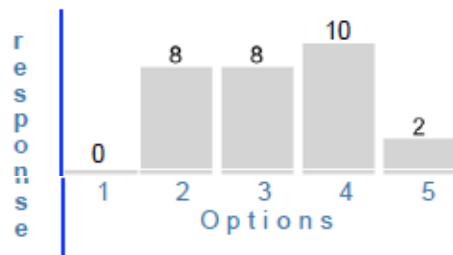
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



23. Question: I found it easy to follow the contributions submitted to the country forums by other group members.

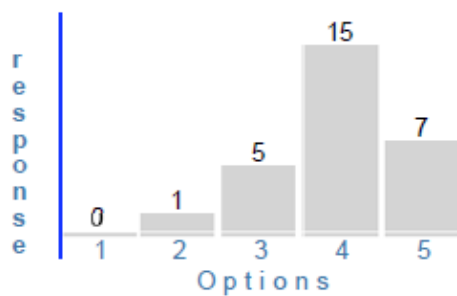
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



24. Question: I have found it easy to express my own views.

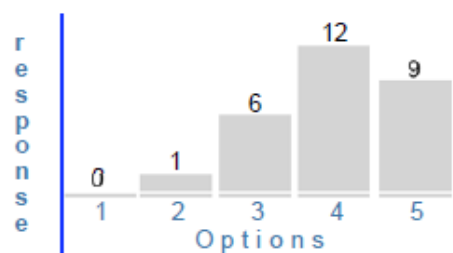
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



25. Question: I thought my own views were received well by other group members.

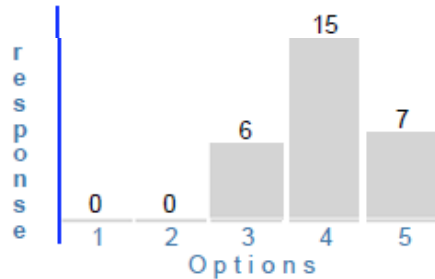
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



26. Question: I thought my own contributions to the country forum were valued by other group members.

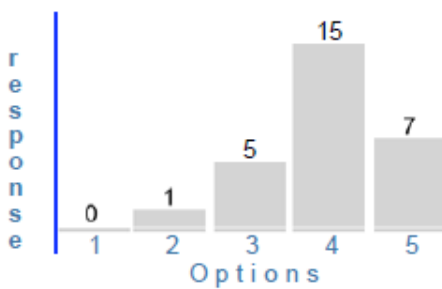
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



27. Question: I would prefer to do the role-playing simulation in face-to-face mode than in online mode.

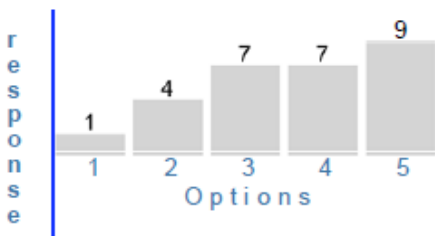
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



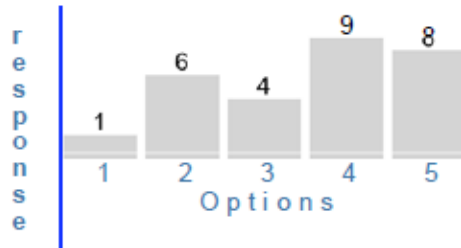
28. Question: If I could have the opportunity to meet with other students in the course, it would assist with my participation in the online environment.

Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree



29. Question: I feel there is more support from other students for my learning in the online environment than in face-to-face contexts.

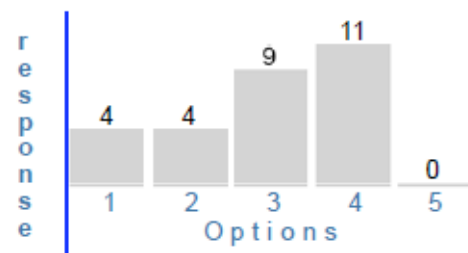
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



30. Question: I find it easier to communicate my ideas online than in face-to-face teaching contexts.

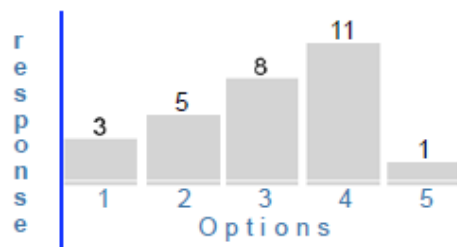
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



31. Question: I find it easier to understand the ideas and views expressed by others in the online learning environment than in face-to-face learning contexts.

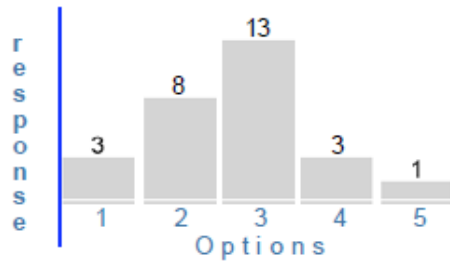
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither agree nor disagree

Option 4: somewhat agree

Option 5: strongly agree



32. Question: Overall, the course was a valuable learning experience, but studying online has taken much more of my time than a face-to-face version of the course would have.

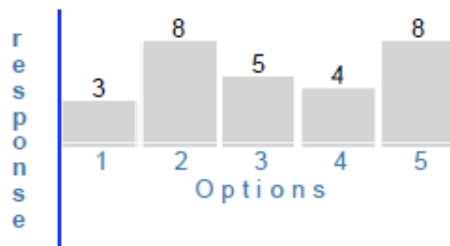
Option 1: strongly disagree

Option 2: somewhat disagree

Option 3: neither disagree nor agree

Option 4: somewhat agree

Option 5: strongly agree



33. Question: What aspects of the course worked well for you? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the simulation, etc.)

- 1.
2. I could express my views easier through the online environment, as i am not put on the spot, and have more time to formulate ideas. Also, no one can criticise what i say, which is comforting. I enjoyed the online scenario, once I actually understood what was going on, and it was great to work in a group, and to be able to communicate with other groups through various discussion boards. I liked that tasks and discussions could be done at one's leisure, instead of having a set time every week where i was required to be at lectures and tutes.
- 3.
4. Flexible time table, good access to resources
5. The simulation was quite good, simply because I liked the end product.
6. I enjoyed the whole online environment - it meant I could work when I wanted to. I found the role play a great learning experience but was frustrated by the lack of input from fellow group members.
7. The postings for the topics were ok I suppose
8. The 'lecture' replacements were good, and the idea of a journal, because you were given two weeks per topic. This was a good amount of time to read the readings and then look at the lecture replacements and actually take some time to consider all the questions there.
9. I was surprised that the role playing activity was so engaging and beneficial. The resource materials and lecture notes were suitable and easy to understand.
10. the simulation was perfect for showing how to apply the theories from teh course reading to real world situations lecture notes were excellent for self study of teh provided readings
11. reading materials provided were very good and links to other on line sites was good too. This was central in maximising quality reading time in a task heavy course. The tasks were fairly clear and some clarification from online tutor was good. Scenario was well thought out and implemented.
- 12.
13. being able to work when you want
14. The online situation gave me more confidence to express my own opinions and become more involved in the discussion whereas I would hesitate to do so in a face-to-face situation.
15. I liked the online interactive seminars. Working full time gave me the ability to read and prepare for this in my own time.
16. The tutor always there to answer anyones questions. People expressing their thoughts/ideas and then working together either supporting the statement or helping out the other student to make it sound better.
17. the online lectures and the group discussion site
18. The simulation was good in theory - it made me think of a real-life situation and made me understand international politics a bit more
19. Online scenarios
20. definately the resources provided, however more internet resources should be provided. I think that there needs to be stronger consequences for students who do not participate in the online scenario.
- 21.
22. i think the question above about expressing ones views. The online environment somewhat 'forces' (in the lightest of terms) you to contribute and say things that perhaps you wouldnt in a face-to-face. the longer periods between each of the topics helped contribute to this two. teh two week tut set ups gave a little more time to look at topics grasp them and comment as often and freely as you like.
23. My group work was good. The discussions and tasks were clear and easy.

24. The Chechnya study was good, as it helped being able to apply things we have learnt to a more realistic situation, rather than always saying 'what if.' The weekly updates made the situation realistic.

25.

26.

27. could do what I wanted when i wanted

28.

34. Question: What aspects of the course could be improved? (you can talk about resources, teaching input, communication and collaboration with others, expectations, tasks, discussions, the scenario, etc.)

1.

2. I would appreciate clearer instructions, and often everyone was unsure about what needed to be done. This was particularly troublesome for the assignments as everyone was confusing about the task and the questions were not really cleared up by the tutor on the discussion board. I also found that I forgot to do the readings early on, as it was an online course and was pushed to the back of my mind due to lectures and tutes of other subjects seeming more important, thus having to post last minute entries quite often.

3. Not online. I don't have the internet at home because I can't afford it so I probably end up spending more time accessing the subject at uni than i would in a lec/tute situation. Furthermore while some people contributed more online than they may have otherwise the people in my group did bugger all with a single exception. Its stupid to have group mark when you have no way of getting others peoples opinions because they don't post or basically reword other peoples stuff. At least in face to face you can force a little more than 2 postings of "yeah I agree with blah". I also found it harder to manage the assignments not because there was more work than other subjects but because in other subjects you are constantly being reminded to do this or that. Its all very well to say that university students are expected to monitor themselves but the reality is that we are still human and there is a reason most lecturers will say at the end of a lec "remember to do this or that". Online subjects remove the point of being a university student. Reading from a computer screen doesn't really constitute an enlightened debate. I can sit in a public library and do that for free instead of paying 600 bucks for a university subject. Sure online subjects give more flexibility to some but when it is a forced decision ie you have to do it online that that's not really flexibility especially for those who can only access the net at uni. In fact it's a genuine case of bureaucratic stupidity that fails to acknowledge that situation many students face.

4. Instructions from staff regarding expectations are not clear enough, I felt I needed more direction and examples of what was expected

5. There needs to be more clarity on exactly what is expected of us - I know that emails were sent to us a while into the course with specific details, but until then we'd just been floating around (and I'd even gone to the in-person info session at the beginning of the semester, so it must've been really hard for those who didn't). Secondly, why in the case study did we have to focus specifically on a country that used to be part of the USSR? It was hard when I knew nothing about it to go into such detail - to even know where to start. Also, there was one online task - a quiz - that I only just found while browsing through links on the site about two weeks ago. I panicked, I'd never heard about it til then and the date to do it had already expired! And one more thing - I thought we were supposed to keep our main topic postings short and to the point? Some people waffled for pages!

6. Perhaps if a part of the scenario was to meet face-to-face with your group at least once - that was the only part of the course that I had difficulty with and it was purely and simply because of the lack of participation of my fellow group members

7. Not everyone contributed their part to the online scenario, and should be graded accordingly

8. There was conflicting information about expectations and assessment. Also only about three people (including myself) participated in the role play, which really annoyed me as it put our group at a real disadvantage. And i was not impressed with people using the excuse "I had other subjects to do"... so what? We all have other subjects. Grrr, needless to say, I think people should have taken this subject more seriously and not discarded it as useless just because it's an online subject.

9. I am not convinced that online study is as effective as face to face study. I have also studied Australian Asian Relations and French 2B this semestre. The personalities of the lecturers, the incidental anecdotes, the passion for the subject, the body language all added an enormous amount of insight that my online teacher and tutor could not provide. The online subject, satisfying in its own way is a thin filtered version of the real life experience that one enjoys in face to face contact.

10. all students should be forced to participate in the country forum at least twice, for example monday and friday. Apart from one other student all students from my country group only checked the forum fridays, so that a proper discussion was hardly possible, which annoyed me because I found the role play exciting.

11. Clearer expectations clarified from other scenario participants - especially in regards to meeting postings deadlines, prompt and clear communications and shared work loads. More consistent and greater input from online tutor. It felt at times an imposition to ask a question or ask for clarification - and the response was not always prompt. Changes or contradictory messages re deadlines could have been resolved - eg a contradiction between course outline and info provided on line.

12.

13. personally i just find it hard to read the masses of readings - i take in lectures better and feel it is easier to ask questions and learn more face-to-face. So the only way to improve this is face-to-face contact, which defeats the purpose of an online course.

14. Chat rooms would be helpful in the online scenario as it is difficult to collaborate without 'real time'. Perhaps the scenario tasks could require each group member to post something to the main discussion board (where only the leader posted this time) so that it encourages to contribute a bit more to the discussion.

15. I thought the online scenario was a great idea, however it was difficult to motivate others in the group. Perhaps in the first couple of weeks the groups should have to meet at a certian time and discuss the plan for the semester.

16. Possibly have more face-to-face contact.

17. there seemed to be alot of work for this course. other courses have the same amount of essays but do not require additional tasks such as the online scenario or the required postings every fortnight.

18. I think the guidelines for the assignments and role play could be a bit clearer - lots of people had to ask questions to clarify what we had to do. Also I think some of the readings weren't really relevent and were a struggle to get through because of this - it was hard to 'discuss' the issue in the online groups because we had to in effect summarise the readings. I think more discussion could be generated by everyone having more of a discussion than everyone only being allowed one post, pretty much saying the same thing.

19.

20. More information on the assignments should be provided to show what exactly is expected of students when submitting their assignments

21.

22. I think that too many things run alongside each other. Although in come respects the scenario did tie in with the topics, although i did not always see this correlation, having to respond to both the scenarios and the topics was a little difficult at times. I think in terms of the two week long topics, like I said this longer period was good to grasp the huge subjects, but i really feel like more feedback from tutor would be good. The groups were a a huge collection of thoughts and ideas, and it was difficult to dintniguish fact from idea, and what were and perhaps were not valid points. Perhaps where questions are posed, they could be answered at some point.

23. Better and more resources available. A big input by teachers- but in the sense that they make their answers to our questions clear. Answers were given but weren't clear leaving me still confused. The homepage is a bit messy. I know my group and I were beginning to get confused with all the different subject headings, links, where to post our discussions, draft statement, etc. It could be in a much neater version.

24. Would be good to have an email about our postings from tutor, as I have no idea on what my postings in Chechnya study and fortnightly seminars have been like - if they are up to standard or on the right track. It will be too late at the end of the course to change it!

25. Not just offering it online

26.

27. slightly ambiguous instructions and expectations pertaining to the assessment made life hard sometimes

28.

Appendix L: Open-ended survey questions categorised into themes

Course (Task and Assessment) Expectations, Clarity and Organisation

Respondent	Positive	Negative
S1R1	there is loads of information available and many things are repeated to ensure that we understand what is expected of us	there is too much to prepare for, it seems that more time needs to be spent on it than other online courses i have done
S1R4		None really. It is very unclear what our discussions should target. I usually end up rambling because there is not much direction. Also, we are only meant to write 300 words ish but some people basically write essays and this confuses me on what we are expected to do. & More teaching input and clearer direction or purpose for the activities. There are some questions on the lecture sites but if you answered all of them, you would far exceed the word limit. These kind of contradictory instructions are very confusing.
S1R5		(Good idea for online discussion board,) although there was a lot of confusion. & The discussion site was more confusing than helpful. I found that the teaching input was sufficient but not helpful. The teacher responded fast to emails and questions but wasnt clear in defining our questions...hence the confusion continued. Also, the online scenario and the course website was very confusing to find everything. Possibly, it could be tidied up so things are more clear. There are too many links, its confusing.
S1R9		the scenario structure was pretty confusing in itself.
S1R18	the lecture notes are clear, well-structured and easy to understand	
S1R23	The detailed list of expectations provided by the tutors is very clear.	

S1R11	Personally I have not found the course structure confusing at all, (but others have. Maybe this needs to be made more clear for others so there is less confusion.)	(Personally I have not found the course structure confusing at all, but others have.) Maybe this needs to be made more clear for others so there is less confusion.
S1R12		I definately do not like the online courses. They are incredibly confusing, and just make it 20 times easier for people to forget things and, especially with work, other committments etc. I think everyone I know, unless they do not work, feels the stress of this type of course. I also believe that I dont get the quality of learning that I would like from my degree with this wishy-washy course, and therefore I dont think that this course justifies paying \$400-600 or however much it is. I do think, however, that the idea is a good one. Especially for those people who do work all the time and do want something that is a little easier for them, so they can work from home, etc. The couse could be improved by having meetings, such as one at the beginning, one in week 3, week 8 etc, so that the tutorial class can meet up and discuss and question. Also, the assignbment is really annoying with the week 7, 8, 9, online scenario task, becuase we have tried twice to meet up with others in our country group and only 1 other and myself showed up. Unfair!! And no one will ever know it...
S1R13		More clear indication as to what is expected of us in our group discussions
S1R14		A clearer understanding of what is expected each week, and better group organization.
S1R17		possibly make this course as an internal rather than external. the reason being is that it is so broad and complexed, that individuals such as myself not knowing english as the first language, it is hard to understand what is required from an individual.
S1R20		make tasks and due dates more obvious from onset of course
S1R21		More clarity in tasks! Maybe everything's split up a bit too much on the website? I found the scenario task incredibly hard to get my head around at first.

S1R22		teaching input could be improved...i have found that the online tutor has not always been clear and that sometimes, the 'clarification' given has only been more confusing. Expectations and tasks could also be made much clearer. In fact most things relating to this online course have not been as clear as one would have hoped, and honestly, it has been a bit confusing.
S1R26		Need to have a better idea of what is expected from week to week
S1R30		It might have been easier to be in the same groups for the scenario and the online tutorial discussion. The introduction to the concept may have been better explained in more detail, I was a little unsure of exactly what we were meant to be doing the first time I read it.
S1R31		there is so much text on the website that its easy to get confused... clearer instructions would be helpful.(the online scenario is great though, its probably the best assessment piece i've done so far in my degree)
S1R32		maybe if there was an example of the content and level of discussion we should undertake that we could access.
S1R34		Clearer explanations as to what we have to do. It is all a bit jumbled.
S1R39		MORE INFORMATION!!! Clear guidelines and expectations, (and access to tutors)
S2R7	The discussions and tasks were clear and easy.	
S2R14	I was surprised that the role playing activity was so engaging and beneficial. The resource materials and lecture notes were suitable and easy to understand.	
S2R28	(reading materials provided were very good and links to other on line sites was good too. This was central in maximising quality reading time in a task heavy course.) The tasks were fairly clear and some clarification from online tutor was good. (Scenario was well thought out and implemented.)	
S2R3		More information on the assignments should be provided to show what exactly is expected of students when submitting their assignments
S2R7		The homepage is a bit messy. I know my group and I were beginning to get confused with all the different subject headings, links, where to post our discussions, draft statement, etc. It could be in a much neater version.
S2R9		slightly ambiguous instructions and expectations pertaining to the assessment made life hard sometimes

S2R10	Instructions from staff regarding expectations are not clear enough, I felt I needed more direction and examples of what was expected
S2R11	There needs to be more clarity on exactly what is expected of us - I know that emails were sent to us a while into the course with specific details, but until then we'd just been floating around (and I'd even gone to the in-person info session at the beginning of the semester, so it must've been really hard for those who didn't). Secondly, why in the case study did we have to focus specifically on a country that used to be part of the USSR? It was hard when I knew nothing about it to go into such detail - to even know where to start. Also, there was one online task - a quiz - that I only just found while browsing through links on the site about two weeks ago. I panicked, I'd never heard about it til then and the date to do it had already expired! And one more thing - I thought we were supposed to keep our main topic postings short and to the point? Some people waffled for pages!
S2R15	There was conflicting information about expectations and assessment.
S2R21	I think the guidelines for the assignments and role play could be a bit clearer - lots of people had to ask questions to clarify what we had to do.
S2R25	I would appreciate clearer instructions, and often everyone was unsure about what needed to be done. This was particularly troublesome for the assignments as everyone was confusing about the task and the questions were not really cleared up by the tutor on the discussion board. I also found that i forgot to do the readings early on, as it was an online course and was pushed to the back of my mind due to lectures and tutes of other subjects seeming mroe important, thus having to post last minute entries quite often.
S2R28	Clearer expectations clarified from other scenario participants - especially in regards to meeting postings deadlines, prompt and clear communications and shared work loads. More consistent and greater input from online tutor. It felt at times an imposition to ask a question or ask for clarification - and the response was not always prompt. Changes or contradictory messages re deadlines could have been resolved - eg a contradiction between course outline and info provided on line.

Interaction		
Respondent	Positive	Negative
S1R2	Online discussions force you to understand the concepts and interact and communicate with others to gain different views and perceptions.	Less group collaboration, for example in the case of the country discussions as I find it hard to communicate with others in an online environment, especially when something needs to be handed up as I found that it was hard to get things done with a whole group. I would prefer to work individually.
S1R6	talking with other students online about what is expected etc	Is this level of interaction really required? we do postings once a fortnight. this is never required in other external courses.)
S1R9		
S1R10	I think the role play scenario is an excellent way to bring together students who may be physically far apart and involve everybody. The interactive seminar discussion page. (Primarily the readings) and forum discussion for each topic. Having all the answers from a range of others in the general discussion page has also helped spell things out a bit clearer Through discussion online with the Tutor and other online individuals. communication with tutor and others, discussions, scenario	
S1R11		
S1R14		
S1R15		
S1R17		
S1R20	Also, the group work relieves some pressure as learning and knowledge are shared. Despite some difficulty in meeting together online, the willingness of my group members to discuss and participate has helped me to understand the task and the issues it involves.	Access to chat rooms as well as discussion boards might be useful as they allow real-time conversation which would be more efficient for online "meetings".
S1R23		
S1R24	The availability to respond to these online discussions is a lot to attend then going to class.	The problem is that not all people respond early and some not at all. & If your group isn't motivated to get together for the group. Communication is harder because if someone is busy for a few days and unable to get online, it is hard to communicate.
S1R28		It is easy to miss important parts of the group discussion and decision making. It's hard to get every one online together : some are here in Adelaide but others are overseas.

S1R31	communication with other students (to clear up what we think is expected of us) (and the instructions provided)	
S1R32	communication with others in the group. understanding the concepts more through the online tutorials.	
S1R34	I like being able to read everyones responses to topics as it broadens my knowledge.	
S1R37	Communication and collaboration with others	
S1R27		Online just isn't the same
S1R28		I really would have preferred a face to face meeting. Online discussions are rather like spelology without proper illumination.
S2R3		I think that there needs to be stronger consequences for students who do not participate in the online scenario.
S2R6	i think the question above about expressing ones views. The online environment somewhat 'forces' (in the lightest of terms) you to contribute and say things that perhaps you wouldnt in a face-to-face. the longer periods between each of the topics helped contribute to this two. teh two week tut set ups gave a little more time to look at topics grasp them and comment as often and freely as you like.	
S2R7	My group work was good.	
S2R9	could do what I wanted when i wanted	
S2R10	Flexible time table,(good access to resources)	
S2R12	I enjoyed the whole online environment - it meant I could work when I wanted to. I found the role play a great learning experience but was frustrated by the lack of input from fellow group members.	
S2R13	The postings for the topics were ok I suppose	
S2R18	being able to work when you want	
S2R19	The online situation gave me more confidence to express my own opinions and become more involved in the discussion whereas I would hesitate to do so in a face-to-face situation.	
S2R20	I liked the online interactive seminars. Working full time gave me the ability to read and prepare for this in my own time.	

S2R25	I could express my views easier through the online environment, as i am not put on the spot, and have more time to formulate ideas. Also, no one can criticise what i say, which is comforting. I enjoyed the online scenario, once I actually understood what was going on, and it was great to work in a group, and to be able to communicate with other groups through various discussion boards. I liked that tasks and discussions could be done at one's leisure, instead of having a set time every week where i was required to be at lectures and tutes.
S2R27	The tutor always there to answer anyones questions. People expressing their thoughts/ideas and then working together either supporting the statement or helping out the other student to make it sound better.
S2R5	Not just offering it online
S2R8	Would be good to have an email about our postings from tutor, as I have no idea on what my postings in Chechnya study and fortnightly seminars have been like - if they are up to standard or on the right track. It will be too late at the end of the course to change it!
S2R12	Perhaps if a part of the scenario was to meet face-to-face with your group at least once - that was the only part of the course that I had difficulty with and it was purely and simply because of the lack of participation of my fellow group members
S2R13	Not everyone contributed their part to the online scenario, and should be graded accordingly
S2R14	I am not convinced that online study is as effective as face to face study. I have also studied Australian Asian Relations and French 2B this semestre. The personalities of the lecturers, the incidental anecdotes, the passion for the subject, the body language all added an enormous amount of insight that my online teacher and tutor could not provide. The online subject, satisfying in its own way is a thin filtered version of the real life experience that one enjoys in face to face contact.
S2R15	Also only about three people (including myself) participated in the role play, which really annoyed me as it put our group at a real disadvantage. And i was not impressed with people using the excuse "I had other subjects to do"... so what? We all have other subjects. Grrr, needless to say, I think people should have taken this subject more seriously and not discarded it as useless just because it's an online subject.

S2R16	all students should be forced to participate in the country forum at least twice, for example monday and friday. Apart from one other student all students from my country group only checked the forum fridays, so that a proper discussion was hardly possible, which annoyed me because I found the role play exciting.
S2R18	personally i just find it hard to read the masses of readings - i take in lectures better and feel it is easier to ask questions and learn more face-to-face. So the only way to improve this is face-to-face contact, which defeats the purpose of an online course.
S2R19	Chat rooms would be helpful in the online scenario as it is difficult to collaborate without 'real time'. Perhaps the scenario tasks could require each group member to post something to the main discussion board (where only the leader posted this time) so that it encourages to contribute a bit more to the discussion.
S2R20	I thought the online scenario was a great idea, however it was difficult to motivate others in the group. Perhaps in the first couple of weeks the groups should have to meet at a certian time and discuss the plan for the semester.
S2R21	it was hard to 'discuss' the issue in the online groups because we had to in effect summarise the readings. I think more discussion could be generated by everyone having more of a discussion than everyone only being allowed one post, pretty much saying the same thing.
S2R27	Possibly have more face-to-face contact.

Instructional Resources (Teaching Input)

Respondent	Positive	Negative
S1R2	Reading resources and additional reading resources. Additionally, teching input and lecture notes.	

S1R3	the online modules are good as are the readings - well prepared - unlike other online work I have been involved in	I have been very happy with the course so far - maybe a little more input from the moderators on group discussion boards - just to confirm if we are on the right track or not.
S1R5	Good links and help in finding further resources. Good idea for online discussion board,(although there was a lot of confusion.)	The discussion site was more confusing than helpful. I found that the teaching input was sufficient but not helpful. The teacher responded fast to emails and questions but wasn't clear in defining our questions...hence the confusion continued. Also, the online scenario and the course website was very confusing to find everything. Possibly, it could be tidied up so things are more clear. There are too many links, it's confusing.
S1R12	The only thing that has helped me in preparing for the online simulation is everything which I have gathered myself, and what is expected online (such as online seminar reading, contributions and responses).	
S1R13	Weel thought out scenario, easy to follow and to find information on	
S1R14	Primarily the readings (and forum discussion for each topic.)	
S1R15	the available online resources and texts have been particularly useful. Having all the answers from a range of others in the general discussion page has also helped spell things out a bit clearer	i don't really know. the resources are all there, i think the greatest problem, perhaps only personally, is i find the themes a little harder to process in the online environment, and although the scenario is practical way to put them into context, trying to do this with incomplete understanding has been somewhat challenging
S1R21	It's good that Snjezana has sent us reminder emails of what to do when, else I'm sure a lot of us would have forgotten things.	
S1R26	Discussion boards, instructions for scenario, added readings and links regarding the issue	
S1R27	Readings	
S1R28	The case study on a republic which was formerly in the USSR was an excellent preparation for understanding some of the dynamics in international relations in the Russian region. The readings have also been significant in preparation for this task. I found plenty of information about my country's position in relation to the simulation and could make a confident contribution	
S1R30	I found the separate discussion boards useful so that questions and discussion for one assignment doesn't get all jumbled in together.	
S1R31	(communication with other students (to clear up what we think is expected of us)) and the instructions provided	

S1R4		More teaching input and clearer direction or purpose for the activities. There are some questions on the lecture sites but if you answered all of them, you would far exceed the word limit. These kind of contradictory instructions are very confusing.
S1R6		More background on scenario in each topic (identity, human rights, etc), as I had no idea about Chechnya before I started the online simulation.
S1R7		A better site layout. This can be seen on any major companies website, the way they organise it with links along the top and to the left. The layout in general of the online sites is quite horrific. It takes too long to 'learn' and work you rway around the site.
S1R9		not having an online simulation. or not having fortnightly postings...ts just TOO MUCH!!!
S1R18		the readings are long, complex and difficult to understand
S1R19		I think overall the whole thing needs to be simpler to understand and we need to get better feedback from the online tutor, we haven't really heard anything back from her which makes it difficult to know if we are heading in the right direction.
S1R31	(there is so much text on the website that its easy to get confused... clearer instructions would be helpful.)	the online scenario is great though, its probably the best assessment piece i've done so far in my degree
S1R37		resources (a little boring and overwhelming at times)
S1R39		(MORE INFORMATION!!! Clear guidlines and expectations,) and access to tutors
S2R3	definatly the resources provided, however more internet resources should be provided.	
S2R8	The Chechnya study was good, as it helped being able to apply things we have learnt to a more realistic situation, rather than always saying 'what if.' The weekly updates made the situation realistic.	
S2R10	(Flexible time table,) good access to resources	
S2R11	The simulation was quite good, simply because I liked the end product.	
S2R12	I enjoyed the whole online environment - it meant I could work when I wanted to. I found the role play a great learning experience but was frustrated by the lack of input from fellow group members.	

S2R14	I was surprised that the role playing activity was so engaging and beneficial. The resource materials and lecture notes were suitable and easy to understand.
S2R15	The 'lecture' replacements were good, and the idea of a journal, because you were given two weeks per topic. This was a good amount of time to read the readings and then look at the lecture replacements and actually take some time to consider all the questions there.
S2R16	the simulation was perfect for showing how to apply the theories from the course reading to real world situations lecture notes were excellent for self study of the provided readings
S2R21	The simulation was good in theory - it made me think of a real-life situation and made me understand international politics a bit more
S2R22	Online scenarios
S2R26	the online lectures and the group discussion site
S2R28	reading materials provided were very good and links to other online sites was good too. This was central in maximising quality reading time in a task heavy course. (The tasks were fairly clear and some clarification from online tutor was good.) Scenario was well thought out and implemented.
S2R1	Not online. I don't have the internet at home because I can't afford it so I probably end up spending more time accessing the subject at uni than I would in a lecture/tute situation. Furthermore while some people contributed more online than they may have otherwise the people in my group did better all with a single exception. It's stupid to have group mark when you have no way of getting others' opinions because they don't post or basically reword other people's stuff. At least in face to face you can force a little more than 2 postings of "yeah I agree with blah". I also found it harder to manage the assignments not because there was more work than other subjects but because in other subjects you are constantly being reminded to do this or that. It's all very well to say that university students are expected to monitor themselves but the reality is that we are still human and there is a reason most lecturers will say at the end of a lecture "remember to do this or that". Online subjects remove the point of being a university student. Reading from a computer screen doesn't really constitute an enlightened debate. I can sit in a public library and do that for free instead of paying 600 bucks for a university subject. Sure online subjects give more flexibility to some but when it is a forced decision ie you have to do it online that that, it's not really flexibility especially for those who can only access the net at uni. In fact it, it's a genuine case of bureaucratic stupidity that fails to acknowledge that situation many students face.

S2R6		I think that too many things run alongside each other. Although in come respects the scenario did tie in with the topics, although i did not always see this correlation, having to respond to both the scenarios and the topics was a little difficult at times. I think in terms of the two week long topics, like i said this longer period was good to grasp the huge subjects, but i really feel like more feedback from tutor would be good. The groups were a a huge collection of thoughts and ideas, and it was difficult to dintniguish fact from idea, and what were and perhaps were not valid points. Perhaps where questions are posed, they could be answered at some point.
S2R7		Better and more resources available. A big input by teachers- but in the sense that they make their answers to our questions clear. Answers were given but werent clear leaving me still confused.
S2R18		personally i just find it hard to read the masses of readings - i take in lectures better and feel it is easier to ask questions and learn more face-to-face. So the only way to improve this is face-to-face contact, which defeats the purpose of an online course.
S2R21		Also I think some of the readings wern't really relevent and were a struggle to get through because of this
S2R26		there seemed to be alot of work for this course. other courses have the same amount of essays but do not require additional tasks such as the online scenario or the required postings every fortnight.

None		
Respondent	Positive	Negative
S1R7		None. It was my prior computing knowledge that helped me greatly with this course.
S1R9		not really anything. to be honest,(the scenario structure was pretty confusing in itself. Is this level of interaction really required? we do postings once a fortnight. this is never required in other external courses.)

S1R19

S1R39

I don't think I am prepared for the online situation.

not many aspects have helped well, instructions were not that clear and the discussions were not helpful either.

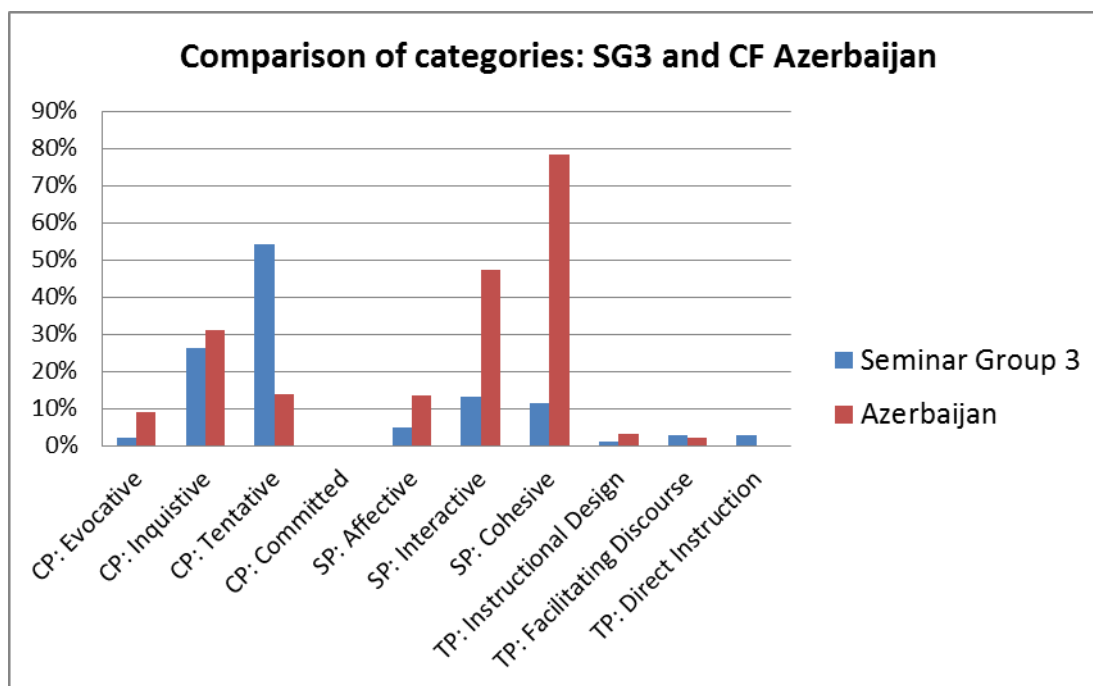
Appendix M: Posted messages in spreadsheet format with filters applied

P36 selected in column A with her two posts to Seminar Group 3 discussion and her seven posts to the country forum USA.

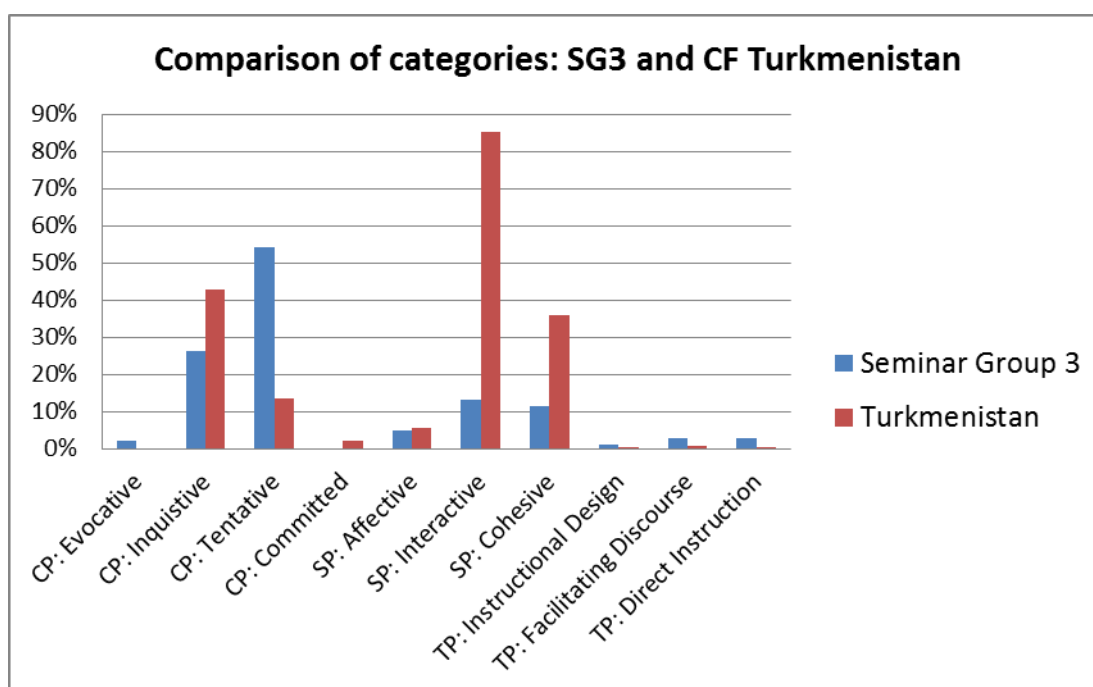
	A	B	C	D	E	F
1	id	DI_DATE	DISCUSSION	DI_TOPIC	DI_MESSAGE_BODY	
720	36	6/08/2006	GROUP 3	First posting...	Hi Guys - well do I feel like the biggest slacker ever! Usually in these things people write their bit and then run for the hills, but how great that we actually have...	
721	36	15/08/2006	GROUP 3	Identity	Again late - sorry guys! I was just doing an online response for another subject on culture, and I think the two tie in really well. It is interesting to see others op...	
722	36	11/09/2006	USA	Hi	Hey there! My name is P36 and I'm obviously terribly organized! I'm a third year psych. student who works full time at (place of employment). I have done c...	
723	36	11/09/2006	USA	Re: Hi	Okay so I've been away and read all some stuff, and all seems pretty interesting, especially the latest developments. Apparently we are entering into talks...	
724	36	19/09/2006	USA	Re: ideas	Hey there. So I did some googling to find some info. I can vaguely say (lets hope I don't have it too wrong) that US-Russian relations are okay but not fanta...	
725	36	21/09/2006	USA	contact with the UK	Ps. We have been invited to start have talks with the UK to form a coalition. Any ideas? I think it sounds good.	
726	36	21/09/2006	USA	okay i'm officially a nerd...	Okay guys, just checking out the discussion board for all groups, and we are seriously behind the eight ball. aghhhh! so we should somehow organize a st...	
727	36	26/09/2006	USA	Re: position statement	Hey (student name) I think that agreeing with the UK would be in part a good position to take. As far as US foreign policy is concerned there is no negotiati...	
728	36	28/09/2006	USA	Re: prelim statement	Hey (student name) I good work! Just a few things that I think should be changed/added. How about instead of 'The United States is willing to begin talks' I w...	
892						
893						
894						
895						
896						

Appendix N: Comparison of presence between seminar groups and country forums

Comparison of Seminar Group 3 and the country forum Azerbaijan

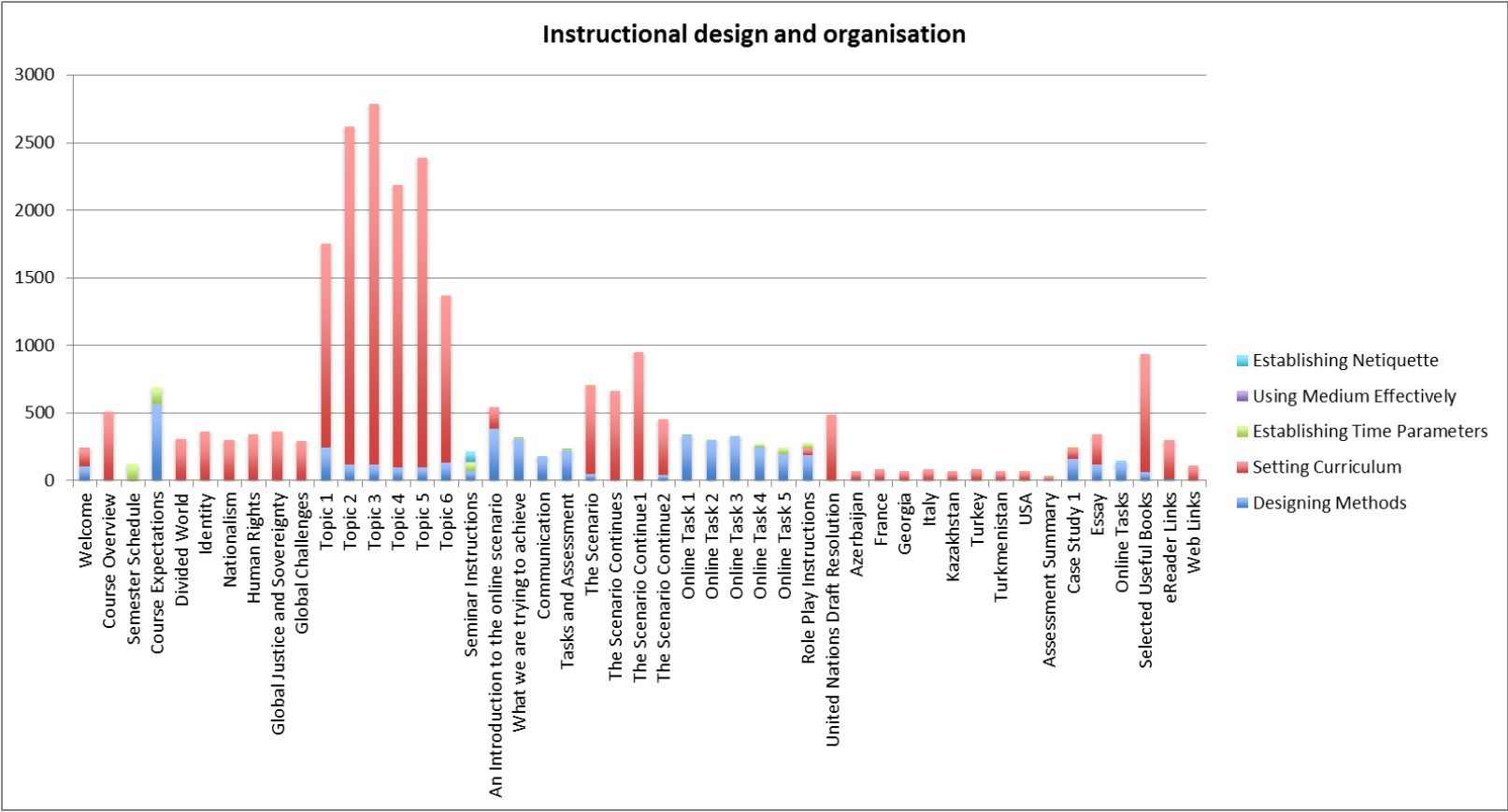


Comparison of Seminar Group 3 and the country forum Turkmenistan














Appendix O: Allocations of instructional design indicators for course webpages

Nature of instructional design and organisation on each course webpage


















Appendix P: Online course content structure

Top Banner – Uni Technovation – Learning to Resolve Global Conflicts 201			
Left Spine – List of Contents		Main Frame for the display of content	
	Site Map		
	Welcome		
	<u>Course Information</u>		
		Course Overview	
		Seminar Schedule	
		Course Expectations	
		<u>Topic Guide</u>	
			Divided World
			Identity
			Nationalism
			Human Rights
			Global Justice and Sovereignty
			Global Challenges
	<u>Interactive Seminars</u>		
		Divided World	
		Identity	
		Nationalism	
		Human Rights	
		Global Justice and Sovereignty	
		Global Challenges	

		<u>Seminar Discussion Sites</u>	
			<u>Introduction</u>
			<u>GROUP 1</u>
			<u>GROUP 2</u>
			<u>GROUP 3</u>
			<u>GROUP 4</u>
			<u>GROUP 5</u>
			<u>GROUP 6</u>
	<u>Seminar and Role Play</u>		
			<u>Introduction</u>
		<u>Instructions</u>	
			<u>Objectives</u>
			<u>Communication</u>
			<u>Tasks and Assessment</u>
		<u>Scenario</u>	
			<u>Overview</u>
			<u>Tensions Escalate</u>
			<u>Conflict Looming</u>
			<u>Update Developments</u>
		<u>Online Tasks</u>	
			<u>Online Task 1</u>
		?	<u>Online Simulation Quiz</u>
			<u>Online Task 2</u>
			<u>Online Task 3</u>
			<u>Online Task 4</u>

			<u>Online Task 5</u>
		<u>Country Profiles</u>	
			<u>Armenia</u>
			<u>Azerbaijan</u>
			<u>Belarus</u>
			<u>France</u>
			<u>Germany</u>
			<u>Greece</u>
			<u>Georgia</u>
			<u>Hungary</u>
			<u>Iran</u>
			<u>Italy</u>
			<u>Kazakhstan</u>
			<u>Romania</u>
			<u>Russia</u>
			<u>Spain</u>
			<u>Turkey</u>
			<u>Turkmanistan</u>
			<u>Ukraine</u>
			<u>United Kingdom</u>
			<u>United States of America</u>
			<u>Uzbekistan</u>
		<u>Role Play Discussion Sites</u>	
			<u>General Discussion (all countries)</u>

			<u>ARMENIA</u>
			<u>AZERBAIJAN</u>
			<u>BELARUS</u>
			<u>FRANCE</u>
			<u>GERMANY</u>
			<u>GREECE</u>
			<u>GEORGIA</u>
			<u>HUNGARY</u>
			<u>IRAN</u>
			<u>ITALY</u>
			<u>KAZAKHSTAN</u>
			<u>ROMANIA</u>
			<u>RUSSIA</u>
			<u>SPAIN</u>
			<u>TURKEY</u>
			<u>TURKMANISTAN</u>
			<u>UKRAINE</u>
			<u>UNITED KINGDOM</u>
			<u>UNITED STATES OF AMERICA</u>
			<u>UZBEKISTAN</u>
			<u>Forum for United Kingdom, Ukraine, Georgia, Armenia and Russia</u>

		<u>Position Statements and Draft Resolutions</u>	
			<u>Instructions</u>
			<u>Country Position Statement Posting</u>
			<u>Draft Resolution</u>
	<u>Assessment</u>		
		<u>Assessment Summary</u>	
		<u>Case Study 1</u>	
		<u>Essay</u>	
		<u>Online Tasks, Scenario and Role Play Participation</u>	
	<u>Resources</u>		
		<u>Selected Useful Books</u>	
		<u>Web Links</u>	
		<u>E-Reader Links</u>	
	<u>Notice Board and Information</u>		
	<u>Help</u>		

Legend



Document Icon – Content produced by Course Coordinator



Folder Icon – Expandable and Collapsible Organiser of Content



Discussion Icon – Opens into Online Asynchronous Threaded Discussion (OATD) forum



Quiz Icon – Opens into a multiple choice quiz
