Investigating an Online Community of Second Language Learners Using Design-Based Research

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I declare that this thesis is my own account of my research and contains as its main content work that has not previously been submitted for a degree at any tertiary education institution.

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Abstract

The purpose of this research was to investigate the development and implementation of an online community of learners within the context of an intermediate and advanced level Italian as a second language university class using a design-based research approach.

The online learning community of this study was developed to address some of the issues related to learning a second language in a context where learners only have limited opportunities to engage in collaborative social interaction and participate in meaningful and authentic activities with other speakers of the target language, such as more competent peers and native speakers.

The development of the learning environment drew upon theories and principles derived from the literature, including Vygotsky’s sociocultural theory applied to second language learning, theories of situated and authentic learning, and principles that guide the development of online communities of practice and communities of learners.

The learning environment comprised a course website, which provided a combination of different text-based synchronous and asynchronous Computer Mediated Communication (CMC) tools to support communication and collaboration within the learning community, two authentic tasks designed according to the defining elements of authentic tasks identified in the relevant literature, together with the support and assistance provided by selected native speaker facilitators.

The research sought to investigate students’ views and opinions on the impact of each element of authentic tasks on their learning, the process and strategies employed by students to collaborate in a community of learners, the nature of students’ contributions to the CMC features provided in the course website, and the role of native speaker facilitators in assisting and supporting students’ collaborative work.
The study was structured within a four-phased design-based research approach, which allowed the researcher to progressively test and refine the learning environment developed through a series of successive iterative implementations, and to develop a new set of design principles to guide the development and implementation of similar learning environments in other second language learning contexts.

Data collected included individual and focus group interviews with students and facilitators, analysis of online interactions and messages, students’ reflective portfolios, and note taking and observations. Data were analysed using techniques of qualitative data analysis.

Findings suggest that all the critical elements of authentic tasks determined from the literature on situated learning and authentic learning environments provided a useful frame of reference for the design of the two authentic tasks of this study. Each element provided valuable opportunities for student learning, particularly in relation to the development of target language communication skills and problem solving and project management skills, and had a positive impact on students’ motivation and engagement with the subject. The findings also highlighted a number of significant issues encountered by the collaborative groups as they completed the tasks, and the strategies employed by the different groups to solve them. Participants identified key principles that could lead to more effective and successful future collaborative work, supporting the view that they had gained a deep understanding of individual and collaborative learning processes. The findings also shed light on the nature and extent of students’ contributions to the CMC features and resources provided to support interaction and collaboration in the online learning community, and on the native speaker facilitators’ role in supporting students in the process of completing authentic collaborative tasks.

The major implication of the research is that a learning environment which supports the development of an online community of learners through participation in authentic tasks in collaboration with other learners and native speakers of the target language can be effectively designed and implemented by second language educators to facilitate second language acquisition.
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# Table of Contents

CHAPTER 1  Introduction

Background to the study ................................................................. 1
Practitioner consultations and discussions ........................................... 6
The four phases of the study and the research questions ....................... 9
The structure of the thesis .............................................................. 11

CHAPTER 2  Literature review

Introduction .................................................................................. 13
Sociocultural theory applied to second language learning .................... 13
Situated learning ........................................................................... 24
Communities of practice .............................................................. 30
Online communities of practice ...................................................... 34
Communities of learners .............................................................. 39
Critical design elements derived from the literature and recommended design guidelines .......................................................... 42

CHAPTER 3  Methodology

Introduction .................................................................................. 45
Design-based research .................................................................... 45
Design-based research model applied in this study ............................ 49
Summary of the research plan .......................................................... 68

CHAPTER 4  Development of the learning environment

The learning context ........................................................................ 69
The development of an online learning environment .......................... 70
Critical design elements and their implementation ........................... 83
CHAPTER 5  Authentic tasks ................................................................. 89

Research question 1 .................................................................................. 89
Framework and method of analysis ........................................................... 89
Analysis of data .......................................................................................... 91
1. Real-world relevance .............................................................................. 92
2. Ill-defined nature of the activities .......................................................... 100
3. Complexity and sustained effort ............................................................ 103
4. Multiple perspectives and resources .................................................... 106
5. Collaboration ......................................................................................... 113
6. Reflection ............................................................................................... 122
7. Integration and application across different subject areas ..................... 133
8. Integration with assessment ................................................................... 135
9. Development of polished products ....................................................... 137
10. Competing solutions and diversity of outcome ...................................... 138
Discussion ................................................................................................. 139
Design principles ....................................................................................... 141

CHAPTER 6  Collaboration in an online community of learners ................. 145

Research question 2 .................................................................................. 145
Framework and method of analysis ........................................................... 145
Collaboration ............................................................................................. 146
The seven phases of the collaboration ....................................................... 147
Observations on the two iterations ............................................................ 152
Problems encountered by the collaborative groups .................................... 153
Discussion ................................................................................................. 164
Design principles ....................................................................................... 166
CHAPTER 7  Technology ................................................................. 169

Research question 3 ........................................................................ 169
Framework and method of analysis .................................................. 169
Analysis of participants’ contributions ............................................. 172
The CMC tools used in the study ...................................................... 174
Discussion ....................................................................................... 232
Design principles ......................................................................... 236

CHAPTER 8  Scaffolding ................................................................. 241

Research question 4 ........................................................................ 241
Framework and method of analysis .................................................. 241
Analysis of facilitators’ support and scaffolding ................................ 243
Scaffolding role of the facilitators ................................................... 245
Discussion ....................................................................................... 261
Design principles ......................................................................... 267

CHAPTER 9  Conclusion ................................................................. 269

Summary of the study ..................................................................... 269
Findings of the study ...................................................................... 271
Design principles for developing an online community of language learners ........................................... 278
Limitations of the study .................................................................. 280
Recommendations for future research ........................................... 281
Concluding remarks ...................................................................... 281

References ..................................................................................... 285
Appendices ................................................................. 307

APPENDIX 1 Guidelines for student participants ................................................................. 309
APPENDIX 2 Information on the reflective portfolio ............................................................. 311
APPENDIX 3 Australian participant information letter ....................................................... 315
APPENDIX 4 Australian participant consent form .............................................................. 317
APPENDIX 5 Guidelines for facilitators ........................................................................ 319
APPENDIX 6 Information letter for the facilitators ............................................................. 323
APPENDIX 7 Consent form for the facilitators .................................................................. 327
APPENDIX 8 Schedule, classification and rationale of focus group interview
questions ......................................................................................................................... 329
APPENDIX 9 Schedule, classification and rationale of student interview questions ........... 331
APPENDIX 10 Schedule, classification and rationale of interview questions with
facilitators ....................................................................................................................... 337
List of Tables

Table 2.1  Authentic task as an element of an authentic learning context ............ 29
Table 2.2  Design principles for online communities of practice ...................... 37
Table 4.1  Design elements that emerged from the literature, and guidelines for their implementation in the learning environment ...................... 84
Table 5.1  Stages of analysis of data: Authentic tasks ......................................... 91
Table 5.2  Impact of the 10 elements of authentic tasks on student learning and design principles ............................................................. 142
Table 6.1  The four groups and their travel destination: Iteration 1 ..................... 148
Table 6.2  The five groups and their travel destination: Iteration 2 ....................... 149
Table 6.3  Strategies employed by the collaborative groups: Iteration 1 .............. 150
Table 6.4  Strategies employed by the collaborative groups: Iteration 2 .............. 150
Table 6.5  Strategies for effective collaboration and design principles ............... 167
Table 7.1  Message categories for analysing participants’ online contributions .......................................................... 171
Table 7.2  Stages of analysis of data: Technology .............................................. 173
Table 7.3  Reliability of coding ........................................................................... 174
Table 7.4  Messages posted to the New South Wales group discussion forum .......................................................... 193
Table 7.5  Messages posted to the Queensland group discussion forum .............. 196
Table 7.6  Messages posted to the Northern Territory group discussion forum .... 199
Table 7.7 Messages posted to the Victoria group discussion forum .................... 202
Table 7.8 Messages posted to the Lombardia–Veneto group discussion forum........................................................................................................ 205
Table 7.9 Messages posted to the Toscana group discussion forum .................... 208
Table 7.10 Messages posted to the Lazio–Umbria group discussion forum ......... 211
Table 7.11 Messages posted to the Campania group discussion forum ................. 213
Table 7.12 Messages posted to the Sicilia group discussion forum ....................... 216
Table 7.13 Recommendations for student contributions and design principles ........................................ ................................................... 237
Table 8.1 Categories for analysing the support and scaffolding provided by facilitators ........................................................................................................ 243
Table 8.2 Stages of analysis of data .............................................................................. 244
Table 8.3 Reliability of coding .......................................................................................... 245
Table 8.4 Allocation of facilitators to groups during the first iteration ............... 245
Table 8.5 Allocation of facilitators to groups during the second iteration ........... 246
Table 8.6 Type of support and scaffolding provided by facilitators to the collaborative groups: Iteration 1 ......................................................... 246
Table 8.7 Type of support and scaffolding provided by facilitators to the collaborative groups: Iteration 2 ......................................................... 247
Table 8.8 Recommendations for effective scaffolding and design principles ...... 267
Table 9.1 Design principles for developing an online community of language learners ........................................................................................................ 279
List of Figures

Figure 3.1. Predictive and design-based research approaches in educational technology research (Reeves, 2006, p. 59) ........................................... 48

Figure 4.1. Class forum open discussion space .................................................. 74

Figure 4.2. New South Wales group discussion forum ........................................... 77

Figure 4.3. Description of Task 1 ........................................................................ 79

Figure 4.4. Description of Task 2 ........................................................................ 79

Figure 7.1. Messages posted to the first class discussion forum ......................... 175

Figure 7.2. Proportion of categories: first class discussion forum ....................... 181

Figure 7.3. Messages posted to the second class discussion forum ....................... 182

Figure 7.4. Proportion of categories: second class discussion forum .................... 189

Figure 7.5. Messages posted to the New South Wales group discussion forum ...... 192

Figure 7.6. Proportion of categories: New South Wales group discussion forum ...... 194

Figure 7.7. Messages posted to the Queensland group discussion forum ............ 195

Figure 7.8. Proportion of categories: Queensland group discussion forum .......... 197

Figure 7.9. Messages posted to the Northern Territory group discussion forum ....... 198

Figure 7.10. Proportion of categories: Northern Territory group discussion forum .... 200

Figure 7.11. Messages posted to the Victoria group discussion forum ................. 201
Figure 7.12. Proportion of categories: Victoria group discussion forum ............... 203

Figure 7.13. Messages posted to the Lombardia-Veneto group discussion forum ........................................................................................................... 205

Figure 7.14. Proportion of categories: Lombardia–Veneto group discussion forum ........................................................................................................... 206

Figure 7.15. Messages posted to the Toscana group discussion forum ............... 207

Figure 7.16. Proportion of categories: Toscana group discussion forum ............. 209

Figure 7.17. Messages posted to the Lazio-Umbria group discussion forum .......... 210

Figure 7.18. Proportion of categories: Lazio–Umbria group discussion forum ...... 212

Figure 7.19. Messages posted to the Campania group discussion forum ............. 213

Figure 7.20. Proportion of categories: Campania group discussion forum ........... 214

Figure 7.21. Messages posted to the Sicilia group discussion forum .................... 215

Figure 7.22. Proportion of categories: Sicilia group discussion forum .................. 217

Figure 7.23. Message categories of group discussion forums: Iteration 1 .......... 218

Figure 7.24. Message categories of group discussion forums: Iteration 2 .......... 218

Figure 7.25. Categories of asynchronous communication: Iteration 1 ............... 220

Figure 7.26. Categories of asynchronous communication: Iteration 2 ............... 222
CHAPTER 1

Introduction

Background to the study

Second language acquisition (SLA) is a complex and diverse field of study, which explores the process of foreign and second language acquisition and describes the conditions that make it possible. SLA emerged as an independent discipline in the 1960s, branching off from research on first language acquisition in children, and drawing from areas such as linguistics, psychology, psycholinguistics, sociology, sociolinguistics, discourse analysis, cross cultural communication and education. Over the last 60 years various linguistic phenomena have been researched and several theories have been developed to attempt to explain how languages are learned. These different theoretical perspectives and approaches have informed the practice of second language pedagogy and have led to the development of a variety of language teaching methodologies.

The 1950s and 1960s were characterised by a behaviourist orientation to second language acquisition and second language pedagogy. Influenced by the work of the American linguist Leonard Bloomfield (1933), who studied the process of first language acquisition in children, and behavioural psychologists such as John Watson (1924) and B.F. Skinner (1957), linguists in the behaviourist tradition conceptualised language acquisition as essentially habit formation and imitation of correct linguistic patterns. For the behaviourists, errors were seen as habits associated with the first language, which interfered with the habits needed for the acquisition of the second language (Lado, 1957). Therefore, in order to successfully acquire a second language, it was critical for the learner to develop a new set of habits to replace the habits of the native language (Fries, 1952) and to be corrected when producing a grammatically incorrect form (Lado, 1964).
In the behaviourist tradition, the process of SLA was studied for its pedagogical implications rather than for its theoretical implications. The pedagogical focus of the behaviourist framework led to the development of several methods of language instruction. A first method was the grammar translation method, which focused on the formal analysis and memorisation of the system structures of the second language and on the application of grammatical rules to produce grammatically correct sentences (Fries, 1952), and also on the translation of texts to and from the target language. A second method was the audio-lingual method, which focused on the oral production of automatic correct responses to given linguistic stimuli and involved repetition of pattern drills and memorisation of dialogues. A third method, which was used at more advanced level, consisted in the Contrastive Analysis of the structural differences between the system structures of the native language and of the target language to isolate the structures that needed to be learned from those which did not need to be learned and to develop a higher level of grammatical competence (Fries, 1945; Lado, 1957; Stockwell, Bowen & Martin, 1965).

In 1959, the American linguist Noam Chomsky published a critical review of Skinner’s article Verbal Behavior in which he challenged Skinner’s explanation of language in behavioural terms and rejected the dominant behaviourist model of language and language learning based on imitation and habit formation. Chomsky proposed a theory of generative grammar and argued that the development of an individual’s grammatical system was guided by innate cognitive structures or language acquisition devices located within the brain. According to Chomsky, language was an aspect of individual cognition and the process of language acquisition was an internalised, cognitive process, which was mentally constructed by the individual. From this perspective, the learner was viewed as an active participant in the process of developing grammatical competence, rather than a passive imitator of correct linguistic forms, because of the ability to generate and transform knowledge using innate mental structures.

Chomsky himself did not discuss the implications of his cognitively-oriented theories of psychology and second language acquisition for second language pedagogy. However, following the emergence of his theories of generative grammar, the focus of second language teaching shifted from the behavioural reinforcement of accurate linguistic habits to fostering learners’ mental construction of second language systems. Chomsky’s theory of a transformational-generative grammar (Chomsky, 1957, 1965, 1975) and his conceptualisation of language acquisition as an individual phenomenon
located in the mind of the learner, had a powerful impact on the field of linguistics and influenced the work of SLA researchers for several decades. Among those researchers the most significant have been Corder (1967), who studied learners’ errors, Selinker (1972) who developed the notion of interlanguage, and Krashen (1977, 1978) who developed the Monitor Model.

Krashen’s Monitor Model, with its five main hypotheses, became one of the most influential models of SLA and found widespread application to second language pedagogy. Krashen’s five hypotheses, which have been revised over the years (Krashen, 1985) and are described in detail in Mitchell, Myles and Marsden (2013), are: (1) the Acquisition-Learning Hypothesis, (2) the Natural Order Hypothesis, (3) the Monitor Hypothesis, (4) the Input Hypothesis and (5) the Affective Filter Hypothesis. The Input Hypothesis is particularly significant as it states that SLA depends on the amount of comprehensible input a learner receives in the second language. According to Krashen, this input should be understandable, provided in sufficient quantities and at a level a little more advanced that the learners’ current linguistic competence. In other words, in order to acquire a language, learners need to receive messages they can understand but that are also a little beyond their current level of proficiency.

Despite being criticised for not having enough validity and for not being supported by empirical evidence (Gregg, 1984; McLaughlin, 1978, 1987; White, 1987) and for the insufficiency of comprehensible input alone in the development of second language proficiency (Long, 1981; Swain, 1985), Krashen’s Input Hypothesis made a significant contribution to the field of SLA, prompting other researchers to elaborate on it and explore different aspects of the language acquisition process. One of the most relevant theoretical approaches developed out of the Input Hypothesis was the Interaction Hypothesis. While Krashen’s model postulates that only one-way comprehensible input is needed for acquisition to take place, the Interaction Hypothesis suggests that two-way communication and oral interaction with other speakers of the target language are crucial elements in SLA (Gass, 2003; Gass & Mackey, 2007; Long, 1983, 1996; Pica, 1994, 2013). According to the proponents of the interaction approach, the process of second language development is facilitated by one particular type of interaction, which has been described as negotiation of meaning (Long, 1996, 2007; Pica, 1994, 2013). This process of negotiation of meaning—when learners engage in interpersonal oral interaction and endeavour to negotiate meaning among themselves to overcome potential communication problems—creates the internal processes responsible for
inter-language development. This process encourages learners to focus their attention on specific features or issues related to the language in use (Long, 2007; Mackey, 2007, 2012; Mackey & Gass, 2006) and to experiment with language forms and structures by manipulating the linguistic input received in the form of comprehensible and meaningful output in order to convey meaning (Swain, 2000, 2005).

While the behaviourist perspective and the cognitively-oriented linguistic models that have stemmed from Chomsky’s theories have had a major impact on second language pedagogy, they have also been shown to present significant limitations for second language educators and practitioners. The inadequacies of the behaviourist approach and methods of language instruction, for example, relate to the fact that they do not promote a deep learning approach to second language acquisition because they rely on mechanical practices such as rote memorisation and repetition of grammatical rules and on the decontextualised application and production of grammatically correct linguistic forms and structures. Such practices are not intrinsically motivating for students as they do not encourage them to engage actively with the content and to be active participants in the process of developing their own linguistic competence, but simply require them to passively imitate correct linguistic forms. Consequently, the linguistic knowledge acquired using these types of structured practices is less likely to be retained by the students over a sustained period of time.

The limitations of cognitively-oriented models and language teaching methodologies, on the other hand, relate to the fact that they focus on the development of linguistic competence as a cognitive process that is situated inside the learner’s head and tend to view the interactions that take place in the second language as isolated and decontextualised linguistic input and output, rather than meaningful social practices that occur in a particular social and cultural context. While the grammatical focus of these types of interactions can contribute to learners’ second language development, it does not promote meaningful and authentic language use and does not encourage learners to establish a connection between the linguistic structures and forms that they are learning and the types of goal-oriented situations that are typical of real-world communicative contexts. The purely grammatical focus of the cognitively-oriented perspectives and methods of language instruction can impact negatively on learners’ motivation to engage with the target language in a meaningful way and use it for real-world communicative purposes.
The inadequacies of these structurally-driven theoretical frameworks and decontextualised grammar-based methodologies have led researchers to explore the possibility of integrating a theoretical approach which takes into account the formal and structural aspects of language and second language acquisition, without isolating them from the social and cultural context in which second language learning naturally occurs (Lantolf, 2013; Lantolf & Beckett, 2009; Lantolf & Poehner, 2014; Lantolf & Thorne, 2006; Lantolf, Thorne & Poehner, 2014; Swain, Kinnear & Steinman, 2015; Thorne, 2005; van Lier, 2004; Zuengler & Miller, 2006). One theoretical framework which has the potential to provide a more contextualised approach to second language learning, and which emphasises the integrated nature of the structural and social elements in the second language learning process, is Vygotsky’s sociocultural theory (SCT) applied to second language acquisition.

Vygotsky’s sociocultural perspective applied to second language acquisition views the social environment as the main source of cognitive and linguistic development, rather than simply a resource that can be used to supply learners with linguistic input in order to assist them develop their grammatical competence. In this framework, the interactions and collaborative dialogue that take place in the second language are not conceptualised as linguistic input and output but as meaningful social practices that shape and influence second language development (Donato, 2000; Ellis, 2000; Swain, 2000, 2005, 2010; Swain & Watanabe, 2012; Swain, Kinnear & Steinman, 2015).

As a result, the application of the sociocultural framework to second language acquisition and pedagogy has led to the development of methodologies which focus on providing learners with opportunities for collaborative social interaction and dialogue with other members of a particular speaking community. More specifically, the application of the Vygotskian concept of zone of proximal development (ZPD) to second language pedagogy supports teaching practices which focus on fostering social relations and on creating increased opportunities for language practice with more advanced and proficient speakers of the target language, who can model appropriate and correct target language use and assist learners to move beyond their own limitations and advance in their ZPD (Kitade, 2000; Lightbrown & Spada, 2013; Otha, 2000, 2005; Thorne & Lantolf, 2007). In a similar way, the concept of scaffolding, originally developed by Wood, Bruner and Ross (1976) and later elaborated and refined by researchers influenced by the Vygotskian notion of ZPD (Bruner, 1986; Daniels, 2001; Wells, 1999; Wood, 1988), provides the conceptual basis for describing and analysing
the influence of a teacher or a more competent target language speaker on learners’ linguistic and cognitive development (Donato, 1994; Otha, 2005). A final significant pedagogical implication of the sociocultural framework involves the practice of task-based language teaching, which involves integrating authentic and meaningful tasks that have real-world relevance as a basis for language practice in the second language classroom (Ellis, 2003, 2009; Nunan, 2004; Skehan, 2003).

In order to provide a rationale for the application of the sociocultural approach to the specific context of this study and to explore the dimensions of some of the issues related to learning Italian as a second language in the Australian university context, preliminary discussions and consultations with teachers of Italian language and culture courses in Australian universities were conducted. These consultations are described in the following section.

**Practitioner consultations and discussions**

Practitioner consultations provided further understanding of the specific problems of learning a second language beyond the issues discussed in the literature, and have added a practical dimension to the discussion by relating these issues to the specific context of an Italian as a second language university course in Australia.

In the following section, information gathered from a series of informal conversations and discussions with 10 university lecturers and tutors (who were the researcher’s current and former colleagues) prior to the beginning of the study is presented to establish the significance of the study as understood prior to the collection of data and to gain insights into their views about the nature and extent of the problem area in practice. These discussions revealed a number of critical issues related to learning Italian as a foreign language in formal university classroom settings in Australia. They also enabled the development of a list of possible solutions and strategies informed by the practitioners’ personal experience and teaching practice. The critical issues raised by the practitioners and the strategies developed to address them are described in the sections that follow.
Critical issues identified by practitioners

Lack of opportunities to interact with target language native speakers

The first issue identified by the practitioners was learners’ lack of opportunity to engage in meaningful and authentic interaction with native speakers of the target language. This lack of exposure to the correct and appropriate language used by competent target language speakers in their communicative interactions is due to the fact that, with the exception of some familiar or local contexts, the target language is not widely spoken in the local community and that bringing competent native speakers into the classroom on a regular basis is problematic and impractical. Although study abroad opportunities are becoming increasingly common in Australian universities, many students do not have the opportunity to travel and spend some time in the target language country during the course of their language studies, due to physical and geographical limitations and to financial constraints.

Reliance on decontextualised non-authentic tasks

A second issue noted by the practitioners related to the use of decontextualised non-authentic textbook-based tasks and situations that focus primarily on the development of grammatical competence as a resource for communicative practice in the language classroom. The practitioners agreed that, although these types of textbook tasks can be valuable and convenient for the language instructor, their exclusive focus on the reproduction of fixed phrases, rather than on meaningful and purposeful language use, limits students’ opportunities to learn to produce their own original sentences independently and limits their exposure to the types of authentic language that is typical of real-world communicative contexts.

According to the practitioners consulted, pedagogy restricted to grammar-based tasks and exercises and the decontextualised acquisition of vocabulary lists, does not automatically translate into students’ ability to use the target language accurately and fluently for communicative purposes, and needs to be balanced by a focus on meaning and on purposeful and real-life language use.

Reliance on non-authentic assessment

A further area of concern identified by the practitioners related to the fact that, despite the variety of innovative and effective assessment techniques available to language instructors, teachers often find it easier and more time-efficient to rely on traditional,
non-authentic and decontextualised methods of assessment, such as grammar tests and quizzes, to evaluate students’ level of linguistic and cultural competence. The practitioners agreed that, although these types of decontextualised assessments tasks can be efficient and convenient for the language instructor who needs to quickly test students’ linguistic proficiency, their narrow focus on the production of correct linguistic form does not reflect students’ ability to use the language in meaningful, authentic context and limits even further students’ opportunities to engage in activities that are authentic and purposeful.

**Lack of sustained motivation**

A final issue was the difficulty of keeping students motivated in learning and using the target language for the sustained period of time that is required in order to arrive at a higher level of language proficiency. Several practitioners noted that it is common for students to enrol in a second language university course for only one or two semesters and not to continue past the beginner or intermediate level due to the demands of studying a language at advanced level and to conflicting study and work commitments.

According to the teachers and practitioners consulted and interviewed, all the issues discussed above limit learners’ ability to achieve a higher level of language proficiency. In addition, they can also contribute to a decrease in learners’ motivation and engagement with the subject, as learners may feel that they are unable to create a meaningful connection with other members of the target language speaking community and with the target language culture.

**Solutions and implications for practice**

In addition to identifying the types of issues outlined by the practitioners, the researcher was also interested in the specific teaching strategies that could be used to attempt to solve them, in order to encourage students’ interaction with other native speakers and facilitate the language learning process. The practitioners consulted have attempted to provide practical solutions and it was possible to formulate their suggestions into a list of recommendations that have been taken into account by the researcher in developing and implementing the learning environment of this study. The most significant recommendations made by the practitioners are summarised below.
• Provide alternative opportunities for regular interaction and communication with other students and native speakers in the target language outside the formal classroom context using the available technology.
• Design tasks which are authentic and meaning-focused and require learners to use the target language structures learned in class to engage in the types of communicative activities likely to be found in real-world communicative settings.
• Design tasks which immerse learners in the target language culture to increase learners’ interest and motivation.
• Design tasks which meet learners’ interests and relate to future work aspirations and travel opportunities.
• Incorporate small group and pair work with other students and native speakers to foster language acquisition, increase learners’ motivation and reduce anxiety.

These recommendations are in line with some of the principles and pedagogical approaches that have emerged from the application of the sociocultural perspective to second language acquisition as described in the literature, and have been used successfully by many teachers and researchers in their specific second language learning context. In the next section, the four phases of the study are described in brief.

The four phases of the study and the research questions

The purpose of this research was to investigate the development and implementation of an online community of learners to enable students’ interaction and collaboration with native speakers of the target language through participation in authentic, real-life tasks. The study addressed the problem identified in the literature review and through consultation with practitioners of limited direct contact with Italian native speakers and investigated the use of authentic and meaningful communication in the target language. The research was designed to be conducted in four phases according to the model of design-based research (DBR) proposed by Reeves (2006).

Phase 1: Analysis of practical problems by researchers and practitioners in collaboration

The first phase of the research involved identifying and analysing some of the practical problems related to the application of structurally-oriented theoretical perspectives and teaching methodologies, which focus primarily on the application of grammar rules and
on the decontextualised development of grammatical competence, in the context of an intermediate and advanced level Italian as a second language university course at an Australian university. During this initial phase, an in-depth review of relevant second language acquisition literature was conducted and the views of 10 teacher-practitioners were sought to gain insights into their views about the nature and extent of the problem, and to identify possible solutions based on their reflections and teaching practice.

**Phase 2: Development of solutions informed by existing design principles and technological innovations**

Phase 2 of the research involved the identification of draft design principles from both the literature review and the consultations with the teacher-practitioners. In this phase, an online learning environment was designed and developed according to the critical elements and design principles identified from the literature and consultations. These principles were derived from: Vygotsky’s sociocultural theory applied to second language learning; situated learning theory and a pedagogical model for the design and development of authentic e-learning contexts and authentic tasks; and the critical elements that guide the development of successful online communities of practice and communities of learners. During this phase, a learning management system was integrated into the design of a second and third year Italian language class to enable students to interact and collaborate with each other, and with a group of selected native speaker participants through online asynchronous and synchronous communication tools and resources. Two authentic tasks, which incorporated the defining characteristics of authentic tasks outlined in the relevant literature, were designed, and a group of native speaker participants was selected and invited to take part in the study to provide students with additional opportunities for target language use and to support and assist the collaborative completion of the tasks.

**Phase 3: Iterative cycles of testing and refinement of solutions in practice**

In the third phase of the research two iterative cycles of testing and refinement of the solutions proposed in the second phase of the study were implemented within the tutorial component of an intermediate and advanced level Italian language university classroom.
Research questions

Specifically, the third phase of the study aimed to address the following research questions:

1. What elements of authentic tasks provide opportunities for student learning in an online community of learners?

2. How do students collaborate and solve problems in an online community of learners?

3. What was the nature and extent of students’ contributions to the Computer Mediated Communication features and resources provided to support interaction and collaboration in an online community of learners?

4. How do native speaker facilitators support students in the process of completing authentic collaborative tasks in an online community of learners?

Phase 4: Documentation and reflection to produce design principles

The fourth and final phase of the research was the documentation and reflection phase. In this phase, the findings of Phase 3 of the research were documented and reflected upon in order to produce a new set of design principles and guidelines that could be accessed by other language teachers interested in addressing a similar problem within their specific educational context.

The structure of the thesis

This chapter has outlined the background and rationale of this study, described the problem area and consultation with practitioners, and has summarised the four phases of its research methodology.

Chapter 2 provides a review of the research literature in three key areas that are relevant to this study: second language acquisition theory and research, situated and authentic learning, and communities of practice and communities of learners. The chapter concludes with a list of critical elements which have emerged from these theories and frameworks and which guide the development of the learning environment of this study.

Chapter 3 describes and justifies the research methodology employed. The four phases of the study are described in detail. This chapter also discusses the ethical
considerations related to the study and the methods used to ensure reliability and validity of the research.

Chapter 4 describes the process of developing the learning environment of this study to ensure that each of the draft design principles was instantiated in the curriculum design and its implementation in the language classroom.

Chapters 5-8 present the analysis of the data and the discussion of each of the research questions.

Chapter 5 discusses the findings of an investigation into the impact of each of the critical elements of authentic tasks on students’ learning.

Chapter 6 presents the findings of an investigation into the process that students followed to collaborate on the assigned tasks and the strategies that they used to solve the problems that arose during the collaboration.

Chapter 7 investigates the nature and extent of students’ contributions to the CMC features and resources provided to support interaction and collaboration in an online community of learners.

Chapter 8 provides an analysis and discussion of how the native speaker facilitators support students in the process of completing authentic collaborative tasks in an online community of learners.

Chapter 9 presents a summary of the findings of the research and provides a model of design principles and guidelines that could be referred to and followed by other language teachers in order to address similar problems within their specific educational context. Limitations of the study and suggestions for further research are also provided.

The following chapter presents the theoretical context of the research by examining the research literature relevant to the study.
CHAPTER 2

Literature review

Introduction

This chapter presents the theoretical context of the study by examining the research literature in a number of key areas. This literature review is structured in three sections. The first outlines the development of Vygotsky’s sociocultural theory (SCT) applied to second and foreign language learning and the key concepts of the *zone of proximal development* (ZPD) and *scaffolding*. The second section describes the theory of situated learning and the critical elements of authentic e-learning and authentic tasks. The third section examines the concepts of community of practice and community of learners and describes the critical elements and design principles that guide their development in an online learning environment.

The chapter concludes with a list of principles gathered from the literature and research that constituted the draft design principles and provided guidelines for the design and implementation of the learning environment of this study.

Sociocultural theory applied to second language learning

As described in Chapter 1, the inadequacies of the structurally-oriented linguistic models derived from the behaviourist and cognitive theoretical perspectives on language and SLA have led second language acquisition researchers and theorists to develop a theoretical approach that is in line with Vygotsky’s sociocultural theory.

Sociocultural theory was developed by Russian psychologist Lev Semenovitch Vygotsky (1962, 1978, 1981) as a general psychological theory aimed at understanding and explaining higher forms of human mental functioning. Unlike traditional cognitive approaches to learning, which direct their attention to the cognitive processes of individuals in isolation from their learning environment, Vygotskian SCT sees cognitive
development as socially situated. According to Vygotsky, mental development and functioning is the product of the overall social and cultural (sociocultural) context of which an individual is part (Lantolf, 2013; Lantolf & Thorne, 2006; Lantolf, Thorne & Poehner, 2014; Wertsch, 2009) and occurs through interaction and participation in socially mediated activities with other members of that particular culture. The following quote captures Vygotsky’s thinking on development: “Human development is the product of a broader system than just the system of a person’s individual functions, specifically, systems of social connections and relations, of collective forms of behaviour and social cooperation” (Vygotsky, 1999, p. 41). In Vygotsky’s thinking, cognitive development occurs initially through a process of social interaction and collaboration with others and then becomes integrated into the individual’s mental structure. The process through which the external social function becomes an internal function is known as internalisation (Vygotsky, 1962) and is outlined in Vygotsky’s (1981) general genetic law of cultural development:

Any function in the child’s cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an inter-psychological category, and then within the child as an intra-psychological category. This is equally true with regard to voluntary attention, logical memory, and the formation of concepts, and the development of volition…. It goes without saying that internalisation transforms the process itself and changes its structure and functions. Social relations or relations among people genetically underlie all higher functions and their relationship. (p. 163)

As Newman and Holzman (1993) explained, in Vygotsky’s view there is a bi-directional relationship between the individual and the social framework of which he/she is part. The sociocultural context can assist the cognitive development of the individual through a process of internalisation and the individual can have an impact on the social group through the process of externalisation.

Although the Vygotskian sociocultural framework does not offer a formal theory of language development, like other models which account for specific linguistic phenomena, its essential tenets can be applied to SLA and to second language pedagogy. Frawley and Lantolf (1984, 1985) were the first authors to describe the relevance and application of the Vygotskian sociocultural model to SLA and to outline a perspective on language that recognised the central role that the social dimension
plays in the process of second language development. These researchers maintained that second language acquisition is not an intuitive process that happens in isolation inside the learner’s head, as was argued by cognitively based researchers who followed Chomsky’s tradition, but is a developmental process that is embedded within the particular sociocultural context in which it occurs.

Other researchers continued to elaborate on the sociocultural paradigm applied to SLA and argued that second language acquisition is realised through a process of collaborative social interaction and participation in meaningful, goal-oriented communicative activities with other members of a speaking community (Donato, 1994; Lantolf, 2013; Lantolf & Beckett, 2009; Lantolf & Poehner, 2014; Lantolf & Thorne, 2006; Lantolf, Thorne & Poehner, 2014; Otha, 2000; Swain, Kinnear & Steinman, 2015; Thorne, 2005). As Otha (2000) explained, it is through this collaborative social process that learners become aware of the structures and functions of language and appropriate the language of the interaction as their own and for their own purposes. From a sociocultural perspective language learners are no longer viewed as individuals who are constrained by their lack of knowledge or comprehension of the target language and need to be presented with specific sets of grammar rules that are going to lead them to the correct answer, but rather as active participants in the meaning-making process through which they develop their own linguistic competence (Lantolf, 2013; Lantolf & Beckett, 2009; Lantolf & Poehner, 2014; Lantolf & Thorne, 2006).

**The zone of proximal development**

A core aspect of Vygotskian theory is the concept of zone of proximal development. According to Vygotsky (1978), there are two developmental levels in a child’s mental development. The first level is the *actual developmental level*, which is the level of development of a child’s mental functions that is determined as a result of independent problem solving. The second level is the *potential developmental level*, which is the level of development that a child can reach with the assistance of others. The distance between those two levels of development is what has been defined as the *zone of proximal development*, that is: “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86).
According to Vygotsky (1978), a child’s actual developmental level (level of independent performance) does not satisfactorily describe development because it defines mental functions that have already matured during previous developmental cycles. The level of potential development (level of assisted performance) is more significant because it indicates what a child is at present able to do with the assistance of others and what he or she will be able to do independently in the future. The ZPD defines the mental functions which have not yet matured, but that will emerge as the child moves towards the level of potential development.

As Vygotsky proposed with his general law of cultural development, during the first stages of development the child is only able to carry out a given task with the assistance and guidance of an adult, teacher or more capable peer, and is therefore dependent on others. Then, as the child begins to appropriate the higher mental functions and skills from the expert, he or she will gradually become more capable and will eventually be able to carry out the task independently. The assumption that the skills that children can develop with the assistance of a teacher or more capable peers exceeds what they can achieve by themselves, implies that, in order to assist them to advance through their ZPD, it is necessary to provide them with opportunities to interact and cooperate with others. In other words, social interaction and collaborative learning, either between teacher and learners or among learners, are essential in assisting learners to advance through their ZPD.

Moll (1990) discussed the relevance and application of the concept of ZPD to an educational context and explained that the ZPD is used for:

1. Establishing a level of difficulty. This level, assumed to be the proximal level, must be challenging for the child but not too difficult.
2. Providing assisted performance. The adult provides guided practice to the child with a clear sense of the goal or outcome of the child’s performance.
3. Evaluating independent performance. The most logical outcome of a zone of proximal development is the child performing independently.

Several other researchers who have interpreted and applied the concept of ZPD to instructional research have pointed out that the focus of the ZPD is not simply on transferring knowledge and skills from individuals who are more capable or competent (experts) to those who are less capable (novices) through social interaction (Moll, 1990;
Wells, 1999). Rather, the focus of the ZPD should be on the co-construction of contexts and opportunities for both experts and novices to assist one another in creating zones of proximal development in which they can all learn and develop (Donato, 1994; Wells, 1999) and in which expertise can emerge as a feature of the particular group which is working collaboratively (Lantolf, 2013).

While the notion of ZPD was developed by Vygotsky to explain the cognitive and social development in children by measuring their potential age as compared to their actual age in terms of mental development, this concept has also been directly applied to second language acquisition research and pedagogy. In SLA research the ZPD has been defined as: “The difference between the second language (L2) learner’s development level as determined by independent language use, and the higher level of potential development as determined by how language is used in collaboration with a more capable interlocutor” (Otha, 1995, p. 96). This definition implies that the linguistic skills that second language learners can develop with the assistance of a teacher or a more proficient user of the target language exceed what they can achieve independently (Otha, 2005). Therefore, in order to assist learners develop their language skills and advance through their ZPD, it is essential to provide them with opportunities to interact and collaborate with more proficient speakers of the target language such as teachers, peers and native speakers (Kitade, 2000; Lightbrown & Spada, 2013; Otha, 2000, 2005; Thorne & Lantolf, 2007).

The notion of ZPD applied to second language learning is a key developmental space for second language acquisition (Otha, 2005) and provides a useful framework for designing online language learning environments that support the development of social relations and learners’ participation in collaborative and meaningful interaction with more advanced speakers of the target language. In the specific context of this study, the main focus is not measuring individual learners’ linguistic development as they engage in collaborative dialogue with native speakers, but rather investigating and describing how more competent speakers of the target language can mediate and assist learners advance in their ZPD and how they can provide them with effective scaffolding and specific support as they complete an authentic collaborative activity. The concept of scaffolding and its implications for this study are described in detail in the section that follows.
Scaffolding

The term *scaffolding* appeared for the first time in a paper by Wood, Bruner and Ross (1976) and was used to describe the process by which an adult or competent person can support and guide the learning and development of young children during joint problem-solving activities. Wood et al. stated that the scaffolding process “enables a child or novice to solve a problem, carry out a task or achieve a goal that would be beyond his unassisted efforts” (p. 90). According to Wood et al., during the scaffolding process the adult controls “those elements of the task that are initially beyond the learner’s capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence” (p. 90). The idea behind the scaffolding process is to help learners arrive at a better understanding of what they need to do in order to accomplish the tasks, not by assisting them complete the task itself but by scaffolding their understanding of how to conceptualise the task and of the steps to take in order to accomplish it. As Wood et al. stated in their original article, a crucial aspect of the scaffolding process is that “comprehension of the solution must precede production” (p. 90). The learners’ new understanding of how to accomplish the task is achieved through a process of ongoing interaction in which the competent adult provides the appropriate amount of assistance depending on the learner’s level of competence. Wood et al. explained that, in order for the scaffolding process to be successful, the amount of scaffolding provided by the knowledgeable adult or teacher needs to gradually decrease, or fade. This implies that, over time, as the learners gradually take on more responsibility for the task, they can be provided with a decreasing level of scaffolding in order to accomplish the same task. Wood et al. identified six types of assistance that the adult or teacher could provide to children:

1. Recruiting interest in the task;
2. Simplifying the task;
3. Maintaining pursuit of the goal;
4. Marking critical features and discrepancies between what has been produced and the ideal solution;
5. Controlling frustration during problem solving;
6. Demonstrating an idealised version of the act to be performed.
Greenfield (1984) pointed out the similarities between scaffolding as it is used to support learning, and in building construction. She further refined the scaffolding metaphor and emphasised the fact that scaffolding does not involve simplifying a particular learning task, but rather keeping the task constant “while simplifying the learners’ role throughout the graduated intervention of the teacher” (p. 119). Greenfield (p. 118) described scaffolding as comprising five main features, which are relevant in both the building and educational context:

1. Provides support;
2. Functions as a tool;
3. Extends the range of the worker;
4. Allows the worker to accomplish a task not otherwise possible;
5. Is used selectively to aid the worker where needed.

These early accounts of the scaffolding metaphor emphasised the crucial role of the competent adult or teacher in creating supportive conditions so that learners could extend their current skills and knowledge to a higher level of competence. In order for the scaffolding process to be successful, it is critical that the competent adult or teacher is active in revising, modifying and adapting the support or scaffold in response to the emerging capabilities of the learners and to their level of understanding of the task (Collins, Brown & Newman, 1989; Greenfield, 1984; Rogoff, 1990; Wood et al., 1976).

Over the past three decades, several researchers and educators, including the original developers of the scaffolding metaphor, have revised and developed the original conceptualisation of its features as proposed by Wood et al. (1976) and Greenfield (1984), and have interpreted the metaphor as a direct application of the Vygotskian notion of teaching in the zone of proximal development (Bruner, 1986; Daniels, 2001; Wells, 1999; Wood, 1988). Although Vygotsky himself never used the term scaffolding in his writings, his notion of the ZPD (Vygotsky, 1962, 1978) provided the conceptual basis for describing and analysing the influence of adult-child interactions on children’s cognitive development (Bruner, 1975; Day & Cordon, 1993; Ellis & Gauvain, 2013; Tudge & Rogoff, 1999) and of teacher-student interactions on student learning in a classroom context (Langer & Applebee, 1986; Palincsar, 1986, 2012; Palincsar & Brown, 1984; Wells, 1999; Wertsch, 2009).
In attempting to explain the way in which the concept of scaffolding relates to the Vygotskian notion of ZPD, Wells (1999) identified three critical features of educational scaffolding:

1. The dialogic nature of the discourse in which knowledge is co-constructed;
2. The significance of the type of activity in which knowing is embedded;
3. The important role of collaboratively produced artefacts that mediate knowing.

These features of educational scaffolding are consistent with the definition of ZPD provided by Vygotsky (1978) and emphasise the crucial role of dialogue and collaboratively produced artefacts in developing and furthering learners’ knowledge and skills.

In addition, Mercer and Fisher (2013) contended that the main aim of scaffolding is the transfer of responsibility for a particular task from the teacher to the learner. They proposed that successful scaffolding should:

1. Enable the learners to carry out a task which they would not have been able to carry out on their own.
2. Bring the learners to a level of competence which would enable them to complete the task independently.
3. Be followed by evidence that the learners have achieved a greater level of competence as a result of the scaffolding experience.

These elements of successful scaffolding emphasise teacher and learner collaboration and negotiation and the need to support learners’ ability to complete a task independently, by gradually withdrawing the scaffolding and transferring the responsibility for the performance of a task to the learner.

Another crucial implication of a Vygotskian inspired view of the scaffolding metaphor is that the scaffolding process is not interpreted as a teacher-initiated directive instructional strategy but as a fluid, two-way interactive process which occurs between teacher and student (Stone, 1998). In this framework, the learner is not viewed as a passive participant in teacher-student interactions but as an active participant in an interpersonal process in which both student and teacher build a common understanding through collaborative dialogue. According to Stone, through this type of interpersonal
collaborative dialogue, students learn from the perspective of their teacher or other more competent and knowledgeable peers and advance through their ZPD.

The concept of scaffolding described above has been developed originally in traditional face-to-face settings. As this study is concerned with the development of an online community of learners, studies which apply the scaffolding metaphor to distance and online learning environments are also reviewed and considered. The application of the concept of scaffolding to distance and online learning environments is described in detail in the section that follows.

**Scaffolding in distance and online learning environments**

The original conceptualisation of scaffolding offered by Wood et al. (1976), and later elaborated and refined by researchers influenced by the Vygotskian notion of the ZPD, was developed in traditional face-to-face settings. In these learning contexts, scaffolding is offered mostly by a teacher who supports students’ learning by modelling the target performance of a particular task and by asking learners relevant questions and providing verbal explanations and specific feedback to assist them identify appropriate strategies to complete the task (Roehler & Cantlon, 1997; Tharp & Gallimore, 1988). In such settings, the teacher generally supports learners through a process of task planning and structuring (Applebee & Langer, 1983; Edwards & Westgate, 2005) and direct verbal interaction (Palincsar, 1986; Tharp, 1993), while the student relies mostly on face-to-face contact with the expert or teacher for assistance and guidance (Tharp, 1993).

With a shift of focus on teaching and learning beyond the traditional classroom to distance and online learning settings, and with recent advances in student-centred, technology-supported learning environments, the concept of scaffolding has expanded to include alternative forms of support, such as asynchronous discussion forums, synchronous chats and video calls, which enable small group dialogue and interaction with other learners and which allow the sharing of information, review of ideas and feedback among different groups of learners in an online community (Hannafin, Hill, Land & Lee, 2014; McConnel, 2006; Pea, 2004). These new forms of support have contributed to reducing the need for the direct intervention of the teacher that had characterised many of the traditional face-to-face learning settings (McLaughlin, 2002; Salmon, 2011) and have helped foster a more learner-centred, self-directed constructivist approach to teaching and learning (Hannafin, Hill, Land & Lee, 2014;
Salmon, 2011; West, Hannafin, Hill & Song, 2013). The integration of alternative forms of support in technology-enhanced learning environments has contributed to expanding and sustaining the dialogue and discussion initiated in face-to-face environments (Garrison & Vaughan, 2011), enhancing collaboration and cooperation among learners (McConnel, 2006; Zumbach, Reinman & Koch, 2006), facilitating student autonomy and self-regulated learning (Hannafin, Hill, Land & Lee, 2014) and developing and enhancing metacognitive knowledge, critical thinking and reflection (West, Hannafin, Hill & Song, 2013).

While the core principles that underpin the scaffolding metaphor apply and are still relevant to both face-to-face and online learning environments (McLaughlin, 2002; Oliver & McLaughlin, 2001), the types of scaffolding that teachers or facilitators need to offer to support the learning process in online learning settings should be different (Puntambekar & Hübscher, 2005; Sharma & Hannafin, 2007).

McLaughlin (2002, pp. 156-159) proposed a set of 10 dimensions of successful learners’ support that can be applied to the design of effective online learning environments. These dimensions, which are based on the application of constructivist principles drawn from different technology-enhanced learning contexts, need to be combined in order to create effective instructional scaffolds:

1. **Goal orientation.** The level and amount of support should be goal directed to enable learners to successfully complete a task and to foster independent learning.

2. **Adaptability.** The scaffold should be flexible to meet the needs of a diverse range of learners and should be modified and reduced (or fade) as learners’ level of competence increases.

3. **Accessibility.** The scaffold needs to be accessible to learners when they need it and facilitators or moderators should be available to provide continuous support.

4. **Alignment.** The support should be aligned with task goals and learning outcomes to ensure consistency and structure in course design.

5. **Experiential value.** Scaffolds should enable students to experience an event or situation as the focus of their learning. Scaffolds should enable the transfer of skills to a new task and should help students create new knowledge.

6. **Collaboration.** The scaffold should support collaboration and dialogue.
7. *Constructivism.* The scaffolding activity should be designed to support knowledge construction rather than memorisation or rote learning.

8. *Learning orientation.* The scaffolds need to be designed to encourage self-regulation and independent learning.

9. *Multiplicity.* Scaffolds should be designed to support many aspects of the learning process such as metacognition, reflection, articulation and comparison of multiple perspectives.

10. *Granularity.* Scaffolds need to be created at the level of the task to enable learners to select and reconstruct the parts of the tasks that are meaningful to them.

More recently, Salmon (2011) developed a five-stage model to support effective scaffolding in online collaborative learning environments. This model, which is also based on constructivist, learner-centred principles, is developmental and focuses specifically on the critical role of the e-moderator as a mediator and facilitator of students’ learning in technology supported learning environments and on the type of activities that are appropriate for promoting successful learning in such settings. The five stages of this model are:

1. *Access and motivation.* Individual access and purposeful reasons to engage in online learning are essential prerequisites for full participation and engagement and for successful collaborative learning.

2. *Online socialisation.* Individual participants establish their online identities and interact with others in the online environment.

3. *Information exchange.* Participants engage in mutual exchange of information and make learning-related contributions.

4. *Knowledge construction.* Group discussions develop and interaction becomes collaborative, team-oriented and more complex, leading to knowledge construction.

5. *Development.* Participants exploit the benefits of online learning to pursue their ideas and goals and reflect on the learning process.

According to Salmon (2011), each stage of this model requires participants to master specific technical skills and requires different e-moderating skills. At Stage 1, participants need information and technical support to get online, and require strong motivation and encouragement. At this stage, the e-moderators need to expose
participants to the learning platform to enable them to make optimal use of the technology and appreciate the benefits of the new online learning environment, and need to encourage online participation. At Stage 2, participants start to operate and communicate in the new online environment and e-moderators need to promote and facilitate social interaction by creating a safe climate that promotes trust and mutual respect and enables participants to express themselves. At Stage 3, participants start to appreciate the broad range of opportunities provided by the online learning environment and e-moderators need to continue to encourage active participation and positive online relationships, while providing direction and formative feedback and ensuring that participants contribute to the learning tasks. At Stage 4, participants interact actively with each other and start to engage in active and productive collaborative learning that leads to development and knowledge construction. At this stage, the e-moderators need to enable the development and review of ideas through discussion and collaboration and support the collaborative groups in the process of knowledge construction. At Stage 5, participants become responsible for their own learning and can provide assistance and guidance to newcomers or less experienced participants. At this stage, e-moderators need to challenge participants to explore their own thinking and knowledge-building processes to foster reflection and knowledge construction.

The model described above is highly relevant to this study as it provides insights into the dynamics of collaborative learning in online and distance education settings mediated by technology and provides a useful framework for developing effective scaffolding practices in an online community of second language learners. In the specific context of this study, both the teacher and the native speaker participants could act as mediators and facilitators of students’ learning and provide appropriate scaffolding and support depending on learners’ abilities and level of competence.

**Situated learning**

The concept of situated learning or situated cognition was originally introduced by Brown, Collins and Duguid (1989) to refer to the role of context in the learning of knowledge and skills, and to describe the situated nature of learning. In their article, Brown et al. (1989) analysed the common features of a number of effective learning situations and developed a model of situated learning that was based on their observations. The common features of the successful learning situations were later...
summarised by McLellan (1996) and included: apprenticeship, collaboration, reflection, coaching, multiple practice and articulation.

In their investigation, Brown et al. (1989) observed that meaningful learning can only occur if it is embedded in the social and physical context in which it will be used in the future, and advocated a method of instruction based on the traditional model of learning and teaching through apprenticeship. The cognitive apprenticeship model involved situating abstract tasks into authentic contexts and was designed to enable students to participate in authentic practices through activity and social interaction (Brown et al., 1989) in order to enable them to “see the processes of work” (Collins, Brown & Holum, 1991, p.1).

Collins, Brown and Newman (1989, p. 456) identified three key characteristics of the traditional apprenticeship that need to be incorporated into a situated learning model:

1. Learners have access to models of expertise which can assist them to refine their understanding of complex skills;

2. Apprentices often have several masters and have access to a variety of models of expertise which lead them to understand that there may be different ways to carry out a particular task;

3. Learners have the opportunity to observe other learners with different levels of skills.

Collins, Brown and Holum (1991) and Collins, Brown and Newman (1989) further developed the situated learning model and proposed a framework for designing effective learning environments based on four critical dimensions: content, method, sequence, and sociology.

The first dimension of the framework, content, consists of domain knowledge and three types of strategies. Collins et al. (1991) refer to domain knowledge as “the concepts, facts, and procedures explicitly identified with each subject matter” (p. 13). This type of knowledge is taught in traditional school settings and is generally the focus of textbooks and class lectures. The first types of strategies are the heuristic strategies, and are generally acquired by experts through the practice of solving problems. The second types of strategies, according to Collins et al. (1991), are the control strategies, and are used to “control the process of carrying out a task” (p. 13), while the third types of strategies are the learning strategies, and are the general strategies that experts have
developed for exploring new domains or for “extending or reconfiguring knowledge in solving problems or carrying out complex tasks” (p. 13).

The second dimension of the framework, *method*, consists of six teaching methods: modelling, coaching, scaffolding, articulation, reflection and exploration. The first three methods, modelling, coaching and scaffolding, are at the heart of cognitive apprenticeship. The fourth and fifth methods, articulation and reflection are “designed to help students both to focus their observations of expert problem solving and to gain conscious access to (and control of) their own problem-solving strategies” (p. 13). The final method, exploration, is used to encourage the learners’ independence in both executing expert problem-solving processes and in defining the problems to be solved.

The third dimension of the framework, *sequencing*, suggests three principles that must be balanced when sequencing learning activities for students. These are: global before local skills, increasing complexity and increasing diversity.

The fourth dimension of the framework, *sociology*, deals with “critical characteristics affecting the sociology of learning” (Collins et al., 1991, p. 16). These are situated learning, community of practice (CoP), intrinsic motivation and exploiting cooperation. The first critical characteristic, which involves implementing situated learning as a model of instruction, could have significant benefits for the learners. According to Collins (1998), these benefits are that students learn the conditions for applying knowledge to new situations, they learn to invent responses and solutions and to use the acquired knowledge flexibly, they learn to see the implications and purpose of the knowledge they are learning and to store knowledge in a form that is appropriate to application in new situations. Collins et al. (1991) added that, in a situated learning framework, students learn by “actively using knowledge rather than passively receiving it” (p. 16). The second characteristic relates to the fact that, in communities of practice, the apprentice or novice observes a master or expert who performs the skills to be acquired or learned and gradually acquires those skills and knowledge (Lave & Wenger, 1991). The third characteristic refers to the fact that both the concept of situated learning and the establishment of communities of practice have a positive impact on learners’ intrinsic motivation for developing knowledge and skills. In these types of settings, learners are encouraged to set personal goals to assist them develop specific knowledge and skills. The fourth characteristic involves exploiting cooperation and
“refers to having students work together in a way that foster cooperative problem solving” (Collins et al., 1991, p. 16).

Several researchers and educators, including the original proponents of the situated learning model, have contributed to expanding and refining the situated learning framework and have provided guidelines on its practical application to a classroom context (Brown & Duguid, 1993; Collins et al., 1991; Lave & Wenger, 1991). These researchers have argued that the situated learning approach could be used as a model of instruction by enabling learners to be exposed to and observe a master who performs the skills to be acquired or learned within the authentic context of everyday activities.

Although the contributions of these authors have referred specifically to the application of the situated learning model within a traditional classroom context, this framework could also be used effectively in computer-based learning environments. In her review of situated learning, McLellan (1994) argued that, while the situated learning model proposes that knowledge must be learned in context, such context could be a realistic or virtual scenario that could include opportunities for simulated apprenticeship as well as other supporting activities. This idea has been supported by several other researchers and instructional designers, who have argued that technology could be used as an alternative to real-life settings, and that technology-based learning tasks could effectively support learning in authentic contexts (Herrington & Herrington, 2006; Herrington & Kervin, 2007; Herrington & Parker, 2013; Herrington, Reeves & Oliver, 2014; Howland, Jonassen, & Marra, 2013; Lombardi, 2007).

Herrington and Oliver (2000) have proposed a framework for authentic learning environments that is based on the situated learning model and on relevant research and literature on anchored instruction, collaborative learning, scaffolding, and authentic assessment. This framework and its implications for the design of effective e-learning environments are described in the following section.

**Elements of authentic e-Learning**

According to Herrington and Oliver (2000, p. 18) learning is best achieved in authentic settings which feature the following nine critical elements:

1. Provide authentic contexts that reflect the way the knowledge will be used in real life;
2. Provide authentic tasks;
3. Provide access to expert performance and the modelling of processes;
4. Provide multiple roles and perspectives;
5. Support collaborative construction of knowledge;
6. Promote reflection to enable abstractions to be formed;
7. Promote articulation to enable tacit knowledge to be made explicit;
8. Provide coaching and scaffolding by the teacher at critical times;
9. Provide for authentic assessment of learning within the tasks.

These elements are described in detail and have been translated into a number of recommended learning design features for the instructional design of effective e-learning courses with authentic contexts (Herrington, Reeves & Oliver, 2010).

According to Herrington and Herrington (2006) and Herrington, Reeves and Oliver (2010), of all the crucial elements of authentic e-learning listed above, the most important is the task. These authors have argued that a complex, well-designed authentic task and the activities that learners undertake in order to complete it, can become a significant component, or even the central element, of an entire course of study as it not only provides learners with the opportunity to practise and apply the knowledge and skills that they have learned in a formal and content-focused setting, but can also support and enhance the learning of complex context. In the following section, the defining characteristics of authentic tasks are described in detail.

**Elements of authentic tasks**

Several theorists and researchers have contributed to define the essential characteristics of authentic tasks. In reflecting on these elements and reviewing the literature on authentic learning environments, Herrington, Oliver and Reeves (2003), Herrington, Reeves and Oliver (2010) and Herrington, Reeves, Oliver and Woo (2004) have derived ten defining characteristics, as listed in Column 1 of Table 2.1 together with a description of each element in Column 2.
### Table 2.1
**Authentic task as an element of an authentic learning context**

<table>
<thead>
<tr>
<th>Element of authentic task</th>
<th>Description</th>
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<tbody>
<tr>
<td>Authentic activities have real-world relevance</td>
<td>Activities match as closely as possible real-world tasks rather than decontextualised or classroom-based tasks</td>
</tr>
<tr>
<td>Authentic activities are ill-defined, requiring students to define the tasks and sub-tasks needed to complete the activity</td>
<td>Problems inherent in the activities are ill-defined and open to multiple interpretations rather than easily solved. Learners must identify their own tasks and sub-tasks in order to complete the major task</td>
</tr>
<tr>
<td>Authentic activities comprise complex tasks to be investigated by students over a sustained period of time</td>
<td>Activities are completed in days, weeks and months rather than in minutes or hours, requiring significant investment of time and intellectual resources</td>
</tr>
<tr>
<td>Authentic activities provide the opportunity for students to examine the task from different perspectives, using a variety of resources</td>
<td>The task affords learners the opportunity to examine the problem from a variety of perspectives, rather than a single perspective that learners must imitate to be successful</td>
</tr>
<tr>
<td>Authentic activities provide the opportunity to collaborate</td>
<td>The task affords learners the opportunity to collaborate with others. Collaboration is integral to the task, both within the course and the real world.</td>
</tr>
<tr>
<td>Authentic activities provide the opportunity to reflect</td>
<td>Tasks enable learners to make choices and reflect on their learning both individually and as a group</td>
</tr>
<tr>
<td>Authentic activities can be integrated and applied across different subject areas and lead beyond domain-specific outcomes</td>
<td>Tasks encourage interdisciplinary perspectives and enable diverse roles and expertise rather than a single well-defined field or domain</td>
</tr>
<tr>
<td>Authentic activities are seamlessly integrated with assessment</td>
<td>Assessment of tasks is seamlessly integrated with the major task to reflect real-world assessment, rather than separate artificial assessment removed from the nature of the task</td>
</tr>
<tr>
<td>Authentic activities create polished products valuable in their own right rather than as a preparation for something else</td>
<td>Activities create a whole product rather than an exercise or sub-step in preparation for something else</td>
</tr>
<tr>
<td>Authentic activities allow competing solutions and diversity of outcome</td>
<td>Tasks allow a range and diversity of outcomes open to multiple solutions of an original nature, rather than a single correct response obtained by the application of rules and procedures</td>
</tr>
</tbody>
</table>

Note. Adapted from Herrington, Oliver & Reeves, 2003; Herrington, Reeves, Oliver & Woo, 2004; and Herrington, Reeves & Oliver, 2010.

Authentic tasks are a critical component of situated learning environments and can be the starting point for the design and development of authentic e-learning courses. As the proponents of authentic learning have pointed out, the application of the key elements of authentic tasks can support students’ learning in entire courses of study by providing meaning to complex curricula and by promoting the learning of knowledge and skills in meaningful, realistic contexts which reflect the way the knowledge is used in real-world settings (Herrington, Reeves & Oliver, 2010; Herrington, Reeves & Oliver, 2014; Woo, Herrington, Agostinho & Reeves, 2007).

Another critical aspect of the situated learning model, which is closely linked to the idea of learning knowledge and skills in authentic, real-world contexts, is the notion of
learning as a process of social participation in communities of practice. The concept of community of practice and the notion of learning through a process of legitimate peripheral participation, originally developed by Lave and Wenger (1991) to describe learning in apprenticeship environments, refer to the process by which learners, or novices, become involved and engaged in the practices of a particular community and gradually acquire knowledge and skills from expert community members. The concepts of community of practice and its defining dimensions and characteristics are described in detail in the section that follows.

**Communities of practice**

In their publication entitled *Situated Learning: Legitimate Peripheral Participation*, Lave and Wenger (1991) built on Lave’s (1988) previous study of cognition in practice and provided an analysis of situated learning in different settings in which learners, or novices, gradually acquired knowledge and skills from experts in the context of everyday activities. According to Lave and Wenger, learning does not occur through explicit instruction and isolated acquisition of knowledge and does not simply involve being able to perform specific activities or tasks, as these activities do not exist and have meaning in isolation, but is viewed as a process of “increasing social participation in communities of practice” (p. 49). Lave and Wenger defined a community of practice as a “set of relations among persons, activity and the world, over time and in relation with other tangential and overlapping communities of practice” (p. 98). In reflecting on their examination of four different communities of practice, Lave and Wenger also stated:

> [Community does not] imply necessarily co-presence, a well-defined identifiable group, or socially visible boundaries. It does imply participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities. (p. 98)

Central to the concept of community of practice is the notion of legitimate peripheral participation, discussed by Lave and Wenger in their original work. According to Lave and Wenger (1991), this concept refers to the mode of engagement of learners, or newcomers, who enter and gradually become part of a community of practice by a process of participation and action that is at first legitimately peripheral. In this initial
phase, learners start to develop a set of social relations with expert community members and begin to participate and engage in their practice and activities. Over time, as learners appropriate the practice and skills of the experts and their relationship and integration within the community change and evolve towards full participation, they gradually move from the periphery of the community to its centre and shift to the status of old-timers.

The original definition of CoP provided by Lave and Wenger (1991) was further developed and refined by other theorists and researchers to refer more specifically to a group of people who share an interest or a passion and knowledge about a particular topic and who deepen their knowledge and expertise in that area by engaging in a common activity and interacting with each other on a regular basis (Barab, MaKinster & Scheckler, 2004; Wenger, 1998, 2006, Wenger & Snyder, 2000; Wenger, McDermott & Snyder, 2002). According to the definition proposed by Wenger, McDermott and Snyder (2002):

A community of practice is not just a Website, a database, or a collection of best practices. It is a group of people who interact, learn together, build relationships, and in the process develop a sense of belonging and mutual commitment. Having others who share your overall view of the domain and yet bring their individual perspectives on any given problem creates a social learning system that goes beyond the sum of its parts. (p. 34)

According to the definition provided by Barab, MaKinster and Scheckler (2004) a community of practice is: “a persistent, sustained social network of individuals who share and develop an overlapping knowledge base, set of beliefs, values, history and experiences focused on a common practice and/or mutual enterprise” (p. 55).

In his original publication, Wenger (1998) defined a community of practice along three defining dimensions, which are the source of coherence of a community and are a necessary requirement for creating a cohesive CoP: mutual engagement, a joint enterprise and a shared repertoire of resources.

1. **Mutual engagement.** The first dimension of a CoP is the mutual engagement of participants in the activities of the community. In a CoP, members interact and engage mutually with one another, share insights and critiques, adopt other participants’ practices, and share successes and frustrations (Iverson & McPhee,
2008). Through this mutual engagement, which is grounded in mutual interest, participants share and enact their knowledge within the community. As Wenger explained, practice does not exist in the abstract but “in a community of people and the relations of mutual engagement by which they can do whatever they do” (p. 73). In other words, practice exists because people are engaged in actions and negotiate the meanings of those actions with one another.

2. **A joint enterprise.** The second characteristic is the negotiation of a joint enterprise. Negotiating a joint enterprise creates not only a shared goal but relationships of mutual accountability among the community members involved, which become an integral part of the practice. Wenger (1998) pointed out that the enterprise is joint, not because there is agreement among community members, but because it is communally negotiated through the mutual engagement of community participants who construct knowledge in order to improve their practice.

3. **A shared repertoire of resources.** The third dimension of a CoP is the development of a shared repertoire of communal resources. Wenger maintained that, over time, the joint negotiation of an enterprise creates resources for negotiating meaning. According to Wenger (1998), the elements of the shared repertoire can be heterogeneous and can include both discourse and action. These elements gain coherence not as specific activities and artefacts but from the fact that they belong to the practice of a community pursuing a particular enterprise.

Wenger et al. (2002) later defined three structural elements that differentiate a community of practice from other groups and communities: a domain of knowledge, a community of people who care about the domain and want to see it developed, and the shared practice that they develop in order to be effective in their domain.

The first structural element is the domain of interest or knowledge. The identity of a community of practice is defined by a shared domain of interest and membership of the community implies a commitment to the domain and a shared competence. The domain inspires members to contribute and participate in community activities, guides their actions and gives them meaning. The second element is the community. Members of a community engage in joint activities and discussions, share information and help each other. These members interact with other participants and develop a system of social relationships based on mutual respect and trust that enable them to learn from each other. The third element is the practice. Members of a community of practice are
practitioners who, over time, develop a shared repertoire of resources and a shared practice. The practice has been defined as a set of frameworks, ideas, tools, documents and information that are developed, shared and maintained by community members.

According to Wenger et al. (2002), the combination of these three interrelated elements provides a practical model or framework that guides the development of successful communities of practice. When these elements function well together and are balanced effectively, the community of practice becomes an “ideal knowledge structure” (p. 29), a social structure that is responsible for developing and sharing knowledge.

Wenger et al. (2002) also observed five stages of community development:

1. **Potential.** At this stage, the community is a loose network of people with similar issues and needs who interact occasionally and have the potential to become more connected and form a community.

2. **Coalescing.** As members build connections and relationships, and the organised forms of community life become established, the community begins to take shape and have a presence.

3. **Maturing.** The activities of the community become more focused and the community develops and establishes its identity.

4. **Stewardship.** After reaching maturity, the community keeps growing and accommodates successive generations of members. As new members join and as new issues arise, the community needs to find new leaders and redirect its focus to meet the needs of its changing membership.

5. **Legacy.** Ending is part of the natural evolution of a community. At this final stage, the public space of the community fades away. Members might reflect on the legacy that the community wants to leave behind after the purpose of the community is fulfilled.

Based on the defining dimensions and structural elements of a CoP and on the five-stage lifecycle of community development, Wenger et al. (2002, p. 51) offered seven design principles that should be followed in order to develop and cultivate a successful community of practice:

1. **Design for evolution.** The purpose of a design is not to impose a structure but to help a community develop and evolve. Successful communities are dynamic entities
that are built on existing personal networks and grow as new members join the community and bring new interests and ideas.

2. **Open a dialogue between inside and outside perspectives.** Effective community design is built on the collective experience of community members and new perspectives and information brought from outside the community.

3. **Invite different levels of participation.** Successful communities of practice create opportunities for their members to move through different levels of participation and take different roles. The boundaries of a community of practice are fluid and there should be movement between its different levels.

4. **Develop both public and private community spaces** that use the strength of individual relationships to encourage rich connections and networking among community members.

5. **Focus on value.** Create events, activities and relationships that enable the potential value of the community to emerge and encourage community members to understand the real impact of the community.

6. **Combine familiarity and excitement** to create a lively and vibrant community that provides both stability and a sense of common adventure.

7. **Create a rhythm for the community** to contribute to a sense of familiarity and liveliness.

The concept of community of practice, its defining dimensions and structural elements, and the design principles that guide their development have also been effectively applied to an online environment in which community members are unable to rely solely on face-to-face interactions to collaborate with each other and need to connect and engage in social practice with other members through a combination of face-to-face interaction and different types of internet-based communication. The defining dimensions and design principles that apply to a distributed or online community of practice are described in detail in the section that follows.

**Online communities of practice**

Wenger, McDermott and Snyder (2002) defined a distributed community of practice as a community that “cannot rely on face-to-face meetings and interactions as its primary vehicle for connecting members” (p. 115). According to Wenger et al. (2002), the term
distributed is preferred over the terms virtual or online because, although these communities rely mainly on online communications, their members also communicate face-to-face. For the purpose of this study, however, the term online CoP will be used to describe a community that connects through a blend of face-to-face interaction and internet-based communication.

According to Wenger et al. (2002), designing and supporting the development and growth of online communities of practice presents several difficulties and requires additional effort compared to sustaining the development of traditional CoPs, as it is more difficult for members to “consult the community for help, spontaneously share ideas, or network with other members” (p. 117). As members of an online community of practice are less visible, it is also more difficult to build trust and personal relationships with others (Eraut, 2002; Leimeister, Ebner & Krcmar, 2005; Nichani & Hung, 2002), have “closer interactions around shared problems” and develop “a sense of commonality” (Wenger et al., p.122). Wenger et al. offered the following design principles to support the design and implementation of a successful online CoP:

1. Achieve stakeholder alignment to overcome conflicting priorities and lack of connection and trust and to develop a common understanding of the potential value of the community.

2. Create a structure that promotes both local variations and global connections by dividing the community into cells. Assign local community coordinators for the local cells and one global community coordinator or facilitator to connect people and hold together the whole community.

3. Build a rhythm of activity to maintain community visibility and strengthen community presence by organising regular events such as face-to-face and synchronous online meetings, posting regular reminders of events, coordinating and facilitating online threaded discussions and integrating different modes of communication using the community website.

4. Develop the private space of the community by increasing the exposure of community members to each other and strengthening personal networks and relationships through postings of personal member profiles with photos and small group projects and meetings.
These principles complement the seven design principles proposed earlier by the same authors to support the development of traditional, co-located communities of practice, and can be used as a framework for the development and implementation of effective online CoPs. Several researchers have provided theoretical support to the design principles outlined by Wenger et al. (2002) and have contributed to validate and refine them by adding significant details and descriptions that relate specifically to the implementation of these principles in an online CoP (Amin & Roberts, 2008; Bond & Lockee, 2014; Borzillo, Aznar & Schmitt, 2011; Cox, 2005; Johnson, 2001; Lai, Pratt, Anderson & Stigter, 2006; McDermott, 2000; Preece, 2000; Wenger, White & Smith, 2009).

In addition to the principles outlined above, Hough, Smithey and Evertson (2004) have also proposed that a successful and effective online CoP needs to provide a clear frame of purpose for the community and ensure that there are pre-existing relationships among some of the community members.

The following table summarises the design principles that have been derived from relevant research and studies on both traditional and online CoPs. These principles are organised in three columns based on the key concepts discussed in the literature and include supporting authors and theorists.
<table>
<thead>
<tr>
<th>Element of online communities of practice</th>
<th>Design principles</th>
<th>Supporting authors, researchers and theorists</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Purpose</td>
<td>• Provide a clear frame of purpose for the community</td>
<td>(Hough et al., 2004; Hung &amp; Chen, 2001; Lai et al. 2006; McDermott, 2000; Palloff &amp; Pratt, 2010; Preece, 2000)</td>
</tr>
<tr>
<td>2. Evolution and sustainability</td>
<td>• Do not impose a structure but allow the community to develop and evolve</td>
<td>(Lai et al., 2006; Schwen &amp; Hara, 2003; Wenger et al., 2002)</td>
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<td></td>
<td>• Encourage new members to join the community and bring new interests and ideas</td>
<td>(Aznar &amp; Schmitt, 2011; Borzillo, Bond &amp; Lockee, 2014; Probst &amp; Borzillo, 2008)</td>
</tr>
<tr>
<td>3. Open dialogue</td>
<td>• Open a dialogue between inside and outside perspectives</td>
<td>(Amin &amp; Roberts, 2008; Lai et al. 2006; Wenger et al., 2002)</td>
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<tr>
<td></td>
<td>• Encourage community members to share their experiences and perspectives and to be open to new perspectives and information brought from outside the community</td>
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<tr>
<td>4. Varied participation levels</td>
<td>• Invite different levels of participation from peripheral to core group members</td>
<td>(Amin &amp; Roberts, 2008; Bond &amp; Lockee, 2014; Borzillo, Aznar &amp; Schmitt, 2011; Haythornthwaite, Kazmer, Robins &amp; Shoemaker, 2000; Johnson, 2001; Lai et al. 2006; Wenger et al., 2002)</td>
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<tr>
<td></td>
<td>• Create opportunities for members to move through different levels of participation and take different roles</td>
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<tr>
<td>5. Public and private space</td>
<td>• Develop both public and private space in the community</td>
<td>(Amin &amp; Roberts, 2008; Hung &amp; Chen, 2001; Johnson, 2001; Wenger et al., 2002)</td>
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<td></td>
<td>- Provide tools for both public and one-to-one personal communication</td>
<td>(Probst &amp; Borzillo, 2008)</td>
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<tr>
<td></td>
<td>- Provide the opportunity to make detailed member profiles with photos</td>
<td>(Arnold &amp; Paulus, 2010; Barab, MaKinster &amp; Scheckler, 2003)</td>
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<tr>
<td></td>
<td>- Organise activities and meetings to foster personal relationships and networks in the community</td>
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<tr>
<td>6. Membership value</td>
<td>• Make clear the immediate value and impact of membership in the community</td>
<td>(Lai et al. 2006; McDermott, 2000; Schwen &amp; Hara, 2003; Wenger et al., 2002; Wenger, White &amp; Smith, 2009)</td>
</tr>
<tr>
<td></td>
<td>- Create events, activities and relationships that enable the potential value of the community to emerge</td>
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<td></td>
<td>- Develop activities which require participants to create artefacts of community activity</td>
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<td></td>
<td>- Focus on emergent values as well as early values</td>
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<tr>
<td>7. Familiarity and liveliness</td>
<td>• Develop engaging and exciting activities but also allow participants to tap into past experiences and knowledge</td>
<td>(Wenger et al. 2002)</td>
</tr>
<tr>
<td>8. Pre-existing relationships</td>
<td>• Ensure that there are pre-existing relationships among community members but also encourage new members to join the community and bring new interests and ideas</td>
<td>(Borzillo, Aznar &amp; Schmitt, 2011; McDermott, 2000; Hough et al., 2004; Wenger et al. 2002; Wenger, White &amp; Smith, 2009)</td>
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<tr>
<td>9. Rhythm of activity</td>
<td>• Build a rhythm of activity with regular email reminders of initiatives and events &lt;br&gt; • Maintain group cohesion by scheduling regular face-to-face meetings with the group or sub-groups &lt;br&gt; • Coordinate and facilitate online threaded discussions &lt;br&gt; • Integrate different modes of communication (i.e. a blend of face-to-face and online communication)</td>
<td>(Haythornthwaite et al., 2000; Saint-Orge &amp; Wallace, 2012; Sessions, 2010; Wenger et al., 2002)</td>
</tr>
<tr>
<td>10. Stakeholder alignment</td>
<td>• Negotiate a common understanding of the potential value of the community &lt;br&gt; • Invite participation from across multiple structures to cultivate stakeholder support</td>
<td>(Hung &amp; Chen, 2001; McDermott, 2000; Schwen &amp; Hara, 2003; Wenger et al., 2002)</td>
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<tr>
<td>11. Assigned leadership</td>
<td>• Divide the community into cells and assign leadership roles &lt;br&gt; - Ensure leaders and facilitators understand their role &lt;br&gt; - Promote active facilitation via asynchronous communication</td>
<td>(Cox, 2005; Johnson, 2001; McDermott, 2000; Oliver &amp; Herrington, 2000; Preece, 2000; Wenger et al., 2002)</td>
</tr>
</tbody>
</table>

The defining dimensions of both traditional and online communities of practice and the design principles that have been recommended to support their development and growth have been effectively applied to a number of areas such as business (Saint-Onge & Wallace, 2012), public administration (Kingsley, Knox, Rogers & Boyer, 2013), ecology and sustainability research (Cundill, Roux & Parker, 2015), education and teacher professional development (Hough, Smithey & Evertson, 2004; Kirschner & Lai, 2007; Lai, Pratt, Anderson & Stigter, 2006; Lock, 2006). In these different professional and academic contexts, the implementation of the design principles that guide the development of successful online CoPs has provided significant benefits such as fostering the creation, transfer and dissemination of knowledge among community members and improving members’ satisfaction and problem-solving processes (Hildreth & Kimble, 2004), reducing learning curves for new employees or members (Dubé, Bourhis & Jacob, 2005), improving decision making processes (Saint-Onge & Wallace, 2012) and fostering innovative practice and performance (Gannon-Leary & Fontainha, 2007; Laursen & Salter, 2006; Mahr & Lievens, 2012).

Since this study is concerned with the specific educational context of foreign and second language education, the concept of communities of learners or learning communities is also considered and examined. The defining characteristics of communities of learners and the benefits related to their application and implementation are described in detail in the next section.
Communities of learners

The concept of communities of learners or learning communities is built upon the concept of community of practice. As described earlier, Wenger (1998) defined a community of practice as a set of relationships among people and activities that occur over time and that is developed through practice. According to Wenger, it is through their practice that community members interact and form relationships with each other and with their work. Similarly, in a learning community members interact and develop relationships with each other and with their tasks through a process of active collaboration and cooperation among each other. Wenger also proposed that learning lies at the very core of both communities of practice and communities of learners. In both frameworks, the relationships that are developed among community members as they interact and collaborate with each other enable them to generate knowledge and learn.

The definition of learning community provided by Wenger (1998) has evolved and has been expanded by other theorists and researchers to include a discussion about the goals and defining qualities of a learning community. Fulton and Riel (1999) for example, defined a learning community as “a group of people who share a common interest in a topic or area, a particular form of discourse about their phenomena, tools and sense-making approaches for building collaborative knowledge, and valued activities” (p. 1). Bielaczyc and Collins (1999) maintained that the defining quality of a learning community is that there is a “culture of learning, in which everyone is involved in a collective effort of understanding” (p. 271). According to Bielaczyc and Collins (p. 272), a learning community has the following characteristics:

1. Diversity of expertise among its members. Community members are valued for their contribution and are supported in their development and learning;
2. A shared objective of advancing and developing the community’s collective knowledge and skills;
3. An emphasis on learning how to learn and develop effective strategies for knowledge building;
4. Effective mechanisms for sharing knowledge and skills.

Schwier (2001) reinforced the idea that a learning community typically involves the acquisition, creation or transformation of knowledge. Scardamalia and Bereiter (2006)
claimed that the goal of a learning community is to advance the collective knowledge of a group of learners to support the growth of individual knowledge. Kilpatrick, Barrett and Jones (2003) contended that the shared goals of a learning community are achieved through collaboration, cooperation and partnership and through building or creating new knowledge. Similarly, Biasutti (2011) noted that an essential characteristic of a community of learners is that its members engage with each other and learn through a process of collaboration and cooperation with other community members. The common feature of these definitions is that, through a process of collaboration and cooperation, knowledge is distributed among the various members of a learning community to enhance the potential of all members. As they contribute to a particular group activity or project, these community members share not only their knowledge and skills but also the responsibility for learning.

Research into the outcomes of learning communities has revealed that learning communities are powerful means for creating and sharing knowledge and can provide several benefits to both their individual members and the community as a whole. These benefits include improved student retention in academic courses (Levine Laufgraben & Shapiro, 2004; Tinto, 2000), increased flow of information and knowledge sharing among community members (Kilpatrick, Barrett & Jones, 2003), increased interaction and collaboration within the community (Palloff & Pratt, 2007), increased student involvement in the learning process and increased sense of responsibility for student learning and the learning of others (Levine Laufgraben & Shapiro, 2004), increased sense of engagement and motivation (Pike, Kuh & McCormick, 2011; Zhao & Kuh, 2004) and reduced feelings of stress and isolation (Levine Laufgraben & Shapiro, 2004).

Similarly to the way in which the concept of communities of practice and their defining dimensions and design principles have been applied to an online environment, the concept of communities of learners and their critical characteristics have also been applied successfully to a technology-supported learning environment. In such contexts, learners have the opportunity to collaborate and cooperate with other learners and facilitators through a combination of face-to-face interaction and online, internet-based communication.

Vesper and Herrington (2012) have identified a number of critical factors that should be present in order to develop and maintain a successful online community of learners.
These factors are based on relevant research studies and include the retention of learners in the community (Berge & Huang, 2004; Frankola, 2001; Rovai, 2003, 2007), the experience of social and emotional presence of participants (Cleveland-Innes & Campbell, 2012; Garrison, 2011; Kear, Chetwynd & Jefferis, 2014; Kehrwald, 2010; Rovai, 2007), the development of a feeling of safety, respectfulness and trust among learners (Kilpatrick, Barrett & Jones, 2003; Rovai, 2001; Wang, Sierra & Folger, 2003) and an attention towards issues of cultural diversity of learners (Rogers, Graham & Mayes, 2007; Wang & Reeves, 2006). According to Vesper and Herrington (2012), another crucial element that can positively influence a community’s success is the active role of instructors and facilitators or mentors in supporting and guiding learners’ collaboration and discussion, monitoring postings and communication and encouraging participation when learners are not contributing actively to the discussion. The presence and active involvement of instructors and facilitators in the activities of an online community of learners can positively influence learners’ level of interest and motivation to participate and engage in community activities (Lee & McLoughlin, 2010; Palloff & Pratt, 2013; Salmon 2011) and can help them arrive at a deeper understanding and appreciation of the subject matter (Amhag & Jacobsson, 2009; Garrison & Cleveland-Innes, 2005; Garrison, Cleveland-Innes & Fung, 2010). With the appropriate level of academic and social support and scaffolding, teachers and facilitators can help learners overcome the challenges of communicating and collaborating with others in a technology-supported learning environment (Lee & McLoughlin, 2010), can support the development of sustained interaction among learners and expert community members (Johnson, 2001) and can contribute to nurturing and promoting a sense of belonging and community among learners while facilitating the acquisition of knowledge (Palloff & Pratt, 2007, 2013; Rovai, 2007).

Palloff and Pratt (2007, p. 34) proposed the following guiding principles for building a successful online community of learners based on a review of relevant literature:

1. Clearly define the purpose of the group;
2. Create a distinctive gathering place for the group;
3. Promote effective leadership;
4. Define norms and a clear code of conduct;
5. Allow for a range of member roles;
6. Allow for and facilitate subgroups;
7. Allow members to resolve their own disputes.

These principles complement and blend in with the critical elements and design principles offered to support the successful development and growth of online CoPs, and provided a useful framework to guide the design and implementation of the online community of second language learners of this study.

Vygotsky’s sociocultural theory applied to second language acquisition (with its emphasis on the social and cultural context of second language development and on the concepts of zone of proximal development and scaffolding), the theories of situated and authentic learning (with their focus on learning in authentic settings and on the instructional design of effective authentic tasks), together with the principles that guide the development of communities of practice and communities of learners, provide a framework for the development and implementation of the learning environment of this study.

The following section outlines the critical elements that have emerged from these theories and principles and presents a checklist of recommended design features to guide the design and development of the learning environment.

**Critical design elements derived from the literature and recommended design guidelines**

**SLA sociocultural theory and scaffolding in online learning environments**

- Provide opportunities for collaborative social interaction with more proficient speakers of the target language who can model correct and appropriate language use and provide relevant scaffolding.
- Provide opportunities to participate in meaningful and goal-oriented communicative activities in the target language.
- Provide access to online resources and enhance motivation by designing tasks that are relevant to student experiences.
- Provide opportunities for online socialisation and facilitate online participation.
- Provide opportunities for information exchange and knowledge construction through regular interaction and collaboration with more competent peers or facilitators.

- Provide opportunities for development and reflection through focused online discussion.

**Authentic tasks**

- Design tasks which have real-world relevance, are ill-defined and complex and need to be investigated over a sustained period of time.

- Design tasks which provide the opportunity to examine the problems from multiple perspectives and to use a variety of resources.

- Design tasks which provide opportunities for collaboration and reflection, and which can be integrated and applied across different subject areas.

- Design tasks which are seamlessly integrated with assessment and require students to create a finished product.

- Design tasks which allow competing solutions and a diversity of outcomes.

**Online communities of practice and communities of learners**

- Provide a clear frame of purpose for the community.

- Plan for evolution and sustainability by welcoming new members to the community.

- Open a dialogue between inside and outside perspectives.

- Provide opportunities to move through different levels of participation by encouraging students to take different roles and responsibilities.

- Provide opportunities for both public and personal communication.

- Make clear the value and impact of membership to the community.

- Design activities that are interesting and engaging but also allow participants to draw from past experiences and knowledge in order to create a tangible product that is shared.

- Ensure that there are pre-existing relationships among participants but also invite new members into the community.
• Maintain group cohesion through regular face-to-face meetings and integrate different modes of communication into the learning environment.

• Encourage participants to negotiate a common understanding of the value of the community and invite members with different levels of linguistic competence and different backgrounds.

• Assign participants different roles and responsibilities and promote active facilitation through asynchronous and synchronous communication.

• Provide opportunities to collaborate and cooperate for a sustained period of time and ensure learners experience social and emotional presence.

• Promote the retention of learners over a sustained period of time.

• Ensure that learners experience social and emotional presence.

• Encourage instructors and facilitators to participate actively in community activities.

The literature review conducted in this chapter has described key theories and concepts that are relevant to the development and implementation of the learning environment of this study. The research methodology used in this study is described in detail in the following chapter.
Methodology

Introduction

In order to design and implement an online community of foreign language learners and develop a learning environment which reflected the defining characteristics of authentic activities described in Chapter 2, a design-based research (DBR) approach was adopted.

This chapter begins with a description of the research methodology used in the study and the rationale for its choice. The research was conducted in four phases, and the methodologies of each phase are described in detail. The chapter concludes with a discussion of the specific ethical considerations for this study and a summary of the methods used to ensure reliability and validity of the research.

Design-based research

Ann Brown (1992) and Allan Collins (1992) introduced the term design experiments to refer to the study of learning in context through the design and development of instructional strategies and innovative educational environments based on the theoretical principles derived from prior research. According to Brown and Collins, existing methods of educational research that were conducted in laboratory settings related inadequately to practice, particularly in contexts of practice such as complex classroom settings and online learning communities. As Brown pointed out, although laboratory research can be valuable in the early phase of research development, testing and refinement needs to be carried out in real-world settings. In such settings, real-world dependent and independent variables that could affect the success of the design need to be considered and addressed effectively (Collins, Joseph & Bielaczyc, 2004).
Other researchers have defined the *design experiment* approach originally outlined by Brown (1992) and Collins (1992) using different terms such as *formative research* (Newman, 1990), *development research* (Oh & Reeves, 2010; Reeves, 2006; van den Akker, 2006), *developmental research* (Richey, Klein & Nelson, 2003), *design research* (Oh & Reeves, 2010; van den Akker, Gravemeijer, McKenney, & Nieveen, 2006) or *educational design research* (McKenney & Reeves, 2012). Wang and Hannafin (2005) have summarised the main characteristics of these variants and methods and have concluded that, although each variant has a slightly different focus, their core aims and approaches are similar.

The Design-Based Research Collective (2003) has best justified the choice of the name *design-based research* over the other terms. According to these authors, this term is the most appropriate because it refers to the combination of empirical research carried out in an educational context and the design driven by theory of innovative learning environments (The Design-Based Research Collective, 2003). Design-based research can contribute to the creation and extension of knowledge about developing, implementing and sustaining innovative learning environments in an educational context in order to “produce meaningful change in contexts of practice” (The Design-Based Research Collective, 2003, p. 6).

According to Amiel and Reeves (2008), the ultimate goal of design-based research is to create a stronger connection between educational research and real-world problems. Design-based research should have a strong theoretical foundation (Collins, et al., 2004; diSessa & Cobb, 2004; Reeves, 2000, 2006; The Design-Based Research Collective, 2003; van den Akker, Gravemeijer, McKenney, & Nieveen, 2006; Wang & Hannafin, 2005). It should be based on and benefit from the theoretical principles derived from prior research, and should address theoretical questions and issues.

Wang and Hannafin (2005) have defined DBR as: “a systematic but flexible methodology aimed to improve educational practices through iterative analysis, design, development, and implementation, based on collaboration among researchers and practitioners in real-world settings, and leading to contextually-sensitive design principles and theories.” (p. 6). They have outlined five main characteristics of design-based research based on previous studies. Design-based research is:
1. **Pragmatic:** DBR has a practical goal and refines both theory and practice.

2. **Grounded:** Design is driven by theory and is grounded in relevant research, theory and practice. Theory is the foundation of DBR but is also constantly developed and elaborated throughout the research process. **Grounded** also indicates that DBR takes place in real-world contexts where participants have the opportunity to communicate and interact socially with each other.

3. **Interactive, iterative and flexible:** Researchers and practitioners interact and collaborate with each other to develop solutions to address complex problems. DBR processes are continuously developed and refined through an **iterative** cycle of analysis, design, implementation and redesign. DBR processes are **flexible** and it is always possible to implement changes when necessary.

4. **Integrative:** DBR draws from a variety of approaches and uses a variety of research methods. During the different phases of DBR, methods can vary as the focus of the research changes and develops.

5. **Contextual:** Research results are linked with the design process and with the particular context in which research is conducted. The aim of DBR should be not only to design and test a particular intervention but also to understand how and why an intervention works within the particular context in which it is implemented. (Wang & Hannafin, 2005, p. 7).

Reeves (2006) has exemplified the differences between predictive research, conducted with traditional empirical goals, and design-based research, inspired by development goals, and has outlined a model that illustrates the four phases of the design-based research methodology (see Figure 3.1).
According to Reeves (2006), design-based research aims to address complex problems in a real context in collaboration with practitioners, developing and implementing plausible solutions informed by existing design principles and technology-based innovations to these complex problems, conducting rigorous and reflective enquiry to test and refine the innovative learning environment developed and to define new design principles that could guide other practitioners interested in solving similar problems within their educational context. As Reeves explained, the design-based research approach is implemented by researchers who are interested in achieving a product-focused outcome to a specific research problem by implementing a technological solution to carry out this research.

As explained by Hoadley (2004), DBR often involves a close relationship between researchers and teachers or implementers of a particular intervention. In DBR the researcher is both a participant in a particular context and also an agent who implements and design interventions in order to be able to generalise across other contexts. It is important to note, however, that despite this close researcher-participant relationship, researcher bias is not normally an issue in DBR because of the desire to explore how an intervention works through a series of implementations rather than prove that it works (Reeves, 1999). In the words of Hoadley, “the design-based researcher recognizes that
any findings are composed of the interaction between design and enactment, between the general and the local. Iteration and replication are not checks against dishonest researchers or chance coincidences, but rather the fundamental mechanism for exploring how local and global interact, for probing the edges of design-oriented understandings” (p. 211).

In their analysis of published DBR studies, Anderson and Shattuck (2012) reviewed the characteristics of DBR and determined the most cited articles from 2003 to 2011. Their analysis has indicated that, over these years, there has been continuing growth of published research using DBR as a research methodology and that DBR has been increasingly utilised in a variety of educational contexts.

**Design-based research model applied in this study**

The research proposed in this thesis addresses some of the issues related to the application of structurally-oriented theoretical perspectives and teaching methodologies, which focus on the application of grammar rules and development of grammatical competence, to support the second language development of a group of intermediate and advanced level learners of Italian at an Australian university.

The solution proposed involved creating and implementing an online community of learners to provide students with the opportunity to engage in collaborative social interaction and participate in meaningful and authentic activities with other speakers of the target language, such as more competent peers and native speakers, who could provide increased opportunities for language practice and model correct and appropriate language use. The DBR approach is well suited to the investigation of the problem and to the development of the online learning environment of this study because it aims at solving a practical educational problem through the development and implementation of an innovative intervention that is based on and benefits from the theoretical principles derived from prior research. The DBR approach is suitable also because the iterative nature of this model allows the researcher to progressively test and refine the learning environment developed through a series of successive implementations. A final reason for adopting the DBR model is that the eventual outcome of this approach is to establish new design principles that could guide other language teachers in the development of similar learning environments and could inform future decisions. The research
methodology for the current study was conducted in four phases and was guided by the model of DBR outlined by Reeves (2006).

**Phase 1: Analysis of practical problems by researchers and practitioners in collaboration**

The first phase of the research involved identifying and analysing some of the practical problems associated with the application of structurally-oriented pedagogical approaches to second language acquisition, which focus primarily on the decontextualised application of grammar rules and on the development of grammatical competence, in the context of an Italian as second language classroom at an Australian university. During this initial phase, the views of teacher-practitioners, that is, teachers of Italian to non-native speakers, were sought and considered. In order to analyse the practical problems identified in the literature, and to provide a rationale for the application of a sociocultural-oriented approach to the specific context of this study, a series of informal conversations and discussions with teachers of Italian language and culture courses in Australian universities was held over a period of several months preceding the beginning of the study. In all, a total of 10 practitioners (seven university lecturers and three tutors) were consulted to gain an insight into their views about the nature, extent and parameters of the problem area in practice. These conversations were recorded by the researcher in extensive hand-written notes that were later transcribed into Word documents. As described in Chapter 1, each practitioner acknowledged the issues of lack of opportunities to engage in meaningful and authentic interaction with native speakers of the target language and of relying primarily on decontextualised and non-authentic tasks and assessment as a resource for communicative practice, and emphasised the importance of providing regular opportunities for collaborative interaction and participation in the types of authentic tasks that are likely to be found in a real-world settings.

**Phase 2: Development of solutions informed by existing design principles and technological innovations**

The second phase of the study involved developing theoretically sound solutions to the problems described in the first phase. During this phase, a learning environment was designed and developed to enable community members to interact and collaborate with each other through the communication tools and resources of an online learning
management system. These resources included both asynchronous and synchronous communication tools.

In the words of Cobb, Confrey, diSessa, Lehrer and Shauble (2003), in design-based research “the theory must do real work” (p. 10). The development of the learning environment drew upon a combination of theories and principles which included Vygotsky’s sociocultural theory applied to second language learning (Lantolf, 2013; Lantolf & Thorne, 2006; Lantolf, Lantolf & Poehner, 2014; Swain, Kinnear & Steinman, 2015; Thorne, 2005; Thorne & Poehner, 2014; Zuengler & Miller, 2006), theories of situated learning (Brown, Collins & Duguid, 1989; Collins, Brown & Newman, 1989) and the critical elements of authentic tasks (Herrington, Oliver & Reeves, 2003; Herrington, Reeves & Oliver, 2010) and principles that guide the development of online communities of practice (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott and Snyder, 2002) and communities of learners (Biasutti, 2011; Bielaczyc and Collins, 1999; Palloff & Pratt, 2013; Salmon 2011; Scardamalia & Bereiter, 2006; Vesper & Herrington, 2012).

Two authentic tasks were designed to incorporate the 10 defining characteristics of authentic tasks as described by Herrington, Oliver and Reeves (2003) such as real-world relevance, complexity, multiple perspectives and resources, opportunities for collaboration and reflection, integration and application across different subject areas and integration with assessment. The first task required students to plan and organise a four week exchange trip to Australia for a group of 15 Italian university students, and the second one to plan and organise a four week trip to Italy for all the students in the class. Both tasks had to be carried out entirely in the target language and required students to work collaboratively to develop an itinerary and a comprehensive travel guide that was shared among community members, using a variety of authentic target language resources and material. During this phase, seven native speaker facilitators were recruited to support students in the process of completing the two tasks and all participants interacted with each other using the CMC tools and resources provided in the course website.

This phase was framed by the sociocultural perspective that second language development occurs through a process of collaborative social interaction and participation in meaningful, goal-oriented and authentic communicative activities with other members of the target language speaking community (Donato, 1994; Lantolf &
Beckett, 2009; Lantolf & Poehner, 2014; Otha, 2000; Swain, Kinnear & Steinman, 2015; Thorne, 2005) and that language learners need to be provided with the opportunity to develop and extend their understanding of the structures and functions of language use and develop their own linguistic competence through this collaborative and purposeful social process (Lantolf & Beckett, 2009; Lantolf & Poehner, 2014; Lantolf & Thorne, 2006; Otha, 2000).

At the conclusion of Phase 2, the learning environment had been designed according to the theoretical principles described in Chapter 2, and was ready for implementation in Phase 3. The full design of the online learning environment is described in detail in Chapter 4.

**Phase 3: Iterative cycles of testing and refinement of solutions in practice**

The third phase of the research consisted of two iterative cycles of testing and refinement of the solutions proposed in the second phase of the study. The two iterative cycles were conducted during the second semester of a second and third year Italian language university class.

**Context**

At the time of this study, the second and third year classes were divided into 13 weeks of four contact hours per week. For university administrative purposes and due to an unusually small third year class which comprised just three students, the second and third year class had been combined for two hours per week. During this time, students worked collaboratively with the other members of their individual groups and with the rest of the class to complete the two authentic tasks that had been presented to them. The remaining two contact hours per week were devoted to developing and consolidating students’ language skills through a combination of activities and tasks aimed at extending students’ fluency and accuracy in spoken and written Italian. During this time, the second and third year groups worked separately with their teacher and followed a different syllabus targeted at students’ differing levels of linguistic competence.

**The first iteration**

This first iteration of the study was conducted during the first six weeks of the semester to determine the effectiveness of the online learning environment developed and to identify any issues or problems related to the design of the first authentic task, the
The first iteration was also undertaken to provide data to assist with the refinement of the learning environment prior to the second iterative cycle of the study.

The participants

The participants of the first iterative cycle were 13 second-year and three third-year students of Italian, four Italian native speaker facilitators and the researcher, who was also the class teacher.

The students, 13 female and three male, were chosen for the research because they were intermediate and advanced level learners of Italian in the two language courses taught by the researcher. All the participating students had completed at least three semesters of formal Italian language study, either at university level or at secondary school level, and had therefore achieved a good level of competence in the target language. It was assumed that the students’ higher level of linguistic skills would enable them to interact and collaborate more effectively with other community members in the online learning environment, and to focus on the content of the interactions as well as on their form. Another reason for selecting this particular cohort of students was that students who decide to study a second language beyond the beginners level tend to be very motivated and interested in improving their language skills. It was assumed that these students would be more likely to carry out interactions that would continue for a longer period of time, therefore increasing the chances of sustained communication and continuity throughout the project. Further, in the case of an intermediate and advanced level class, students would require less assistance and support from the teacher compared to that required at beginners’ level, enabling the teacher to dedicate more time to facilitate the learning experience.

The four facilitators recruited to assist and support the collaborative work during the first iteration were two Italian native speakers and two English and Italian bilingual speakers who were current or former colleagues and collaborators of the researcher. Two of these four participants were experienced lecturers of Italian who had taught at different Australian universities for several years. One participant was a former university language tutor and one was in the process of completing a postgraduate language teaching qualification and was conducting her practicum experience in an
Australian high school. These participants were chosen on the basis of their teaching experience and their knowledge of and familiarity with the geography and locations of Australia.

The teacher conducted all the lessons and provided students with continuous support and assistance over the course of the iteration. The teacher also had the role of researcher as participant, and was identified to the students as a researcher but had a limited level of involvement in the activities of the online learning community.

**Procedure**

*Introduction to the study: Week 1*

In Week 1 of the course, the class teacher introduced the study to the combined second and third year classes and discussed the assessment requirements of the course with the students. Students were also introduced to the learning management system to be used to complete the collaborative activities and to its features. Students were given a demonstration on how to log on to the course website and how to use the online resources provided.

Students were provided with several documents to describe the requirements of the course and to assist in their use of the course website:

1. A *guidelines for students document* with information on the requirements of the course, including assessment requirements and criteria, and information on how to use the course website and compose messages using the online communication resources provided (see Appendix 1);
2. A *reflective portfolio document* with general information on portfolio writing and specific information on the task requirements and assessment criteria (see Appendix 2);
3. An *information letter* to describe the nature and purpose of the study and the role of the researcher in the University (see Appendix 3);
4. A *consent form* to obtain the students’ informed consent to participate in the study (see Appendix 4).

The facilitators were provided with the following documents to describe the requirements of the course and to assist in their use of the website:
1. A *guidelines for facilitators document* with information on the requirements of the course, including assessment requirements and criteria, and information on how to use the course website and support student collaboration (see Appendix 5);

2. An *information letter* to describe the nature and purpose of the study and the role of the researcher in the University (see Appendix 6);

3. A *consent form* to obtain the facilitators’ informed consent to participate in the study (see Appendix 7).

*Presentation of the first task: Week 2*

In Week 2 of the course, students were presented with the first task to be completed during the course of the first iteration. In order to complete this task, students were required to form small groups and to collaborate both within their individual groups and with all the other groups in the class using the online communication resources provided in the course website. All communication had to be carried out in the target language and the final product presented to the whole class at the end of the five weeks in Week 7 of the semester. The final product of the task could be presented in the form of a website, a video segment, a PowerPoint presentation, a guidebook or brochure, or a combination of any of these. Minimal input was provided initially to the students on how to complete the task and develop the final product, and no attempt was made to simplify the process with step-by-step instructions as the starting point for the task.

After being presented with the task, students assigned themselves into four collaborative groups of three, four or five and agreed that each group would organise one of the four weeks of the trip, and would focus on a different State of Australia as the travel location. It was also decided that the name of the groups needed to show a relationship to the chosen State. The names of the four groups were New South Wales, Queensland, Northern Territory and Victoria. For reasons of practicality the names were abbreviated by the teacher as follows: NSW, QLD, NT and VIC. The abbreviations were generally used in all the written communication, both online and paper-based, and the full names in the oral form.

As the students worked on the task, the teacher provided guidance and assistance to students as required, to answer their questions and/or clarify their doubts. A digital audio recorder was used to record the conversations and interactions the students had with each other and with the teacher as they worked on the collaborative task.
At the end of the class, the teacher assigned each group to one of the native speaker facilitators and set up the individual online discussion groups in the course website. The teacher posted a first introductory message to the class discussion forum to welcome the participants to the online space and to remind all the students to post a first message to introduce themselves to the rest of the online community.

Assessment of the first task: Week 7

In Week 7 of the course, each collaborative group presented the final product of their work to the rest of the class. The group presentations were assessed using a list of six different criteria, which were described in the course outline:

1. Clarity and correctness of expression;
2. Logical, coherent development and organisation of the itinerary planned;
3. Depth and scope of presentation;
4. Pronunciation and fluency;
5. Range of vocabulary and expressions;
6. Spontaneity of presentation (i.e. the speaker only referred briefly to notes).

Students from each individual group commenced the presentation with a brief introduction of themselves and of the area of Australia that was the focus of their itinerary. The students generally seemed very interested in listening to the other groups’ presentations and several students asked questions of the groups presenting. Each presentation was audio recorded and the teacher took notes and wrote comments on the performance of each group. At the conclusion of the class the teacher assigned a group mark for each presentation.

Data collection

During and after the course of the first iterative cycle, the researcher was aware of the need for a triangulation of data and facilitation for “thick description” (Lincoln & Guba, 1985) in the reporting of the findings, as a way of determining the success of the design and achieving external validity. The data collected during the first iterative phase can be summarised into four categories: observations, documents, communications and interviews. The types of data collected are described in detail in the following section.
**Noted observations**

During each class, the researcher compiled hand-written observations in a notebook and recorded a series of contextual observations such as participant interactions and seating layout, absent participants and the perceived attitudes and moods of the students. All classes were also recorded with a digital audio recorder to allow the researcher to revisit the data at a later stage. The use of the audio recorder freed the researcher from the pressure of constant note-taking and enabled the recording of comments made by the students that were difficult to capture in hand-written form. It was always made clear to students when the audio recorder was switched on, and students were explicitly told to let the researcher know if they felt uncomfortable and preferred the audio recorder to be switched off. All participants were reassured that the recorded audio files would only be used by the researcher for data analysis purposes.

During the course of the iteration, the researcher visited the course website on a daily basis and took extensive notes in relation to the patterns of participants’ interactions with both the learning content and each other. The researcher documented her own insights into the participants’ use of the communication tools provided and into some of the issues that they encountered while participating in the online discussions. All hand-written observations and recorded audio files were transcribed into Word documents and stored in the researcher’s computer for subsequent data analysis.

**Documents**

As part of the assessment requirements of the course, students in the individual groups presented the final products of their collaborative work to the whole class. Three of the four collaborative groups developed a PowerPoint presentation and a guidebook, complete with photos, images and maps, of the areas explored during the trip. One group developed a website and a one-page flyer outlining the chosen itinerary. These final products were collected and reviewed by the researcher prior to conducting the focus group interviews with the individual groups at the conclusion of the first iteration. As part of the assessment, students were also required to keep a learning portfolio in which they wrote their reflections on their collaborative work on the task. These portfolios were collected and reviewed by the researcher at the conclusion of the first iteration.
Communications

The transcripts of the participants’ postings to the class and the individual group discussion forums and of students’ email messages and contributions to the synchronous chat were also collected and saved as Word documents in the researcher’s computer for analysis.

Focus group interviews with students

In order to consolidate the information gained from the researcher’s notes and observation of students’ participation in the assigned activity, and to corroborate the data gathered from an analysis of the documents and artefacts collected, four focus group interviews were conducted with each collaborative group of students at the conclusion of the first iteration. Patton (2015) has discussed the value of interviewing in finding out information which cannot be directly observed, such as feelings, thoughts and intentions, and has presented a method of categorisation of interviews and surveys which is based on their purpose and structure. The interview technique adopted in this study uses Patton’s Standardized open-ended interview category, in which the wording and sequence of questions are determined in advance and the questions are worded in an open-ended format. This approach was chosen because the framework of topics to be investigated was broad and it was necessary to ensure that the interview was highly focused and that all of the relevant topics and issues were covered in the course of the interview. Despite the strictly standardised schedule of questions, however, some flexibility was required to allow the researcher to ask follow-up questions to clarify individual responses.

Patton (2015, pp. 444-445) has identified six types of interview questions:

1. Experience or behaviour questions aimed at eliciting descriptions of experiences, behaviours, actions, and activities;
2. Opinion or values questions aimed at understanding what people think about their experiences and the interpretive process;
3. Feeling questions aimed at understanding the emotional response people have to their experience and thoughts;
4. Knowledge questions to find out what factual information the respondent has;
5. Sensory questions about what is seen, heard, touched, tasted and smelled;
6. **Background or demographic** questions about the background characteristics of the respondents.

The majority of the questions asked of the four groups of students were opinion, feeling and experience questions. There was one demographic question at the beginning of the interview but no knowledge and sensory questions. The full schedule of interview questions, together with an indication of the question’s type and a brief rationale for its use, is provided in Appendix 8.

All of the participating students agreed to take part in the focus group interviews and an appointment time was arranged with each group of students for the conduct of the interviews: Northern Territory group (five students); Victoria group (three students); New South Wales group (four students); and Queensland group (four students). The interviews were completed within the week following the group presentations of the first task. The interviews were recorded with a digital audio recorder, which was placed in front of the round table where the students and the researcher were sitting. The interviews lasted for approximately 50-60 minutes each, and at their conclusion were transcribed for analysis by the researcher. No data collection problems were evident. The interviews were audible and clear, and easily transcribed. At the conclusion of the interviews the students were thanked for their time.

**Changes made to the design of the learning environment between iterations**

The analysis of the data collected during and after the first iterative cycle of the study revealed a number of minor issues that needed to be addressed before initiating the second iteration. The changes and adjustments that needed to be made to the design of the learning environment related to the use of the communication tools and resources of the learning management system that supported the course, the high number of students assigned to each of the individual collaborative groups, the limited personal connection with two of the native speaker facilitators and the recruitment of new facilitators and other native speaker participants to support students’ interaction and collaboration, and the low intensity of social interaction within the online community.

**Difficulties with the learning management system**

The use of the learning management system in the first iteration of the study revealed a number of technical difficulties which needed to be addressed. These difficulties related to the use of the synchronous chat facility which, according to some of the students, was
not transparent and did not allow them to see at a glance who was online until they clicked on it, and to the difficulties of posting large files, such as images and videos, as attachments to the individual and group discussion forums. Students also commented that the technical difficulties that they experienced accessing and using the chat facility and the easier access that they had to the other participants in face-to-face mode, did not encourage them to make further attempts to use it. Students also noted that the difficulties that they experienced in attaching large files to their forum contributions impacted on their ability to communicate the final stages of their work to the other students in the class.

Although these issues were not serious and did not impact negatively on students’ overall use of the communication tools provided, they affected students’ ability to communicate synchronously and to share with the whole class the supporting documents that they had developed while they were working on completing the tasks.

In order to address the issues encountered by the students, the researcher gave the class a demonstration of the use of the chat facility and of its more advanced applications and advised students on possible alternatives to posting large documents to the class forums.

**High number of participants in the collaborative groups**

The first iterative cycle also revealed some problems with the relatively high number of students assigned to three of the four collaborative groups, which affected the groups’ ability to coordinate and schedule meetings and discussions outside of regular class time and through the synchronous chat facility. This issue was solved by ensuring smaller groups of three students were formed in the second iteration.

**Limited personal connection with two native speaker facilitators**

Analysis of the researcher’s notes and reflections on the scaffolding role of the native speaker facilitators revealed that two of the four facilitators recruited to support students’ collaboration during the first iteration were not particularly successful at establishing a satisfactory personal connection and developing a spontaneous relationship with the students in their collaborative groups. Although the support that they provided to the collaborative groups was extremely valuable and effective, and despite their high level competence and efficiency, they failed to project an image of themselves that was personable and warm but came across as rather distant and formal. Unlike the other two native speakers, these two facilitators did not naturally manage to
develop a genuine connection with the students by engaging in the types of socially-oriented, off-task communication that is an important component of successful mentoring, but kept the communication strictly task-focused.

Students’ comments from the focus group interviews confirmed these findings and prompted the researcher to review her choice of native speaker facilitators and recruit three new facilitators to support students’ interaction and collaboration during the second iteration.

**Low intensity of social interaction**

Analysis of the transcripts of the online discussion forums and the researcher’s notes and reflections also revealed that online social interaction within the learning community was not very extensive but was mostly limited to brief exchanges or occasional remarks. In order to attempt to increase the intensity of social interaction and to add variety and liveliness to the online learning environment, the decision was made to broaden community membership and invite other Italian native speakers to participate in the dialogue and in the collaborative tasks. Two Italian university students, who, at the time of this study, were participating in the international exchange program at the university where this research was conducted, were approached by the teacher and were invited to join the online community and contribute their interests and ideas to the discussion.

According to Wenger et al. (2002), a successful community of practice requires not only active facilitation but also intense social interaction. By opening community membership to other native speakers who were closer to the age group of the student participants, students would not only be provided with increased opportunities for social interaction and collaboration in the target language but also with the opportunity to develop a stronger link to the target language culture by being exposed to and integrating other students’ perspectives.

No issues emerged that required changes to the design of the authentic task itself, or to the theory-based design principles that guided the original design. Once the practical and technical problems had been addressed, the learning environment was ready for the second iteration of the study.
The second iteration

The second iteration of the study was conducted during the last six weeks of the second semester of the same Italian language course.

The participants

The participants were 12 second-year and three third-year students of Italian who also took part in the first iteration, five native speaker facilitators, two Italian university exchange students at the university where this study was conducted, and the researcher, who was also the class teacher. One second-year student who participated in the first iteration withdrew her enrolment from the course in Week 8 of the semester and did not participate in the second cycle of the study.

The primary reason for selecting the same cohort of students for the second iterative cycle of the study was that, having already participated in the first iteration, learners were already familiar with the requirements for the project and with the communication tools and resources of the online learning environment. It was assumed that, for the second iteration, students would require less assistance and support from the teacher compared to that required during the first iteration, and would therefore be able to focus more on, and dedicate more time to, communicating and collaborating with the other community members in order to complete the assigned task.

Five facilitators were involved in the second iteration of the study. Two of the four facilitators who participated in the first iteration were asked, and agreed to take part in the second cycle of the study. The main reason for inviting them to participate again was that both of them were very familiar with the geography of Italy, having lived and travelled there extensively. Another reason for selecting them again for the second iteration was that the students who collaborated with them during the first iteration commented very positively on their presence in the online community and on their friendly and personable attitude, and greatly valued their assistance and support during their work on the assigned task.

Three new facilitators were approached by the researcher prior to the start of the second iterative cycle, and were informed of the nature and purpose of the study. Two of these three new participants were experienced Italian high school teachers who had taught for at least four years at an Australian university as part of an Italian Government posting. One participant was an Italian high school teacher who had lived and worked in
Australia as part of his teacher training and development. All three participants were chosen by the researcher on the basis of their familiarity with the geography and locations of Italy, as well as their friendly and warm personality and their keen interest in taking part in the study. They were also selected because, at the time of this study, they were all living and teaching in Italy but had previously lived and taught in Australia for a number of years and were therefore familiar with the requirements and teaching methods of an Australian university course. The three new facilitators were provided with the same documents that had been given to the facilitators who participated in the first iteration and a consent form to obtain their informed consent to participate in the study.

Two Italian students who were participating in the international exchange program at the university where the study was conducted were approached by the researcher in person prior to the start of the second iteration and were informed of the nature and purpose of the study. They were provided with the same documents that had been given to the facilitators and a consent form to obtain their informed consent to participate in the study.

The teacher conducted all the lessons and provided students with continuous support and feedback over the period of the study. As with the first iteration, the teacher also had the role of researcher as participant.

**Procedure**

**Presentation of the second task: Week 8**

In Week 8 of the semester, the students were presented with the second authentic task. The task mirrored the first task by requiring students to plan and organise a four-week exchange trip, this time to Italy, for all the students in the class and to develop an itinerary and a comprehensive travel guide. As with the first iteration, the activity had to be completed in the target language over a period of five weeks and students were to collaborate and communicate with other community members through the same online tools and resources provided during the first iteration to develop a tangible product that focused on Italian geography, history and culture.

After being presented with the second task, and following the findings and recommendations made at the end of the first iteration, students organised themselves into five smaller groups of three students each, and each group identified itself with the
name of the region or regions of Italy that were chosen as the focus of its research. The names of the five groups were Lombardia–Veneto, Toscana, Lazio–Umbria, Campania and Sicilia.

As with the first iteration, the class discussions and the interactions that took place among the students, as they started to work on the assigned task, were observed and audio recorded by the researcher.

**Assessment of the second task: Week 13**

In Week 13 of the study, each group of students presented the final product of their collaborative work to the rest of the class. The group presentations were audio recorded and were assessed using the same list of six criteria which had been used for the first iteration. As with the first iteration, the teacher assigned a group mark for each presentation.

**Data collection**

The data collection process that took place during and after the first cycle of the study was revised and expanded for the second iteration, with the addition of individual interviews with students and facilitators. The data collected during this phase can be summarised into five categories: observations, documents, communications and interviews. These types of data are described in the following section.

**Noted observations**

As for the first iteration, the researcher compiled hand-written observations and recorded all classes with a digital audio recorder. During the course of the iteration, the researcher documented the participants’ use of the communication tools provided in the course website and their patterns of interactions with the learning content and with each other. All hand-written observations and recorded audio files were transcribed into Word documents.

**Documents**

At the conclusion of the second iteration, students in the individual groups presented the final products of their collaborative work to the rest of the class. Two of the five collaborative groups developed a PowerPoint presentation and a guidebook, complete with photos, images and maps, of the areas explored during the trip. Two of the groups developed a video and a guidebook, and one group developed a website and one-page
flyer outlining the chosen itinerary. These final products were collected and reviewed by the researcher prior to conducting the individual interviews with the students at the conclusion of the second iteration. The portfolio assignments handed in by the students at the conclusion of the second iteration were also collected and analysed by the researcher.

Communications

As for the first iteration, the transcripts of the participants’ postings to the class and individual group discussion forums and of students’ email messages and contributions to the synchronous chat, were saved and stored in the researcher’s computer.

Interviews with students

After the conclusion of the second iteration, individual interviews were conducted with the participating students. An appointment time was arranged with each student for the conduct of the interview.

The full schedule of interview questions, together with an indication of the question’s type and a brief rationale for its use, is provided in Appendix 9. The majority of the questions asked were opinion, feeling and experience questions. There was one demographic question at the beginning of the interview but no knowledge and sensory questions. The students had been encouraged to provide as much detail as they felt able to provide and were reassured that all responses would be confidential.

All the interviews were completed within a two-week period following the final presentations to the class. The individual interviews lasted for approximately 45-60 minutes each. They were recorded and then transcribed for analysis by the researcher.

Interviews with facilitators

After the conclusion of the second iteration, the participating facilitators were contacted in person or by telephone and asked whether they were willing to answer some questions about their experience of assisting students complete the authentic tasks. The facilitators were assured that the information disclosed during the interviews would be kept confidential and would not be used by the teacher to assess the participating students. All the facilitators agreed to be interviewed and were asked whether they preferred to answer the questions over the telephone or in person. Four of the seven facilitators chose to be interviewed by telephone and three of them in person. The
telephone interviews were recorded by placing a digital audio recorder adjacent to the
speaker telephone. The face-to-face interviews were conducted in person at the house of
the person interviewed and recorded with a digital audio recorder. The facilitators were
interviewed using the interview schedule included in Appendix 10.

All the interviews were completed within a month of the conclusion of the semester.
The individual interviews lasted for approximately 50-60 minutes each and were
transcribed for analysis by the researcher. At the conclusion of the interviews, the
facilitators were thanked for the considerable amount of time they had dedicated to the
study and for their valuable comments and feedback.

Data analysis

The data collected during the study were analysed using techniques of qualitative
analysis which involved the identification of dominant themes and the coding of themes
into categories and the content analysis of the participants’ contributions to the online
discussions. The analysis of the data and a discussion of the findings are discussed in
detail in Chapters 5-8.

Ethical considerations

In order to protect the rights of participants and ensure that the research was conducted
in a fair and equitable manner, it was important to follow strict ethical guidelines laid
down by the University. The following sections describe how ethical issues in the
conduct of the research have been addressed.

Informed consent

All participants were informed of the nature and extent of the research prior to
commencement of the study. An information letter, which provided full details of the
aims of the research, was distributed to the participating students on the first day of
class and was sent the facilitators prior to the beginning of each iterative cycle of the
study. Participants—both students and facilitators—were required to sign a consent
form to participate in the study, and to return it to the researcher.

Confidentiality of record

In order to ensure anonymity, pseudonyms for the students and facilitators were used
for the duration of the research. Participants’ real names and other identifying data, such
as specific course name and code or calendar year, were not used at any stage of the
research. Access to the audio recorded interviews and all documentation related to the research was confined to the researcher. Digital audio files, transcripts of interviews, the researcher’s field notes, students’ assignments and all other records were stored securely by the researcher.

**Possible risk to participants**

There were no apparent risks to participants in the research. Students and facilitators participated in the collaborative activities of the online community either in class or in their homes, and in the university library and computer laboratory. All participants were given the option of withdrawing from the study at any time. The case of a withdrawal of a participant would be dealt with by removing all reference to the student or facilitator requesting withdrawal in the data analysis and discussion phase of this study. However, data withdrawal was not requested by the one student who withdrew from the course during the period of the study.

**Payment for participation**

Participants were not offered any payment for taking part of the research. All students and facilitators agreed to participate in the study without remuneration.

**Phase 4: Documentation and reflection to produce design principles**

The fourth and final phase of the research was the documentation and reflection phase. In this phase the data collected and analysed in Phase 3 of the research were documented and reflected upon in order to produce a new set of design principles and guidelines that could be referred to and followed by other language teachers interested in addressing a similar problem within their specific educational context.

The design principles developed during this phase mirror the framework for analysis of the data used in Phase 3 of the study and are organised into four main categories. The first set of design principles focuses on the defining elements of the authentic tasks and on the impact of these elements on student learning. The second set focuses on the strategies that students used to collaborate effectively and to solve the issues and difficulties that arose during the collaborative work. The third set of guidelines focuses on students’ use of the communication tools and resources provided in the course website to collaborate in an online community of learners. The fourth and final set of guidelines relates to the role of the native speaker participants in supporting students in
the process of completing the authentic collaborative tasks. Phase 4 of the research is discussed in detail in Chapters 5-8.

**Summary of the research plan**

The research methodology for this study followed a design-based research approach and was conducted in four interrelated phases. The first phase involved identifying and exploring some of the issues associated with learning a second language in the context of an Australian university course. In this phase, an analysis of the available literature and consultation with teacher-practitioners were conducted to investigate the nature and extent of the issues in practice. The second phase of the study consisted in developing theoretically sound solutions to the problem area described in Phase 1. During this phase, an online learning environment was designed and developed to enable learners to collaborate and communicate with each other and with selected native speaker facilitators in the target language through the communication tools and resources of an online learning management system. The third phase consisted in the implementation of two iterative cycles of testing and refinement of the solution proposed in the second phase. In each iterative cycle, students were presented with an authentic task and were required to develop a final product that was the result of the collaboration within the individual groups and with the whole class. During this phase, collection and analysis of the data was undertaken to evaluate the effectiveness of the learning environment developed in the second phase. The fourth and final phase was the documentation and reflection phase. In this phase the data collected and analysed in Phase 3 of the research was documented and reflected upon in order to develop a set of design principles and guidelines into a framework to be followed by other language teachers when addressing a similar problem within their specific educational context.

This chapter has described the research approach and methodology used to conduct this study. The process of developing and implementing the online learning environment of this study is described in more detail in the following chapter.
CHAPTER 4

Development of the learning environment

Once the critical elements described in Chapter 2 and the guidelines for their implementation were established, an online learning environment based on the critical elements and characteristics was developed and implemented. This chapter describes the process of developing and implementing an online learning environment to support students’ language learning in the specific context of an Italian language university course.

The learning context

The issues associated with the application of traditional structurally-oriented theoretical perspectives and grammar-based methodologies to second language teaching and learning have been discussed in the first phase of this research. An in-depth literature review was then conducted to establish the value of applying a sociocultural approach, which integrates the structural and social elements of the language acquisition process, to a second language learning context. In order to investigate the significance of applying the sociocultural framework to the specific context of this study, and to provide further understanding of the specific problems of learning Italian as a second language in an Australian university context, the views of 10 second language teacher practitioners were also sought and considered. As discussed in Chapter 1, the lack of opportunities to engage in meaningful and authentic communication with native speakers of the target language who can model correct and appropriate language use in real-life situations and provide a connection to the target language culture, has been recognised as a major area of concern. This issue is particularly significant in a context where students’ opportunities to travel to the target language country and regularly engage in authentic face-to-face target language practice are limited due to physical and geographical limitations, and where the opportunity to bring native speakers into the classroom is problematic and impractical. Several teacher practitioners have also
expressed the concern that it is often more convenient for many teachers to revert to using decontextualised situations and non-authentic textbook-based tasks that focus primarily on the development of grammatical competence as a resource for communicative practice in the language classroom, thus limiting even further students’ opportunities for authentic and purposeful interaction in the target language. Despite the variety of innovative and effective assessment techniques, teachers often find it easier and more time efficient to rely on traditional, decontextualised methods of assessment, such as grammar tests and quizzes, which test students’ linguistic proficiency and focus on the production of correct linguistic form rather than on meaningful and purposeful language use.

The development of an online learning environment

In order to address these concerns and to explore the opportunity to integrate the theoretical principles that emerged from the literature on sociocultural theory applied to second language acquisition, situated and authentic learning and online communities of practice and communities of learners, an online learning environment was developed and implemented. The learning environment needed to focus on creating and supporting the development of an online community of learners in which community members had the opportunity to interact regularly and communicate in the target language through the web-based communication tools and resources of a learning management system. The learning environment needed to have an authentic, real-life task as its main focus and an assessment component that required learners to collaborate with other students and with a number of selected native speaker facilitators in order to complete the given task. The learning environment was designed and implemented in the tutorial component of a second and third year Italian university course over two iterations.

In order to develop an effective online learning community which fulfilled the design requirements of the community of practice and community of learners’ model described in Chapter 2, it was necessary to integrate a learning management system (LMS) to support communication and collaboration and to help manage the sharing of information and resources among community members. The process of selecting a suitable learning management system, together with the appropriate CMC tools and resources to facilitate interaction and collaboration within the online community, is described in the sections that follow.
The learning management system

The process of selecting a suitable learning management system was guided by the requirement that access to the site would need to be open to external participants rather than being restricted to the students enrolled in the relevant language courses at the university, and that the system would need to be flexible enough to accommodate and support the participation of a broader target language community located outside of the university context. Another crucial requirement was that the interface of the LMS would need to be user-friendly and intuitive to allow the external participants to access the website readily and make use of all its features without requiring much technical support. It would also be important for the website to be relatively easy to set up and maintain, to allow the teacher to upload new content quickly and update existing content while focusing on facilitating members’ interactions and monitoring students’ participation in the collaborative activities. A final requirement of the LMS was that it would need to enable interactivity and collaboration to be built into the site by providing a combination of CMC features such as email lists, web-based asynchronous threaded discussion forums and synchronous text communication via instant messaging and chat spaces, and by providing a system for monitoring both synchronous and asynchronous discussions and for storing information and data (including content, messages and threaded discussions) on the server.

At the time of this study, several programs in the Faculty of Education at the university where this project was conducted were integrating the Janison LMS (http://www.janison.com.au) to support teaching and learning in postgraduate teacher-training courses which frequently required the participation of experienced teachers and mentors external to the university. After extensive consultations and discussions with the academic coordinators and the technical support staff of these courses, and after evaluating the benefits and advantages related to the integration of Janison and its main affordances for teaching and learning, it was decided that the Janison LMS would be adopted as a platform to support the development and implementation of the online learning community of this study.

The CMC tools and resources

Once the decision to adopt the Janison LMS was made, the next stage was to select suitable CMC communication tools and resources to enable interaction and collaboration within the online learning community. Since the primary goals of the
learning environment of this study were to support target language practice and development by promoting social interaction and the collaborative completion of an authentic task, it was important to ensure that the choice of tools and resources was appropriate to the achievement of those goals. The choice of the CMC features, therefore, began with an examination of the goals of the learning environment, and a consideration of the possible benefits and advantages related to the integration of different text-based synchronous and asynchronous CMC tools into the learning environment of this study in order to achieve those goals.

In order to develop an online learning community which enabled learners to engage in social interaction and collaboration with other learners and native speakers of the target language, it was necessary to provide students with the opportunity to participate actively in online communication and discussion beyond the limited space of the classroom and at times that were convenient to individual community members. In order to collaborate effectively with other community members, learners had to be able engage in multiple discussions both within the whole class and within smaller collaborative groups of fellow students and native speakers. Another important requirement of the learning environment was that, in order to enable the development of learners’ target language skills through interaction and collaboration, it was crucial for learners to have ongoing and direct access to the linguistic model provided by their more competent peers and the native speaker participants, and to be able to examine and review their language use as needed. Importantly, all learners had to be given the opportunity and the time to communicate and contribute their thoughts and ideas to the discussions regardless of their linguistic proficiency level and their level of confidence in expressing themselves in the target language.

Several researchers and language educators have argued that interaction and collaboration among members of a target language community can be effectively supported by asynchronous and synchronous text-based CMC tools and have discussed the benefits and advantages of integrating these two formats in the teaching and learning of foreign languages (Blake, 2013; Chapelle, 2005; Lee, 2005; Levy & Stockwell, 2013; Thorne & Payne, 2005). These benefits and advantages are discussed in detail in the following sections.
Asynchronous online discussion forums

In their review of technologies in use in language teaching and learning, Levy and Stockwell (2013) have argued that incorporating asynchronous online threaded discussion forums in the second language classroom provides learners with increased opportunities to engage in interaction and discussion with others in the target language regardless of time zone differences (particularly when study abroad is not a viable option), and can thereby assist second language development. Levy and Stockwell explained that participating in online discussion forums can foster the development of students’ reading comprehension and written communication skills as students are required to read and examine the other members’ postings and to reply to them by composing their own messages in the target language. According to Chapelle (2005), regular exposure to the rich linguistic input and well-formed sentences of native speaker participants can enhance the language acquisition process, as learners have the opportunity to notice correct and appropriate language use and apply it to their own writing. Blake (2013) argued that another important advantage of integrating online discussion forums in the language classroom is that they promote equal participation of students in the discussions. He explained that online discussion forums allow the students who have less-developed language skills to take time to view and analyse the other members’ postings and structure their contributions to the forums, and enable the less-extroverted students to be engaged actively in the discussions in a way that would not be possible in face-to-face communication. According to Chapelle, students’ participation in online discussion forums is also one of the best ways to reduce communication anxiety and increase learners’ perception of control over the discussion as students feel that they have more time to reflect on the ideas contributed by others and to integrate them with their own ideas and opinions. Another important advantage of online asynchronous discussions is that they promote active learning and foster learners’ autonomy and accountability, as learners need to take the responsibility to respond to others and contribute to the discussions (Lee, 2005). A final benefit is that active discussion forums with high levels of interaction generally help to create course cohesion (Qian & McCormick, 2014) and result in increased sense of community among participants (Dawson, 2006) and in increased levels of student satisfaction in the learning experience (Ravenna, Foster & Bishop, 2012).

In light of these considerations, it was decided that a system of multiple asynchronous discussion forums would be set up and integrated to support online communication and
collaboration both within the whole class and within individual collaborative groups. During the first iterative cycle of the study, a threaded class discussion forum entitled *Forum di classe 1* was created to provide a platform that all the participating students and facilitators could access to contribute their messages and read all the messages posted by others (see Figure 4.1). For privacy reasons, the names and other identifying details of participants in these class forums have been erased.

Figure 4.1. Class forum open discussion space

Four individual group discussion forums were also created to enable interaction and collaboration within each of the four collaborative groups established by the students during the first iteration. During the second iteration of the study, a new threaded class discussion forum entitled *Forum di classe 2* was created to enable all the participants to contribute their messages and read all the other participants’ messages. Five new individual group discussion forums were also created to enable interaction and collaboration within each of the five new collaborative groups established by the students during the second iteration. The benefits and advantages of integrating
synchronous text-based chat to support interaction and collaboration into the learning environment of this study are discussed in the following section.

**Synchronous text-based chat**

In their book on technologies in use in language learning, Levy and Stockwell (2013) have also summarised the advantages and benefits of the integration of synchronous text-based CMC tools in the second language classroom. Similarly to asynchronous online discussion forums, synchronous text chat—a form of synchronous CMC in which interaction occurs simultaneously via typed text—provides learners with increased opportunities to interact and communicate with other learners and native speakers in the target language outside the normal constraints of the classroom. As discussed earlier, increased social interaction and discussion in the target language supports second language development, as learners have the opportunity to practise their reading comprehension and written communication skills while negotiating meaning with others (Blake, 2013; Chapelle, 2005; Levy & Stockwell, 2013; Thorne & Payne, 2005). Synchronous text-based communication can also effectively support collaboration among community members as it enables participants from different locations to set up virtual meetings within small individual collaborative groups and to use them as a space to brainstorm ideas and discuss specific topics (Blake, 2013; Levy & Stockwell, 2013; Martin, Parker & Deale, 2012; Murphy, 2009). According to Park and Bonk (2007), synchronous text-based communication also has great potential to offer high levels of interactivity and increase the active participation of individual members in the discussions, as participants are required to think quickly and provide immediate response and feedback to their virtual interlocutors. Park and Bonk also contended that synchronous communication encourages participants to maintain their interest and focus on the topics of the discussion over a continuous period of time and supports the exchange of social content within the community.

After taking into account all the potential benefits and advantages of synchronous text-based communication, it was decided that a synchronous chat tool would be integrated into the learning environment of this study to bring together learners and the native speaker participants simultaneously and to support collaborative learning within small individual collaborative groups. The benefits and advantages of integrating this approach are discussed in the following section.
Email communication

In addition to the asynchronous discussion forums and the synchronous chat, it was also necessary to provide students with the means for one-to-one private communication in the target language when students needed to post messages that were addressed only to specific recipients and that did not need to be read by all community members. Email communication appeared to be an appropriate means to provide such opportunities to community participants as it offered an alternative mode of communication that was familiar to all participants and simple to use.

The simple combination of the asynchronous and synchronous communication tools described above meant that the LMS adopted in this study would be capable of supporting the types of interactive and collaborative learning environments called for by Vygotsky’s sociocultural theory applied to second language acquisition, and by the proponents of effective learning community design and development. The combination of different modes of text-based communication would also provide flexibility to the learning environment as it would enable learners to develop meaningful interpersonal connections with other community members regardless of time zone differences or variations in their personal and work commitments, and to participate actively in the collaborative activities of the learning community in accordance with their preferred styles of interaction.

The development of the course website

Once the decision to include asynchronous and synchronous text-based features into the learning platform adopted in this study was made, the next step was to request a site to support the delivery of the tutorial component of the two language courses in one single course site.

Once the site request had been established and all the participants had been registered as users, a welcome message was composed and placed on the website. A link to the course outlines of each of the two language courses was also placed on the menu as the first point of reference for information about the course. A class discussion forum that could be accessed by all community participants was created and a first introductory message was posted by the teacher prior to the start of the first iteration of the study. Links to a synchronous chat meeting place and to an email list of all participants were also placed on the main menu of the site.
Once the main course site features had been set up, the site was ready to be accessed and used by all the registered participants. During the first week of the course, prior to the beginning of the first iterative cycle of the study, students were introduced to the LMS and its main features and were encouraged to access and familiarise themselves with the site.

In Week 2 of the course, after the students had self-selected into four collaborative groups, and after each group had been assigned to one native speaker facilitator, four individual discussion forums were created by the researcher and were added to the main menu of the course site to enable interaction and collaboration within each individual group. Figure 4.2 shows some of the messages posted to the New South Wales group discussion forum.

Figure 4.2. New South Wales group discussion forum
Prior to the beginning of the second iterative cycle of the study, a new class discussion forum that could be accessed by all community participants was created by the researcher and added to the main menu of the course site. A similar procedure to that used in the first cycle was also adopted to assign native speaker facilitators to the collaborative groups and to set up the new group discussion forums.

**The development of the authentic tasks**

While the primary focus of the learning environment of this study was to enable learners’ target language development by providing them with opportunities for social interaction and collaboration with other learners and native speakers, it was necessary to ensure that the types of interaction were purposeful and goal-oriented and that learners engaged in communicative activities that were authentic and meaningful.

As discussed in Chapter 2, the characteristics of authentic tasks defined by Herrington et al. (2010) were used to guide the design and development of a learning task for implementation (see Table 2.1). Learners were presented with a complex, ill-defined task that had real-world relevance and mirrored the type of real-world communicative tasks performed by native speakers of the target language in their interactions with each other. It was also important to design a task which enabled learners to have access to the multiple perspectives of other learners and native speakers and to use a wide variety of authentic material and resources in order to complete them. The task also needed to provide learners with the opportunity to collaborate both with other learners and with expert speakers of the target language and to reflect on their learning both individually and collectively. It was important that the task be integrated and applied across different subject areas, such as geography, history and art history, and that it be integrated with assessment to reflect real-world assessment rather than the types of artificial assessment typified by grammar-based tests and quizzes. Finally, the task needed to enable learners to create a complete and finished product that could be shared, and to be open to multiple solutions and outcomes rather than allowing only a single correct response.

After taking into consideration all these requirements, an authentic task was designed and developed for each of the two iterative cycles of the study to enable learners to engage and immerse themselves in purposeful and goal-oriented authentic interaction and collaboration with other learners and native speaker of the target language and apply their language skills to develop a tangible product. A description of each
individual task was uploaded on the course website prior to the beginning of each iterative cycle of the study, and is provided in Figure 4.3 and Figure 4.4.

**TASK 1: Plan a trip to Australia**

A group of 15 Italian university students is coming to Australia for a four-week exchange trip. Plan and develop a detailed itinerary of the trip and create a comprehensive travel guide for the Italian students. The travel guide can take the form of a web page or website, a video segment or a PowerPoint presentation, a guidebook or brochure, or a combination of any of these options, and needs to include specific information related to the trip such as transport, accommodation, activities and cost.

You will need to assign yourself into small collaborative groups and negotiate the division of the work as well as your roles and responsibilities both within each individual group and with the rest of the class. A native speaker facilitator will be allocated to each collaborative group to offer assistance and support as required, and you will be able to communicate and collaborate using the online communication resources and features of the course website.

In Week 7 of the semester you will present the final product of your collaborative work to the rest of the class and you will submit your travel guide and your individual reflective portfolio.

*Figure 4.3. Description of Task 1*

**TASK 2: Plan a trip to Italy**

Your Italian class is travelling to Italy for a four-week exchange trip. Plan and develop a detailed itinerary of the trip and create a comprehensive travel guide. The travel guide can take the form of a web page or website, a video segment or a PowerPoint presentation, a guidebook or brochure, or a combination of any of these options, and needs to include specific information related to the trip such as transport, accommodation, activities and cost.

You will need to assign yourself into small collaborative groups and negotiate the division of the work as well as your roles and responsibilities both within each individual group and with the rest of the class. A native speaker facilitator will be allocated to each collaborative group to offer assistance and support as required, and you will be able to communicate and collaborate using the online communication resources and features of the course website.

In Week 13 of the semester you will present the final product of your collaborative work to the rest of the class and you will submit your travel guide and your individual reflective portfolio.

*Figure 4.4. Description of Task 2*

The requirement to complete these two tasks meant that learners were given the opportunity to interact and communicate with other members of the target language learning community by participating in the types of authentic activities typically undertaken in the real world. The fact that the tasks involved planning and organising travel both within Australia and in Italy ensured their relevance to the students’ own life.
experiences and future plans, and enabled them to practise and apply the linguistic knowledge and skills that they had developed in the formal context of the classroom. The ill-defined and complex nature of the tasks—and the fact that minimal input was provided to the students on how to complete them—required students to define all the tasks and sub-tasks needed to develop the two final products and to invest significant time and resources in the collaborative process. The tasks provided students with the opportunity to examine the scenarios from a variety of different perspectives rather than a single perspective that had to be imitated in order to complete the tasks successfully, and enabled them to explore and use a wide range of resources, including authentic web-based material. The fact that the tasks were to be completed in collaboration with other learners and native speakers enabled students to develop their target language communicative skills through regular practice with other more competent participants and to develop significant teamwork skills. The collaborative and open-ended nature of the tasks also enabled choices related to specific aspects of the tasks such as travel locations, timeframes of the itineraries and format of the final product, and encouraged students to reflect on their learning and on the collaborative process both individually and collectively. The interdisciplinary nature of the tasks encouraged learners to integrate and apply knowledge and expertise across different subject areas such as geography, history and art history, leading to a diverse range of outcomes outside the specific domain of language learning. Since the two tasks were the main focus of the tutorial component of the two combined language courses, assessment was fully integrated with the tasks in a way that reflected real-life assessment. The fact that the main outcome of the tasks was to create a comprehensive itinerary and travel guide for each of the two travel destinations rather than completing an exercise as a preparation for something else, enabled students to create a tangible final product that they could potentially benefit from in the future. The final outcome of their collaborative work was a whole product, which was in itself valuable and could be useful in real life. Finally, the open-ended nature of the tasks enabled learners to arrive at different solutions and outcomes, depending on their interests and creativity, rather than being limited to a single correct response.

**The native speaker participants**

The active participation of the native speaker facilitators in the activities of the online community of learners was integral to the development of the learning environment of this study. As discussed earlier, several researchers who have applied Vygotsky’s
sociocultural framework to SLA and second language pedagogy have argued that collaborative social interaction with other members of a target language speaking community is a crucial factor in the second language development process (Lantolf & Beckett, 2009; Lantolf & Poehner, 2014; Otha, 2000; Swain, Kinnear & Steinman, 2010; Thorne, 2005). According to these researchers, it is through collaborative social interaction with other more competent speakers that learners have the opportunity to be exposed to and observe the correct and appropriate use of the structures and functions of the target language by more proficient students and native speakers and then attempt to use them in their own interactions and for their own purposes. In discussing the application of the Vygotskian concept of zone of proximal development to SLA, other researchers (e.g., Kitade, 2000; Lantolf, 2013; Lantolf, Thorne & Poehner, 2014; Lightbrown & Spada, 2013; Otha, 2000, 2005) have pointed out that participating in meaningful, goal-oriented, social interaction with more competent target language speakers is valuable not only because it provides learners with grammatically correct linguistic input and a grammatically correct linguistic model that they can hold as a reference point, but also because it can assist them develop their language skills beyond their current level of competence and therefore enable them to advance through their zone of proximal development.

In order to develop a learning environment which enabled learners to engage in collaborative social interaction with more competent target language speakers, and which supported the development of their language skills beyond their current level of competence, it was necessary to extend the membership of the learning community to a number of native speaker participants. The process of selecting and recruiting suitable native speakers was guided by the requirement that, as well as being competent target language speakers, these external participants would need to have some prior teaching experience so that they would be able not only to provide learners with the specific linguistic support that they needed, but also to revise and adapt their support depending on learners’ different levels of linguistic competence and their ability to communicate effectively. Another crucial requirement was that the selected participants would need to be experienced at supporting students’ learning in online learning environments and would need to commit to having a regular and active online presence over the course of the specific iteration in which they would be involved. Since the two authentic tasks to be completed by the collaborative groups involved planning and organising travel in Australia and Italy, it would also be important for the selected participants to be familiar
with the content of the tasks and, to some degree, with the specific geographical areas and locations to be explored by their assigned collaborative groups. A final requirement was that the selected participants would need to be friendly and approachable, and able to encourage and motivate learners to complete the assigned tasks as required.

**Selecting and recruiting the native speaker participants**

Once the decision was made to extend the membership of the learning community to a number of native speaker participants, the next step was to select these participants and to invite them to take part in the study. In order to enable each of the individual collaborative groups established during the first iterative cycle of the study to interact with and be supported by one native speaker participant during the collaborative completion of the first authentic task, a list of potential native speaker participants who met the requirements outlined above was made by the researcher. All these potential participants were approached by the researcher and were informed about the nature and purpose of the project prior to the beginning of the first iteration. All four native speakers agreed to participate in the study.

In Week 2 of the course, once the students had formed their groups and agreed on the specific focus of their itinerary and travel guide, one native speaker participant was assigned to each group on the basis of his or her knowledge and familiarity with the specific geographical areas chosen by the individual groups.

After analysing the researcher’s notes and reflections on the scaffolding role of the native speaker facilitators at the end of the first iterative cycle of the study, it was decided that three new native speaker participants would be recruited to support students’ collaboration during the second iteration. All these new participants were informed about the project aims and methods and agreed to participate in the study.

In Week 8 of the semester, a different native speaker participant was assigned to each collaborative group depending on his or her areas of expertise, as was done during the first iteration of the study. In addition, two Italian university students were also invited to join the community and participate in the collaborative activities. As discussed in Chapter 2, one of the crucial design elements for online communities of learners involves opening dialogue between inside and outside perspectives by broadening community membership and encouraging new participants to join the community and bring new interests and ideas (Wenger et al., 2002). The participation of the two
students was intended to provide increased opportunity for interaction in the target language and to contribute to bringing new experiences and perspectives to the community. Both participants were exchange students at the university where this study was conducted and were approached by the researcher and informed about the project in person prior to the beginning of the second iteration. They both agreed to participate in the study and were provided with the same information documents that had been given to the facilitators. Unlike the native speaker facilitators, these student participants were not assigned to one of the individual collaborative groups but were able to interact with the other community members and contribute to community activities as they wished, depending on their level of expertise and interest in a particular travel location.

**Critical design elements and their implementation**

In developing the online learning community of this study, it was important to ensure that all the critical design elements that have emerged from the literature, and from the theories and frameworks described in the literature review in Chapter 2, were incorporated into the design. This process was described in the discussion of the development of the learning environment above, and a summary is provided in Table 4.1. These are organised under different headings based on the key concepts discussed in the literature.
Table 4.1  
**Design elements that emerged from the literature, and guidelines for their implementation in the learning environment**

<table>
<thead>
<tr>
<th>Design element</th>
<th>Guidelines for implementation</th>
<th>How the element was instantiated in the learning environment</th>
</tr>
</thead>
</table>
| SLA sociocultural theory | Provide opportunities for collaborative social interaction with other speakers of the target language (TL) | • students interact with other learners and native speakers in the target language  
• students are required to work in small collaborative groups |
| Provide access to more proficient speakers of the TL (peers, native speakers and teacher) | • collaborative groups enable interaction with learners with various levels of linguistic competence  
• selected native speaker facilitators model correct and appropriate language use and provide scaffolding |
| Provide the opportunity to participate in meaningful and goal-oriented communicative activities that have real-world relevance | • authentic and meaningful tasks are used as a basis for language practice  
• the tasks focus on developing TL fluency and communicative competence in real-world situations  
• assessment is based on the appropriate completion of the tasks rather than grammatical accuracy |
| Scaffolding in online learning environments | Provide access and enhance motivation | • individual access to online resources enables students’ participation and engagement in community activities  
• authentic tasks that are relevant to student experiences promote motivation and engagement  
• the teacher provides information and technical support  
• teacher and facilitators encourage online participation |
| Provide opportunities for online socialisation | • collaborative groups and the asynchronous and synchronous communication tools and resources enable interaction in the online environment  
• teacher and facilitators promote and facilitate social interaction and online participation |
| Provide opportunities for information exchange | • collaborative groups enable mutual exchange of information  
• teacher and facilitators encourage students’ active participation and positive online relationships and provide direction and formative feedback |
| Provide opportunities for knowledge construction | • collaborative groups enable regular interaction and knowledge construction  
• teacher and facilitators encourage discussion and collaboration that leads to development and knowledge construction |
| Provide opportunities for development | • teacher and facilitators encourage students to explore their own thinking and reflect on their learning through focused online discussion  
• individual reflection through the learning portfolio writing process enables development and growth  
• focus group and individual interviews encourage students’ individual and collective reflective process |
<table>
<thead>
<tr>
<th>Design element</th>
<th>Guidelines for implementation</th>
<th>How the element was instantiated in the learning environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic tasks</td>
<td>Design tasks which have real-world relevance</td>
<td>• the tasks mirror the type of tasks students can encounter in real life</td>
</tr>
</tbody>
</table>
|               | Design tasks which are ill-defined | • the tasks are presented in the form of a scenario, there are no step by step instructions  
• when presented with the scenarios, students define the tasks and sub-tasks required to complete the activity and determine the course of action |
|               | Design complex tasks to be investigated over a sustained period of time | • each scenario presents a complex task to be completed over a six week period |
|               | Design tasks which provide the opportunity to examine the problems from different perspectives using a variety of resources | • collaborative groups and the participation of native speaker facilitators enable the expression of different points of view and access to the different perspectives of other participants  
• the tasks enable access to multiple resources |
|               | Design tasks which provide the opportunity to collaborate | • each task is addressed to the whole class, and students are required to work in small collaborative groups |
|               | Design tasks which provide the opportunity to make choices and reflect | • each task enable learners to make choices both individually and as a group  
• collaborative groups and individual and focus group interviews promote individual and collective reflection  
• individual reflection is facilitated by the learning portfolios writing process |
|               | Design tasks which can be integrated and applied across different subject areas and lead beyond domain-specific outcomes | • the tasks enable integration of learning across different subject areas |
|               | Design tasks which are seamlessly integrated with assessment | • students are assessed on the results/final product of their collaborative work, there are no separate assessment tasks or tests  
• assessment is based on the development of different skills |
<p>|               | Design tasks which provide the opportunity to create finished products | • the tasks enable learners to create a finished product that could be used and useful in the future |
|               | Design tasks which allow competing solutions and diversity of outcomes | • open-ended complex tasks are open to multiple solutions and outcomes |
| Online communities of practice and communities of learners | Provide a clear frame of purpose for the community | • students collaborate in order to complete two real-world tasks |
|               | Design for evolution and sustainability | • the online community develops and evolves as new members enter the community |
|               | Open a dialogue between inside and outside perspectives | • students share their experiences and perspectives and are encouraged to be open to new perspectives and information brought from outside the community |
|               | Provide the opportunity to move through different levels of participation | • students collaborate and are encouraged to take different roles and responsibilities in their groups |
|               | Provide opportunities for both public and personal communication | • community members can communicate through class and group discussion forums, synchronous chat sessions and through personal email |</p>
<table>
<thead>
<tr>
<th>Design element</th>
<th>Guidelines for implementation</th>
<th>How the element was instantiated in the learning environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make clear the value and impact of membership to the community</td>
<td>• the final product of community activities is a tangible, finished product created and shared by all community members</td>
<td></td>
</tr>
<tr>
<td>Design for familiarity and liveliness</td>
<td>• the activities are interesting and engaging but also allow participants to draw from past experiences and knowledge</td>
<td></td>
</tr>
<tr>
<td>Ensure that there are pre-existing relationships in the community</td>
<td>• the majority of the participating students know each other from previous courses • new members are also invited to join the community and bring new interests and ideas</td>
<td></td>
</tr>
<tr>
<td>Build a rhythm of activity</td>
<td>• student community members meet face-to-face during regular class time and organise regular meetings with their collaborative groups • group cohesion is maintained through regular face-to-face meetings in class and within individual collaborative groups • coordination and facilitation of online threaded discussions promote group cohesion • different modes of communication (face-to-face and online) are integrated into the learning environment</td>
<td></td>
</tr>
<tr>
<td>Cultivate stakeholder alignment and support</td>
<td>• collaboration enables community members to negotiate a common understanding of the value of the community • community members with different levels of linguistic competence and with different backgrounds and experiences are invited to participate in community activities</td>
<td></td>
</tr>
<tr>
<td>Assign leadership roles</td>
<td>• students are required to divide themselves into collaborative groups and negotiate roles and responsibilities within the groups • native speaker facilitators are assigned a scaffolding role • asynchronous communication promotes active facilitation</td>
<td></td>
</tr>
<tr>
<td>Provide the opportunity to collaborate and cooperate</td>
<td>• collaborative groups enable students to share knowledge and skills • collaborative groups promote an increased flow of information and knowledge sharing • collaborative groups encourage student involvement in the learning process • collaborative groups enable interaction in the target language and contribute to reducing the feeling of isolation experienced by some students</td>
<td></td>
</tr>
<tr>
<td>Promote the retention of learners over a sustained period of time</td>
<td>• students are required to participate in community activities for the entire duration of the semester</td>
<td></td>
</tr>
<tr>
<td>Ensure that learners experience social and emotional presence</td>
<td>• collaborative groups and native speaker facilitators enable learners to experience social and emotional presence</td>
<td></td>
</tr>
<tr>
<td>Encourage the active participation of instructors and facilitators</td>
<td>• instructor and facilitators participate actively in community activities</td>
<td></td>
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</tbody>
</table>
This chapter has described the process of developing and implementing an online learning environment to support students’ language learning in a second and third year Italian language university course, based on the critical elements and defining characteristics identified from the literature. Chapters 5-8 address the findings of each research question, with the next chapter providing an analysis and discussion on the impact of each of the 10 defining elements of authentic tasks on student learning in an online community of learners.
CHAPTER 5

Authentic tasks

The online learning environment of this study was designed and implemented according to the ten defining elements of authentic tasks, as described in Chapter 2. This chapter provides analysis and discussion of the impact of each of these elements on student learning in an online community of learners. Chapter 4 described the development and implementation of the learning environment based on the theories and frameworks derived from the literature. This chapter presents the analysis of data relating to the first research question. It begins with a description of the framework and method of analysis and concludes with a discussion of the findings.

Research question 1

What elements of authentic tasks provide opportunities for student learning in an online community of learners?

Framework and method of analysis

Techniques of qualitative analysis recommended by Marshall and Rossman (2014), McCracken and Morgan (2009), Miles, Huberman and Saldaña (2013) and Patton (2015), were used to analyse the data collected from the focus group and individual interviews with students, the individual interviews with the facilitators, the transcripts of the messages contributed to the online threaded discussion forums and the synchronous chat, email messages, the students’ reflective portfolios and other documents and notes.

The process of coding and analysing the data involved a combination of the template organising approach described in Crabtree and Miller (1999) and in Miles, Huberman and Saldaña (2013), and the constant comparative method, outlined by Corbin and Strauss (2014) and Glaser and Strauss (2009).
The template organising approach allowed the researcher to determine early categories in the data based on the defining characteristics of authentic tasks. The template was constructed by identifying and coding different sections of text present in the data, according to 10 *a priori* categories based on the literature, such as: real-world relevance, ill-defined nature, complexity and sustained effort, multiple perspectives and resources, collaboration, reflection, integration and application across different subject areas, integration with assessment and development of polished products, competing solutions and diversity of outcomes. A different colour highlighter pen was used for coding the segments of text related to each of these categories.

After colour-coding the printed version of the text, 10 separate computer documents were created, one for each of the 10 categories of analysis. All the segments of text related to a particular code were then clustered together in the same document, ready to be coded subsequently and analysed independently. In a number of cases the same segment of text was classified within two or more codes at the same time.

After developing the template, the constant comparative method was adopted to identify new emerging categories and themes within each of the 10 previously established categories. During this phase of the analysis, notations and observations were made in the margins of the printed documents and several new sub-categories or codes were generated. These sub-categories were progressively reviewed and refined by constantly comparing and connecting one segment or observation present in the data with another, until all data were exhausted.

After the final categories and their properties were identified and relevant patterns and themes were determined, data were ordered and organised into displays. Observations and interpretations about the meaning of the data were then made and the conclusions were written up in order to be included in the thesis.

The process of coding the data is summarised in Table 5.1.
Table 5.1

<table>
<thead>
<tr>
<th>Stages of analysis of data: Authentic tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcribing</td>
</tr>
<tr>
<td>Coding</td>
</tr>
<tr>
<td>Sub-coding</td>
</tr>
<tr>
<td>Ordering and displaying</td>
</tr>
<tr>
<td>Conclusion drawing</td>
</tr>
<tr>
<td>Verifying</td>
</tr>
</tbody>
</table>

As can be seen in Table 5.1, the initial template consists of 10 higher-order codes established *a priori*. This descriptive level of coding provided a structure which allowed the researcher to quickly and efficiently identify related sections of text and bring them together earlier in the analysis process.

The constant comparative method allowed the researcher to identify relevant patterns and themes within each of the 10 established categories and to create new emerging categories by progressively comparing and integrating different segments or observations present in the data with other segments. This new level of coding led to the creation of both descriptive and explanatory categories (Lincoln & Guba, 1985, p. 341) and provided the starting point for the interpretation of the data.

**Analysis of data**

Chapter 2 outlined the defining characteristics of authentic tasks as described in Herrington, Oliver and Reeves (2003), Herrington, Reeves, and Oliver (2010) and Herrington, Reeves, Oliver and Woo (2004), and how these characteristics guided the design of the two activities which students were required to complete during the study.

These characteristics (see Table 2.1) formed the basis for the 10 *a priori* categories for analysis. Within each of these categories several sub-themes (sub-categories) were identified and described. Each of these 10 defining categories and the sub-themes and issues that emerged from an in-depth investigation into each of them are described in detail in the following section.
1. **Real-world relevance**

The tasks that students were required to complete had real-world relevance and mirrored real-life tasks, rather than being decontextualised textbook-based tasks. These tasks were designed to allow students the opportunity to plan and organise the various aspects of a trip, read and interpret authentic sources of information, as well as communicate with other students and with the native speaker facilitators using the target language.

In analysing the data collected during the study, several themes emerged in relation to the real-world relevance of the tasks and its impact on student learning. Each of these themes is discussed below.

**Engagement with context**

The real-world relevance of the tasks and of the various activities involved in completing them encouraged students to engage fully with the context of the tasks. This was reflected in the following comment by one of the students:

> The whole idea of planning the details of travel was so close to reality…I really got into it as if I was a real traveller planning a real trip. (Interview with Diana)

Other students described the feeling of becoming so involved in the task of developing the itineraries that it almost did not occur to them that no-one would actually participate in the trips that their groups had so carefully planned:

> We planned every single aspect of the trips so carefully, always thinking that someone would have followed our itineraries…it didn’t even occur to us that it was a pretend thing and that there would be no one doing it. (Interview with Elise)

Some participants’ involvement with the scenarios was so complete that it even irritated some of the students. For example, Nicholas expressed his frustration with the fact that the other students in the class got caught up with the tasks and acted as if they were real. He criticised the fact that his classmates were not able to distance themselves from the tasks as they worried excessively about the details of the trips. In the individual interview carried out with the researcher at the end of the study, Nicholas pointed out
that the trips that the groups were planning and organising were not real and therefore
the rules could be bent:

It’s not a real trip, there’s no-one actually doing it, so you can kind of bend the
rules a little with reference to reality at that point, you can say okay, everyone is
just going to start on a Sunday, and yes, everything will be open, and the
weather will be fine, and you can disregard a whole bunch of stuff, but people
got really caught up in it, they just couldn’t let go of it. (Interview with
Nicholas)

This student is describing the fact that his classmates became deeply engaged in the
context of the tasks and accepted them as real. Such engagement with the scenarios was
possible because students entered into a process that has been described as “willing
suspension of disbelief” (Coleridge, as described in Herrington, Oliver & Reeves,
2002). Students willingly accepted the learning context that had been created for them
and became totally immersed in the scenarios as if they were real. According to
Herrington, Oliver and Reeves (2003), such engagement with the learning context and
willingness to accept it as real is as an important process that needs to occur in order to
support students’ learning, particularly in online settings. It provides the motivation that
is needed in the initial stages of the learning process, when students are still developing
the familiarity with the setting and the skills required to carry out the tasks.

In the particular context of this study, the fact that the tasks required students to carry
out activities similar to those that are likely to be encountered in real-life situations
encouraged them to identify with the scenarios and motivated them to engage fully with
the learning context.

According to experimental psychologist Mihály Csikszentmihalyi (2013), engagement
is an essential condition of learning and only when learners immerse themselves fully in
the process of an activity, meaningful learning can occur. Csikszentmihalyi describes
this type of total engagement and full involvement with an activity as flow (or
completely focused absorption and motivation).

**Connection to prior experiences**

Several students commented that the tasks were relevant to their life experiences
because they involved researching areas where they had lived and travelled in the past.
Five of the 15 participating students had lived and travelled in Italy for more than six
months and several other students had travelled extensively both in Australia and in Italy. One student explained that she was happy to prepare an itinerary for Umbria because she had lived in Perugia for one year and was therefore very familiar with that area of Italy. Another student pointed out that she knew about a particular area of Italy because all her relatives lived there and she had visited them a number of times.

These students were able to connect the tasks to their prior experience and apply their previously acquired knowledge about particular geographical areas to the new tasks. This is consistent with the situated learning notion that knowledge is contextually situated and that, when learners are provided with the opportunity to establish a direct connection between their prior experience and the new material and to transfer their prior knowledge and life experiences to a new situation or task, they can actively construct new knowledge and new understanding (Brown, Collins & Duguid, 1989; McLellan, 1996). This new knowledge is meaningful because it is influenced by the context and culture in which it is developed and used (Brown, Collins & Duguid, 1989) and is grounded and integrated in students’ own life experiences (Collins, 1988; Woo, Herrington, Agostinho & Reeves, 2007).

The fact that the tasks were close to the life experiences of some of the students in the class also had the positive effect of motivating the other participating students to learn about some of the areas explored with the tasks. For example, one student appreciated the fact that one of her group members had lived and travelled in Sicily for six months and acknowledged that this student’s prior experience had a positive impact on her own motivation to carry out the task:

I liked that one of the students had lived in Sicily for a while and [had] visited so many places, because she was able to share her experience with us and give us suggestions, and then motivate us as well to explore as much as possible about the places she’d seen. It was a great experience for her…and it was a big motivation for me… (Interview with Diana)

This comment about the motivating influence of another participant’s experiences on this learner’s engagement in the task is consistent with research which explores the effect that the sociocultural context in which students learn has on their motivation to engage fully in a particular learning activity (Boekaerts, 1999; Hickey, 2011; Meyer & Turner, 2006; Nolen & Ward, 2008; Nolen, Horn & Ward, 2015; Nolen, Ward & Horn, 2011; Perry, Turner & Meyer, 2006; Renninger & Hidi, 2015).
research, context is a major element affecting motivation because individuals working together mutually influence and motivate one another.

As highlighted in studies which explore the link between motivation and cognitive processes, motivation is an essential aspect of learning because it affects the level of learners’ involvement and cognitive engagement in the learning process (Alderman, 2013; Blumenfeld, 1992; Blumenfeld, Kempler & Krajcik, 2006; Brown, 1988; Fredricks, Blumenfeld & Paris, 2004; Wentzel & Brophy, 2014). In the context of this project, the other participants’ prior travel experiences affected students’ motivation to explore and develop a particular aspect of the tasks, which, in turn, deeply affected learners’ level of involvement and engagement in the learning process.

Relevance to personal interests

As well as enabling students to establish a connection to their prior experiences, the real-world relevance of the tasks allowed students to relate the activities to their own personal interests. Several students spoke about their fact that they had an interest in travel and expressed their enthusiasm about the opportunity to plan and organise the various aspects of a trip. This was reflected in the following comment by one of the students:

I love travelling, so I really liked the idea of planning a trip and looking at all the places where I could go and all the things that I could do. (Interview with Elise)

The value of completing tasks which reflected students’ interests and could have a practical application to real life was also recognised in the following comment:

It was an interesting project for us, and also useful if we ever wanted to go and visit some of those places. (Interview with Lara)

These comments support the situated learning notion of learning knowledge and skills in an environment that reflects learners’ personal interests and the way in which such knowledge will be used in the future (Collins, 1988; Collins, Brown & Newman, 1989). The fact that the students were able to relate to the activities they were required to complete, which reflected their interest in travel, and appreciate and value the practical applications of their work, provided them with the type of purpose and motivation that
is crucial for promoting meaningful learning experiences (Collins, 2006; Collins, Brown & Newman, 1989; Jonassen, 1999).

**Authentic versus decontextualised language learning**

**Authentic language learning**

One of the most frequently mentioned advantages relating to the real-world relevance of the two tasks was that they provided students with the opportunity to be exposed to the target language as it is used in real-life situations and gain an understanding of the authentic expressions and colloquialisms that are typical of everyday communication. This was reflected in the following comment:

> It was good that we got to look at how real people communicate…the kinds of expressions and colloquialisms that people use every day when they talk. (Interview with Chloe)

Another advantage was that students were encouraged to apply the structures and expressions that they had learned in class to communicate with others in real-life situations:

> The fact that we had to use the language in real situations was definitely a plus because when you go to Italy you have to talk to the people there, you have to use the structures that you’ve learned in class to communicate your ideas to them and have a conversation. (Interview with Marie)

The real-life communicative context of the activities enabled students to develop an understanding of the target language as it is used in everyday social communication and then use and integrate the range of forms and structures that they had learned in the formal context of the class to express their ideas and engage in meaningful and authentic interactions with others.

The importance of promoting authentic language learning experiences by providing learners with the opportunity to be exposed to the target language and use it in the type of real-life communicative situations that are likely to be encountered outside of the context of the language classroom has been highlighted by researchers and theorists who have applied Vygotsky’s sociocultural theory to second language acquisition (Lantolf, 2013; Lantolf & Poehner, 2014; Lantolf & Thorne, 2006; Swain, Kinnear & Steinman, 2015; Thorne, 2005). These researchers have claimed that participating in
collaborative social interaction and meaningful and goal-oriented communicative activities with other members of a speaking community supports second language development because it encourages learners to establish a connection between the formal, structurally-driven learning that takes place in class and the social and cultural context in which the target language is used and to apply their knowledge with real-life communicative purposes.

**Decontextualised language learning**

In contrast to the real-world communicative context provided with the tasks, students often spoke about the limitations of engaging exclusively with typical textbook-based exercises and activities in which particular forms or grammar structures have to be mechanically applied to set situations:

> When you’re working with just a textbook or a workbook you’re not so much trying to say something, you’re trying to fulfil a particular form and use a particular structure, so you’ll have a question that asks you to ask a question in a formal manner to a bank teller requesting this, and so you have to put in this word and this verb and this adjective or whatever it is, and they have to be in this order, and that’s what you say…but when you have to talk to someone in real life you can’t just do that, you can’t constantly use the same sentence structure, and you can’t always use the same conjugation. (Interview with Nicholas)

This comment is revealing of this student’s perception of the inadequacies of textbook-based grammar drills as a preparation for engaging in the types of communication that are likely to take place in real-life situations, outside the classroom context, which require learners to use and integrate a wide range of sentence structures rather than a limited set of pre-practised sentences and specific linguistic forms.

Another student made the following comment about the process of learning new target language vocabulary and expressions from the artificially constructed dialogues presented in the textbook:

> You’re supposed to learn the new words and expressions by reading those made-up dialogues, which are nothing like the spontaneous dialogues that you would have in everyday life. (Interview with Chloe)
The claim that the typical interactive patterns of textbook activities and dialogues have little value in preparing language learners to interact and communicate in the real world because they do not reflect the variety and spontaneity of real communication, is in line with the idea expressed by the proponents of sociocultural theory applied to second language acquisition that second language development cannot occur in isolation but needs to be embedded in the social and cultural context in which real target language communication naturally occurs (Lantolf, 2013; Lantolf & Beckett, 2009; Lantolf & Poehner, 2014; Lantolf & Thorne, 2006; Lantolf, Thorne & Poehner, 2014; Swain, Kinnear & Steinman, 2015; Thorne, 2005; Zuengler & Miller, 2006). According to these researchers, learners can develop their grammatical competence more effectively through collaborative interaction and participation in meaningful, real-life authentic tasks that are related to their communicative needs and experiences and that allow them to appropriately use the grammar structures that they have learned in different, open-ended communicative situations.

**Developing real-life transferable skills**

The real-world nature of the tasks provided a context for developing a range of practical skills that students are likely to need and use in real-life situations. In order to complete the tasks, students were required to access and interpret current authentic information, such as transport timetables, prices, menus and weather, gathered from a variety of websites, plan and organise the various aspects of travel with a limited budget, solve practical problems and deal with unexpected difficulties and changes of plans.

Students generally recognised the value of learning new practical skills that could be applied to real-life situations with real purposes. For example, one student made the following comment:

> Apart from the language skills, we got to learn some more practical skills as well, like navigating our way through the Italian websites and finding information about how to get around, where to stay and so on…I think all these skills can be pretty useful if some of us go and study or work in Italy next year or the year after because we’re going to have to know how to do these sorts of things. (Interview with Elise)

In line with the tenets of situated learning theory, the real-world nature of the tasks supported the development of practical, transferable skills that students could apply to...
the current tasks and to a range of situations that they are likely to encounter in the future (Brown, Collins & Duguid, 1989; Collins, 2006; Cronin 1993; Lebow & Wager, 1994; Winn, 1993).

**Summary of real-world relevance of the tasks**

The findings of this section suggest that the real-world relevance of the tasks directly affected students’ learning. It encouraged students to engage fully with the context of the learning tasks, which were accepted as realistic, to connect the activities to their own or the other students’ prior experiences and to relate them to their own personal interests. Students’ engagement in the scenarios, the relevance of the tasks and their connection to students’ prior experiences, are essential attributes of real-life tasks and were important factors in motivating students to engage fully with the tasks and in providing them with a more meaningful learning experience.

The real-world relevance of the tasks also promoted authentic language learning experiences by enabling students to be exposed to and gain an understanding of the target language as it is used in real-life contexts, and by encouraging them to apply the language structures and expressions that they had learned in class or from the textbook to the wider context of authentic real-life communication. The real-world nature of the tasks supported the idea of language as a living element that is used and useful for communication rather than something abstract that is limited to textbook style communicative dialogues and does not have concrete applications in the real world.

Finally, the real-world nature of the tasks promoted the development of practical transferable skills that could be applied to the type of real-life situations that students are likely to encounter outside of the classroom context.

These findings are also supported by the situated learning literature which highlights the importance of engaging students in real-life authentic tasks that reflect their own interests and prior experiences and that could have a practical use and purpose in real life (Brown, Collins & Duguid, 1989; Collins, 1988; Collins, 2006). According to the situated learning framework, when learning is embedded with context and students are able to see that what they are doing and learning is relevant to them and can have a practical application and utility in real life, they are likely to feel more motivated to engage fully with the learning tasks. The real-world relevance of the tasks was significant in enhancing students’ motivation and engagement with the scenarios that
were presented to them as well as encouraging them to transfer their knowledge and skills to a real-world context and to participate actively in a process of knowledge construction.

2. Ill-defined nature of the activities

The two tasks presented to the students were ill-defined and unstructured. The first task required students to plan and organise a trip to Australia for a group of visiting Italian students. The second task required students to plan and organise a trip to Italy for the students of the class. Students were provided with a description of the scenarios and were asked to produce an itinerary and a comprehensive travel guide for each activity. No attempt was made to simplify the process with step-by-step instructions. Students had to define the tasks and sub-tasks needed to complete the major task, make choices on how they would accomplish the finished product, and deal with all the difficulties and issues related to the tasks.

From the analysis of the data collected, the following themes emerged in relation to the ill-defined nature of the tasks and its impact on student learning. Each of these themes is discussed in detail below.

Responding to ill-defined challenges

Students generally commented that working with ill-defined and unstructured tasks was challenging and admitted that they found it difficult not to be provided with specific, well-defined guidelines on how to complete the tasks. Several students expressed their frustration at the lack of instructions on exactly what needed to be done:

I found it very annoying not to be told exactly what to do and being left with all the decisions…we spent the first few weeks just discussing and planning what we were going to do… (Interview with Nicholas)

Another student spoke about the difficulties of defining the tasks and determining students’ roles in the initial phase of the project:

At the start it was an absolute mess…just trying to figure out the groups, where to go, who’s doing what, it just was a real battle. (Interview with Nathan)
Nevertheless, when asked to comment about how they felt about the unstructured nature of the tasks during the course of the activities, the majority of the students pointed out that, as they started to work on the tasks and to understand what needed to be done in order to complete them, they gradually became less frustrated. This was reflected in the following comment by one of the students:

*As we started to get more done and we got a clearer idea of where we were and what we needed to do to get to the end product, the whole thing started to make more sense and we became less and less frustrated and more in control.*

*(Interview with Nicholas)*

These comments are revealing of students’ initial feelings about the ill-defined nature of the tasks and of the positive shift that took place as they spent more time working on the activities and started to develop a clearer idea about how to approach them.

The ill-defined, unstructured nature of the tasks had the positive effect of encouraging students to respond to the ill-defined challenges embedded in the activities by spending more time working on them and by developing clarity about the process of completing them. The nature of the tasks encouraged students to approach the activities differently, which in turn positively influenced their attitudes towards them.

**The opportunity to identify and solve problems**

The ill-defined nature of the tasks and the fact that students were not provided with detailed step-by-step instructions on how to complete them encouraged students to identify as well as solve the problems that were presented to them. One student acknowledged the usefulness of such approach and described it in the following way:

*It’s not simply here is the problem, solve it, you have to go and work out what the problem is yourself and then try and find the best solution you can, which I think is a useful thing to do, because this is what you need to do in real life, things aren’t always that clear and straightforward.* *(Interview with Nicholas)*

The idea that real-life scenarios are not always clear and straightforward, and that students should be confronted with issues and difficulties that reflect the complexity and ambiguity of the real world and that are likely to be encountered in real-life situations, has been highlighted in much of the situated learning literature (Brown, Collins &
As students encountered a variety of problems while working on the tasks, they developed effective strategies to solve them. This was reflected in the following comment by one of the students, who described the process of developing possible solutions to some of the problems related to the tasks:

"We did a lot of brainstorming and we discussed possible solutions within the group and then we came up with a plan about what to do. (Interview with Diana)"

The fact that learners had the opportunity to identify and develop possible solutions to the various problems and issues embedded within the tasks provided an important learning opportunity for the students. According to Herrington, Reeves, Oliver and Woo (2004), when learners are enabled to find the problems related to a particular task and to define the steps to take in order to arrive at a suitable solution, meaningful learning is more likely to occur. The students in this study endeavoured to identify and solve the ill-defined problems presented to them by developing a number of problem-solving strategies, which included brainstorming, discussing possible solutions within the groups and developing appropriate action plans.

**Summary of ill-defined nature of the tasks**

A critical characteristic of authentic tasks is their ill-defined and unstructured nature. The fact that the tasks were not clearly structured and that students were not provided with detailed step-by-step instructions on how to complete them, enabled learners to explore complex scenarios which reflect the ambiguities that are typical of real-world situations and presented them with the same type of cognitive challenges that they are likely to encounter in real life (Collins, 2006; Herrington, Reeves & Oliver, 2014; Herrington, Reeves, Oliver & Woo, 2004; Jonassen, 1999; Lebow & Wager, 1994; Reeves, Herrington & Oliver, 2002; Savery & Duffy, 1996). These real-life scenarios enabled students to develop their problem-solving skills by identifying the problems related to the tasks, make decisions about how to approach them and come up with appropriate strategies to solve them.
According to Jonassen (1999), engaging learners in finding as well as solving the type of ill-defined problems that are typical of real-life situations is the key to meaningful learning and conceptual development because it gives learners ownership of the problems, which need to be relevant and engaging, and motivates them to find appropriate solutions and therefore develop valuable problem-solving skills.

3. Complexity and sustained effort

The assigned tasks were sufficiently complex to be investigated by the students over a sustained period of time. Students worked on each of the two tasks over a period of five weeks, both in class (during two of the four contact hours per week dedicated to the course) and outside their scheduled class time. From the analysis of the data collected, the following themes were identified in relation to the complexity of the tasks.

Responding to complex tasks over a sustained period of time

Students generally agreed that the tasks were complex and required a sustained period of time to be planned and developed. Several students pointed out that it took them a considerable amount of time to understand what needed to be done and to make decisions about the steps to take in order to complete the tasks. This was reflected in the following comment:

It took us a while to understand what it was and work out what we had to do, and it took us time to make decisions and define the whole thing and then put it all together, it was quite demanding…we couldn’t have done it in a couple of weeks. (Interview with Elise)

Most students commented that that the planning and preparatory phase of the tasks was more time-consuming than the actual development of the final product. One student noted that his group spent four weeks planning the first tasks and only one week developing the end product. Another student pointed out that her group met frequently and exchanged a lot of ideas during the five weeks allocated to the first task but only produced something tangible during the last 10 days of the iteration:

Over five weeks we met a lot of times, we discussed every possible idea and option, but we didn’t actually produce anything until the last ten days or so. (Interview with Chloe)
Whilst acknowledging the complexity and scope of the tasks and the necessity to dedicate considerable time and effort to develop them, particularly during their initial planning phase, many students commented positively about the value of being confronted with a complex environment which required them to explore and investigate a wide range of issues related to the tasks, develop a clear understanding of what needed to be done, brainstorm and discuss their ideas with the other participants and define the steps to take in order to arrive at the end product. This was reflected in the following comment by one of the students:

It was kind of challenging but it was a positive experience after all…it kind of forced us to think about a lot of different things, figure out what we had to do, who was doing what and when, and then do it…it certainly wasn’t easy initially but we ended up finishing the work and producing a great itinerary. (Interview with Julie)

The importance of complexity and the necessity to provide an environment capable of sustained examination have been emphasised by a number of researchers (Bransford, Vye, Kinzer & Risko, 1990; Herrington, Reeves & Oliver, 2014; Lebow & Wagner, 1994; Lombardi, 2007). In the context of this project, the complexity of the tasks and the sustained examination that was required in order to complete them, encouraged the students to actively explore a wide range of complex issues rather than focus on simple problems or questions that required a minimum amount of time to be investigated, and to engage in in-depth discussion with others in order to identify the most appropriate solutions to those issues. Although demanding and challenging, the tasks enabled the students to investigate and solve a variety of issues and therefore develop a wide range of skills. The complex nature of the tasks also fostered feelings of accomplishment and satisfaction as students were able to successfully complete the activities and arrive at a positive outcome.

**Developing time management and organisational skills**

Several students commented that the complexity and scope of the tasks encouraged them to develop their time management and organisational skills as they learned to work more efficiently and use the time allocated more effectively. This was reflected in the following comment by one of the students:
I think my time management and organisational skills improved a lot as time went on. I learned to use the time I had much better and to be more efficient. (Interview with Josie)

Another student made a similar comment and pointed out that he learned to be well organised in order to comply with his own as well as his group’s deadlines:

The task was huge so I had to learn to be well organised because I had to make sure that I was meeting my own deadlines and my group’s deadlines…we gave ourselves very strict deadlines so that we could finish on time. (Interview with Nicholas)

These comments indicate that the complexity and sustained effort required to complete the various components of the tasks enabled students to improve their time management and organisational skills. The pressures of time constraints encouraged students to organise their work efficiently and set themselves precise deadlines in order to complete the tasks on time.

**Summary of complexity and sustained effort**

The comments made by the students indicated that the tasks were complex and required a sustained effort in order to be completed. Students pointed out that they spent a considerable amount of time planning and developing the different phases of the activities, but appreciated the value of being confronted with complex and demanding tasks which required them to explore a wide range of issues, brainstorm and discuss ideas with other participants in order to identify the most appropriate solutions to those issues, and determine the steps to take to develop the final product and refine it. The complexity of the tasks enabled students to develop a wide range of skills and fostered feelings of accomplishment and satisfaction as they arrived successfully at the end product.

The complexity of the tasks also encouraged students to develop valuable time management and organisational skills as they were required to organise their work efficiently and set themselves precise deadlines in order to complete the different tasks on time.
4. Multiple perspectives and resources

The tasks allowed students the opportunity to examine the scenarios from different perspectives, rather than a single perspective that had to be imitated, and to access and use a variety of resources, rather than a list of preselected references provided by the teacher. The following themes were identified in relation to this aspect of the authentic tasks:

Multiple perspectives

In order to complete the assigned tasks, students were required to work collaboratively and discuss their thoughts and opinions with the other students in the class and with the native speaker facilitators. Through this discussion and collaboration students had access to the different perspectives of other participants and were also able to contribute their own unique perspective to the discussion.

Students generally commented positively about the opportunity to be exposed to ideas and points of view that were different from their own and to bring their own perspective to the discussion. The following comment by one of the students was typical:

Having the different people there to provide different opinions and ideas was certainly positive. Some people came up with ideas that were completely different from my own, and I came up with ideas that were different from everyone else’s ideas. (Interview with Josie)

The impact of multiple perspectives on students’ learning was acknowledged in several comments made by the students and is discussed in detail below.

Considering and integrating multiple perspectives

Several students pointed out that being exposed to the points of view of the other participants encouraged them to consider ideas and approaches that were different from their own. This was reflected in the following comment by one of the students who learned to be open-minded and accepting about the alternative ideas and interpretations of others:

I found myself listening to what the others had to say and trying to be open-minded about their ideas, even when they were totally different from my own. (Interview with Elise)
Another student made a similar comment and noted that she actively integrated the different ideas of her group members with her own ideas:

All the other people in my group put forward their own ideas about the project…I listened to them and I ended up integrating them with my own ideas.
(Interview with Chloe)

These comments indicate that, by coming into contact with the variety of viewpoints and perspectives of other participants, students’ individual perspectives were widened and deepened as they were encouraged to consider ideas that were different from their own and to be open-minded about the possibility of accommodating and integrating these ideas with their own personal viewpoints and opinions.

According to Jonassen (1999), providing learners with the opportunity to integrate the multiple perspectives of others into their own perspectives and to construct their own interpretations on a particular situation or issue based on other participants’ views and interpretations, enhances learners’ cognitive flexibility and assists them develop a less superficial and unilateral understanding of a particular domain or situation.

**Developing knowledge and awareness of the target language culture**

An important benefit of being exposed to the multiple perspectives of other participants was the opportunity for students to learn from others and broaden their knowledge of different aspects of the target language culture. For example, Nathan pointed out that one of the facilitators’ postings about the geography of the north of Italy encouraged him to explore an area which was unknown to him:

At some point Chris wrote something about the main areas of interest in the north of Italy and talked about the Dolomites…he wrote that the north of Italy is not just Milano and Venezia, but there are also other maybe less well known areas which would be worthwhile exploring…so I went and found out about the Dolomites, which I didn’t know anything about, and then we ended up preparing an itinerary which also included a couple of great hikes in the Dolomites. (Interview with Nathan)

Another student valued the different perspectives and the breadth of knowledge that one of her group members, who had lived in Sicily for several months, brought to the tasks, and welcomed the opportunity to learn about Sicily and its history and culture:
Marie lived in Sicily for six months and she contributed many different ideas to the project, which were mostly based on her experience of living and studying there...I learned a lot of interesting things about Sicily and its history and culture just from talking to her. (Interview with Martina)

These comments indicate that the multiple perspectives of the other participants greatly contributed to developing and enhancing students’ knowledge and understanding about particular geographical, historical and cultural aspects of the target language culture.

**Contributing own perspective**

As well as being exposed to and learning from the multiple perspectives of others, students were also encouraged to bring their own unique perspective to the discussion. From an analysis of students’ postings to the discussion threads and the transcripts of the researcher’s notes, it appeared that almost all of the participating students felt free to contribute their ideas to the discussion and to express openly their own personal opinions and views about various aspects of the tasks. This was particularly evident in the initial planning phases of the tasks, in which students brainstormed their thoughts and discussed their ideas with the other participants, and during the final developmental phases of the tasks, in which students met with their group members to finalise the individual sections of the itineraries and to provide as well as receive feedback about their work.

During the individual interviews, students confirmed that they felt they had an active role in articulating their ideas and bringing their own perspective to the discussion. This was reflected in the following comment by one of the students who spoke positively about the opportunity to bring her own contribution to the planning phase of her group’s second itinerary:

I had many ideas for the second task because I spent quite a bit of time travelling around Italy a couple of years ago, so I told everyone what I thought would be a good itinerary and I made some suggestions about places to visit and things to do...it seemed like everyone was keen to listen to what I had to say and wanted to take it into account. (Interview with Julie)

Similarly, another student noted that, as she contributed her ideas and opinions on how to develop the tasks, she felt that they were considered and valued by the other students:
I had the feeling that when I put forward my ideas and opinions about how to develop of the tasks, the others were genuinely interested and valued them…it was very positive because it made me feel like I was making a worthwhile contribution. (Interview with Diana)

The realisation that the other participants were interested in listening to these students’ ideas and suggestions about the tasks and were willing to consider them and actively incorporate them into their own work, had a positive impact on students’ confidence in the value of their own ideas as they felt that they were important and that they were making a valuable contribution to the project.

**Multiple resources**

All the students interviewed welcomed the opportunity to access and use a variety of resources while they were working on the tasks rather than being limited to drawing on pre-selected references provided by their teacher or specific sources of information. This was reflected in the following comment by one of the students, who enjoyed the freedom allowed by this aspect of the task and valued the fact that she was not restricted to a narrow focus in her research:

I enjoyed having the freedom to look up and use a lot of different resources and not being too restricted in what I could research…it was great to be able to do that. (Interview with Diana)

Another student spoke about the importance of researching topics that she found interesting and relevant:

For me it was important to be able to research things that I found interesting and that were relevant to me. (Interview with Marie)

The impact of multiple resources on students’ learning was evident from several comments made by the students and is discussed in detail below.

**Enhancing historical and cultural awareness**

Several students admitted that the ability to access multiple resources encouraged them to explore themes that they would not have otherwise considered had they been provided with a set of specific references. For example, one student described her
experience of finding resources that enabled her to learn about the main historical events and cultural aspects of the Middle Ages in Italy:

I ended up looking at things I probably wouldn’t have looked at if I had a list of references, like specific websites or books...for example I found some websites which were just everything medieval all over Italy, all the history, art and music, they were really great resources and I ended up learning a lot about medieval Italy (Interview with Chloe)

The link between the opportunity to access to multiple resources and students learning was also highlighted in other comments made by the students. For example, Nathan admitted that the wide range of websites that he retrieved while working on the two tasks opened up his knowledge about the geography of Australia and Italy. Similarly, Josie pointed out that the variety of web-based resources and material she came across while researching the second task helped her broaden her horizons about the south of Italy, which she had never visited during her numerous family trips to Italy, and gave her the opportunity to learn about some of the cultural events and traditions that are typical of that part of Italy.

**Defining the direction of the tasks**

As they approached different resources, students had the opportunity to determine what was relevant and useful for the project and what was not relevant and to define the direction of the tasks. This was reflected in the following comment by Lara, who highlighted the importance of being able to make decisions about the development of the different sections of the tasks:

I liked that we could look at different websites, read what was in the sites, and then decide what was important, what was useful for the project and ignore what was not useful...I think this was particularly important because the project involved travelling and we could decide what direction we wanted to give to our specific section of the task. (Interview with Lara)

Another student made a similar comment and acknowledged the value of having an active role in selecting the important information to be included in the project and in defining the focus of the itineraries:
We had the freedom to select the information that we wanted to include and to decide the focus of our itinerary, whether it had to do with art or history or music. (Interview with Caroline)

The opportunity to access multiple resources played a significant role in supporting student knowledge creation processes because it encouraged them to be proactive in identifying the information that was relevant to the development of the tasks and in disregarding that which was irrelevant, and in actively defining the direction and focus of the tasks. According to the proponents of the situated learning model, when learners are able to detect relevant from irrelevant information and make decisions about this information, they are actively constructing their own knowledge, and therefore creating their own learning (Collins, Brown & Newman, 1989; Herrington, Reeves & Oliver, 2014; Savery & Duffy, 1996; Young 1993).

**Developing target language skills**

In discussing the benefits related to the opportunity to access and use a variety of resources in the form of print and web-based material and also documents and emails from the other students and the facilitators, students frequently mentioned the opportunity to develop their target language reading comprehension skills. The great majority of the documents and emails exchanged by the participants during their collaborative work on the two tasks and all of the web pages accessed by the students while working on the second task were written entirely in Italian. Several students noted that their reading comprehension skills improved dramatically over the course of the semester as they continued to read a variety of target language resources and material and regularly accessed Italian language websites that did not provide an English translation of their content. This was reflected in the following comment by Elise, who hinted that, despite some initial difficulties, she was able to develop a greater understanding of the material that she accessed throughout the duration of the tasks:

The majority of the websites I found were in Italian, and there was no little thing to turn it into English…and all of the emails and postings in the forum were written in Italian, so I had to read and understand a lot of information in Italian…it was a bit of a struggle at the beginning but as I kept reading and reading I came to understand more and more of the content…I think my comprehension skills improved a lot just by spending time reading and trying to figure out the information (Interview with Elise).
Another benefit of accessing a wide range of resources, particularly emails and documents from the facilitators and from other native speakers, was the opportunity to be exposed to a variety of linguistic registers in the target language and to experience the different types of language that are used in specific situations and with different interlocutors. This was well illustrated in the following comment by one of the native speaker facilitators, who noted the importance for language students to develop an understanding of the different types of language that are used in particular situations, and to learn to express themselves using different registers depending on the specific linguistic context and on their interlocutors:

Using a variety of resources also gave students the chance to be exposed to different linguistic registers and experience the different types of language that people use in particular situations or when they are communicating with a particular set of people. This is valuable because it encourages students to draw on different registers in their own language use. (Interview with Linda, native speaker facilitator)

Accessing a variety of target language resources enabled learners to come into contact with different linguistic registers and develop an understanding of the communicative conventions of specific social and situational contexts. This contextual and sociolinguistic knowledge, together with the implicit and explicit knowledge of the structures and functions of language, is an essential component of second language development (Halliday, 1978; Halliday & Matthiessen, 2013; Hymes, 1972; Lightbrown & Spada, 2013; Mitchell, Myles & Marsden, 2013).

Summary of multiple perspectives and resources

One of the critical characteristics of authentic tasks is that they provide students with the opportunity to examine the scenarios from different perspectives and to access and use a wide variety of resources. According to Bednar, Cunningham, Duffy and Perry (1992), knowledge can be developed through the sharing of multiple perspectives and the learners’ interpretations of these perspectives.

The majority of the participants acknowledged the positive impact that the multiple perspectives of others had on their learning. Several students pointed out that, as they accessed other participants’ ideas and points of view during their collaborative work on the tasks, they learned to be open-minded and accepting about alternative ideas and
approaches, even when they were different from their own, and learned to integrate these ideas and opinions with their own ideas, thus widening and deepening their individual perspectives and enhancing their cognitive flexibility. Coming into contact with the different ideas of other participants also enabled students to broaden their knowledge and refine their understanding about particular themes or aspects of the target language culture that were not familiar to them or that they had never explored before. The opportunity to actively contribute their own unique perspective to the discussion impacted positively on students’ level of confidence and on their motivation to engage with the tasks, as they felt that their ideas were important and that they were making a valuable contribution to the project.

The opportunity to access and use multiple resources gave students the freedom to explore a variety of themes and subjects that they found interesting and relevant, and encouraged them to enrich their knowledge of specific cultural or historical topics. As they approached different resources, students were also able to construct their own knowledge and create their own learning by determining what was relevant and what was irrelevant for the purpose of completing the tasks, and by actively defining their direction and development. Finally, by accessing a rich set of different target language resources, which included print and web-based material, as well as documents and emails from native speakers, learners also had the opportunity to develop their target language reading comprehension skills and their ability to understand and use appropriately different types of linguistic registers as they are used in specific communicative contexts.

5. Collaboration

In order to complete the tasks, students were required to form small collaborative groups of three to four students and to communicate and collaborate with each other through the online resources provided and in face-to-face mode, both during and outside of the regular class time allocated to the project. For the first task, students divided themselves into four groups of four. For the second task they assigned themselves into five groups of three (one student withdrew from the course after the conclusion of the first task).

The teacher did not take part in the process of forming the groups, and students were left free to choose their own group members as they wished. After the groups were
formed, the teacher assigned one native speaker facilitator to each of the groups, according to the geographical areas of Australia and Italy that the groups decided to research. The collaboration took place both within each individual group and also among the different groups in the class.

The majority of the students had some prior experience of working collaboratively from their high school or university studies. However, none of the students had worked in groups with the aim of completing a collaborative task during the course of their language studies at university.

When asked to comment on the opportunity to collaborate with others in order to complete the assigned activities, several students admitted that they found some aspects of the collaboration quite challenging. Among the difficulties of working in groups students mentioned the fact that a considerable amount of time had to be spent discussing the ideas and opinions of all of the students in the groups, that not all group members contributed equally to the project and that, in some cases, the different levels of linguistic proficiency of the participating students hindered successful communication and therefore collaboration within the groups. Some of the specific problems encountered by the students during their collaborative work will be discussed in greater detail in the following chapter.

Nevertheless, despite acknowledging the difficulties and challenges of working in groups, the majority of the students also recognised its numerous advantages. These advantages are discussed below.

**Communicating in the target language**

All students acknowledged that one of the greatest benefits of the collaboration on the tasks was that it provided them with the opportunity to communicate with the other community participants in the target language. This was reflected in the following comment by one of the students who valued the fact that she was able to use the target language on a daily basis:

The collaboration was actually very positive because it gave me the opportunity to communicate in Italian on a daily basis, both with the other students and with the facilitators. It was great to be able to do that (Interview with Diana)
Another student made a similar comment and noted that, had she been required to complete the project on her own, she would not have used the target language as much:

The best thing was that I got to use the language a lot, not just to discuss the projects with my group but also with the students from the other groups...If I [had] had to work for the most part of the project by myself I wouldn’t have used the language so much. (Interview with Julie)

The sustained communicative practice allowed by the collaboration supported the development of students’ oral and written communicative skills in the target language. This was highlighted in several comments made by the students during the individual interviews and was confirmed by the consistent development observed in students’ written and oral communicative skills throughout the course of the semester. Almost all of the students interviewed acknowledged that their target language skills had improved dramatically during the course of the semester thanks to the opportunity to communicate regularly with other community members while collaborating on the tasks. This was reflected in the following comment by one of the students who expressed his surprise at the fact that his language skills had developed so significantly and noted that, by the end of the semester, he felt more comfortable communicating in Italian and had learned to express himself more clearly:

My language skills improved a lot just because I practised talking and writing in Italian as much as I could. I was actually quite surprised that by the end of the session I was feeling a lot more comfortable communicating in Italian. At the beginning to try and formulate three sentences that would hang together and would make sense was quite a struggle...I think the collaboration and constant interaction with everyone really helped me develop my ability to communicate more clearly. (Interview with Nicholas)

An analysis of the transcripts of students’ written contributions to the group and class discussion threads throughout the course of the semester and of students’ oral presentations at the end of both the first and second iteration, confirmed that there was a considerable improvement in students’ receptive and productive oral and written abilities. As the semester progressed, the language produced by the students showed an increasingly higher level of grammatical organisation and accuracy, stronger cohesion and clarity of expression and a wider lexical range.
These findings are supported by research into the role of collaboration and interaction on the development of learners’ target language communicative skills. According to Vygotsky’s sociocultural theory applied to second language acquisition, language learning occurs through meaningful social interaction and active participation in socially mediated activities with other members of a speaking community (Lantolf, 2013; Lantolf & Thorne, 2006; Lantolf, Thorne & Poehner, 2014; Swain, Kinnear & Steinman, 2015; Zuengler & Miller, 2006). In the context of this study, the regular communicative practice and interpersonal interaction allowed by learners’ collaboration with other speakers of the target language greatly contributed to the development of both their written and oral communicative skills.

**Progressing in the zone of proximal development**

In addition to providing a context for sustained communicative practice and target language development, the collaborative nature of the tasks also enabled students to learn from peers who had a higher level of linguistic proficiency, were more competent in the use of technology or had superior organisational and time management skills. The collaboration with other more competent or advanced peers allowed students to extend their skills beyond their regular level and progress through their zone of proximal development.

**Developing a higher level of target language proficiency**

Several students acknowledged that collaborating with more advanced speakers of the target language had a positive impact on their linguistic development as it provided them with the opportunity to observe a more sophisticated and authentic use of target language forms and expressions and it encouraged them to learn and then integrate them into their own language use. This was reflected in a number of comments made by the students. For example, Chloe admitted that working in the same group as Bianca, a near-native speaker of Italian who had lived and studied in Italy for several years and had therefore acquired a higher level of target language skills, enabled her to “look at how a fluent speaker of Italian communicates” and “learn more authentic expression and forms” (interview with Chloe). Similarly, Julie, a second year student, acknowledged that her collaboration with the third year students in her group had been extremely valuable in helping her “learn words and expressions that were more sophisticated and authentic” as compared to those that she was familiar with and that she would normally have used in own her communicative practice (interview with
Julie). Another student commented that collaborating and interacting with more linguistically proficient group members, who were able to communicate using more complex grammatical structures, encouraged her to learn them and apply them to her own sentence construction:

> It was great to have Julie and the other girls in my group because their Italian is very good. I learnt a lot through working with them, things like *penso che* with the subjunctive, that kind of structure, I didn’t really know it but they used it a lot so I learned it and now I use it as well. (Interview with Caroline)

These comments indicate that collaborating and interacting with more proficient speakers of the target language who could model accurate, appropriate and more sophisticated language use, enabled the less proficient students to learn from their more advanced peers and progress above their current level of competence.

According to the definition of zone of proximal development applied to second language learning proposed by Otha (1995), the linguistic skills that second language learners can develop with the assistance of more proficient users of the target language exceed the skills they can achieve independently. As indicated in the students’ comments, the opportunity to interact and collaborate with peers who had a higher level of linguistic proficiency greatly assisted them develop their language skills and advance through their zone of proximal development.

**Developing competence in using the technology**

The opportunity to learn from more competent peers was not limited to the linguistic sphere but also included other domains. A number of students acknowledged that collaborating with other participants who had a higher level of computer literacy encouraged them to develop and extend their own computer skills. For example, in the Toscana group, Nicholas was a much more competent user of the PowerPoint presentation software than his two other group members, who were able to use only its most basic features. As the group agreed on developing a PowerPoint presentation of the final itinerary for the Toscana region, Nicholas coached his team members, Lara and Elise, to use the software in a more sophisticated way, drawing on its full potential. During their individual interviews with the researcher, both Lara and Elise commented that, thanks to Nicholas’s instructions and assistance, they became much more competent users of PowerPoint:
I think when Nicholas realised how hopeless we were with the PowerPoint presentation he decided to teach us how to do it...he sent us messages with instructions about how to insert photos and video files and that was very helpful. (Interview with Elise)

He basically taught us how to use it...his computer skills were much more advanced than ours and he took the time to teach us what he knew...we definitely learned a lot from Nicholas. (Interview with Lara)

Another example of learning from students with more advanced technical skills became apparent in the Queensland group, in which Nathan, an information technology student who had extensive experience developing web pages, worked with Yuki, an international student with limited technical abilities, and taught her some basic website design skills. Yuki made the following comment about her experience of collaborating with Nathan:

Nathan was a good person to work with...he knew how to create a website and he showed me how to do it, which was something I had never done before...it obviously would have been easier and quicker for him to do it all by himself, but when I asked him if I could watch him do it he was happy to show me and teach me a few things. (Interview with Yuki)

These comments are revealing of the positive impact that the collaboration with peers who had more highly developed computer skills had on student learning. By collaborating with more technically proficient students who were willing to share their knowledge and skills with their team members and dedicate some of their time to assist them learn and improve, the less advanced students were able to develop their own computer skills and therefore progress through their ZPD.

**Developing organisational and time management skills**

The collaboration with participants who had highly developed organisational and time management skills also had a positive effect on the development of students’ individual competencies. Several students acknowledged that working with other fellow students who were more organised and efficient supported the development of their own time management and organisational skills. This was evident in the following comment made by Caroline, who admitted that collaborating with Bianca, who was extremely well
organised and methodical in her work, encouraged her to be more efficient and thorough in her approach to the tasks and to use her time more effectively:

Bianca was super organised and efficient…she had everything planned to the smallest detail…she had all sorts of charts and calendars with our names and the deadlines for doing all the bits and pieces of the project…I didn’t appreciate it that much at the beginning but it turned out to be a really good approach…she definitely encouraged me to be more precise and organised and to use my time more effectively. (Interview with Caroline)

Another student made a similar comment and recognised that the collaboration with one of her more organised group members taught her to prioritise the tasks at hand and helped her improve her time management skills:

Collaborating with Diana was very beneficial in many ways because she was always well organised…she taught me to prioritise the tasks, going from the most important one to the least important one…my time management skills improved a lot through this collaborative work. (Interview with Martina)

These comments indicate that the collaboration with students who were more efficient and organised in their approach to the tasks encouraged the less organised students to work with the same level of organisation and attention to details. By modelling effective organisational and time management skills, the more organised students helped their peers to develop and extend their own skills and progress through their ZPD.

**Developing effective teamwork skills**

When commenting on the impact of the collaboration on their learning, several students spoke positively about the opportunity to learn to work with others. This was reflected in the following comment by one of the students who acknowledged the value of teamwork as a preparation for a real job:

This experience of teamwork was a good preparation for when we’ll go out there and we’ll have a real job, because it’s all about working with others and learning to get on with different people when you have a real job. (Interview with Elise)

Similarly, another student highlighted the importance of learning to collaborate with difficult people and to develop effective strategies to work with them:
When you have a job you might have to work with someone you don’t particularly like or you don’t feel so comfortable with, and you have to find a way to work with this person. Unfortunately you can’t just always have the nice people, so it’s important to know how to deal with those who are a bit difficult. (Interview with Yuki)

The opportunity to develop effective negotiation and mediation skills was also recognised in the following comment:

This whole experience of collaborating in the groups was really positive…I learned to negotiate ideas more effectively and also to be a good mediator when my other group members couldn’t reach an agreement. (Interview with Nicholas)

The same student went on to acknowledge that he developed a sense of responsibility towards his group members and learned to help them solve some of the issues that were preventing the group from successfully completing the tasks:

I felt somehow responsible towards the other people in my group…I learned how to go about helping them solve some of the problems that they had…we got stuck a number of times because they couldn’t agree on what they wanted to do and I helped them to find a common ground so that we could finish the project. (Interview with Nicholas)

These comments indicate that the collaboration within the groups impacted positively on learners’ ability to work with others. In line with the idea of Bruffee (1993) that collaboration reflects the dynamics of working in the real world, students recognised the important role of teamwork as a preparation for working in real-life contexts and acknowledged that, through the process of collaborating with their peers, they learned to cope with difficult group members and to develop effective negotiation and mediation skills.

Promoting social relationships and motivation

Another frequently mentioned benefit of the collaborative work was that it enabled students to interact and engage with their group members outside of the formal context of the classroom. All students commented positively about the social aspect of the collaboration and admitted that they enjoyed working with the other students and
getting to know them. This was reflected in the following comment by one of the three international students in the class who spoke enthusiastically about the opportunity to develop social relationships with her group members:

I really enjoyed the social aspect of this project, I got to work with people I didn’t know and I made new friends, it was really good for me because I didn’t know anyone when I arrived here. (Interview with Marie)

Another student made a similar comment and admitted that the project would not have been as much fun had it been done individually:

Doing a project like this on your own would definitely not be as much fun, I liked working with other students and getting to know them...it was a lot of fun. (Interview with Martina)

Several other students spoke about the *fun* aspect of the collaboration and acknowledged that the fact they had a good time while working with their group members motivated them to spend time together to complete the tasks. This was reflected in the following comment by Elise:

I had fun working with the other people in my groups…I felt motivated to get together with them to do the work and complete the project. (Interview with Elise)

These comments point to the fact that the collaborative aspect of the tasks encouraged learners to develop interpersonal and social relationships with other members of their group, which proved to be an important factor in meeting the social needs of students who initially did not know other students in the class and in assisting them to develop a sense of belonging and connection to a group. The fact that students had the opportunity to develop social relationships with others and that they enjoyed the process of collaborating with them on the tasks, had a positive influence on their motivation to work together with the objective of achieving a common goal.

**Summary of collaboration**

Students generally commented very positively about the learning opportunity provided by the collaboration with the other students. The sustained communicative practice allowed by the collaboration greatly supported the development of students’ target
language skills. As the semester progressed, the oral and written language produced by the majority of the students became more accurate and sophisticated and students demonstrated an increasingly greater ability to convey ideas effectively and use a wider range of expressions and vocabulary.

The collaborative nature of the tasks also enabled students to learn from peers who had a higher level of linguistic proficiency and could model accurate and appropriate language use, were more competent in the use of technology or had more highly developed organisational and time management skills. The collaboration with more advanced peers allowed students to develop and extend their own individual competences and skills above their regular level and progress through their zone of proximal development.

Another significant benefit of the collaboration was that it provided students with the opportunity to learn to work with others and develop effective negotiation and mediation skills. The collaboration also enabled students to develop valuable new social relationships and feel a sense of belonging to a group, which, together with the fact that learners enjoyed the process of working with others, had a positive effect on their motivation to work together and complete the tasks.

6. Reflection

The activities were designed to enable students to make choices and to reflect upon their learning experience while they were working on the tasks.

The opportunity to make choices

The open-ended nature of the tasks and the fact that students were not given a specific pre-defined path to be followed in order to complete them, provided students with many opportunities to make choices both individually and collectively.

Students generally commented very positively on this aspect of the tasks, as reflected in the following comment by Julie, who described the various choices that she was able to make, not only at class and group level, but also as an individual:

I liked the fact that we had lots of opportunities to make choices about the project…as a class we got to choose what sort of itinerary we wanted to develop, as a group we got to choose what to do with our own specific part, and
then within our own groups each of us could choose to research a particular area or follow a particular idea that interested us. (Interview with Julie)

The ability to actively make choices and research themes and ideas that were interesting and meaningful to the students had the positive effect of motivating them to contribute to the project. This was reflected in the following comment by Chloe who acknowledged that being able to choose the focus of her section of the itinerary gave her the motivation to work on the tasks:

I was able to choose the focus of my section of the itinerary and this gave me the motivation to work on the task because I could focus on things that were interesting to me and that I liked. (Interview with Chloe)

Another student made a similar comment and pointed out that she felt inspired and motivated to complete the project because she had the chance to consider several options and then choose the one that was more relevant to her:

It was really good because I could look at all the different options and then choose what was more relevant to me…I felt more inspired and definitely more motivated to finish the whole project. (Interview with Josie)

These comments are revealing of the positive impact that the opportunity to actively make choices about the content and development of the tasks and to pursue their own interests had on students’ motivation and involvement with the activities. According to many of the students in the interviews, the fact that they were able to consider several options and to choose the most relevant and meaningful ones for them, motivated them to engage fully with the tasks and to complete the whole project.

As discussed earlier, the relationship between motivation and cognitive processes has been explored by several researchers (Alderman, 2013; Blumenfeld, 1992; Blumenfeld, Kempler & Krajcic, 2006; Brown, 1988; Fredricks, Blumenfeld & Paris, 2004; Wentzel & Brophy, 2014). According to these researchers, motivation is a desirable outcome in any learning environment and an essential aspect of learning because it affects learners’ level of engagement in the learning process. The fact that learners were able to make choices and pursue their own interests in a particular theme or issue had a positive effect on their learning as it motivated them to engage fully with the tasks and arrive at a more personally meaningful learning experience.
The opportunity to reflect

Reflection is a crucial component of the situated learning model and one of the key defining elements of authentic activities.

Students had the opportunity to reflect on their learning experience both individually, as they engaged in their own personal observations and evaluations about their work in the reflective portfolios and in the individual interviews, and collectively, as they discussed and exchanged ideas with the other participants during the collaborative work on the tasks and during the focus group interviews that took place at the end of the first iteration. The two processes of individual and collective reflection and their impact on student learning are outlined below.

The individual reflective process

As well as reflecting on their experience during the individual interviews with the researcher, students were also required to complete a reflective portfolio in which they could assemble materials that documented their work, report on events related to the tasks and note their observations and reflections about their learning experience and about the challenges and successes of the collaboration with the other participants. The following themes emerged in relation to the individual reflective process:

Developing confidence in the reflective writing process

When questioned on their experience of completing their reflective portfolios, several students admitted that at first they felt uncomfortable about expressing their personal thoughts in writing. This was reflected in the following comment by one of the students:

Initially I didn’t feel comfortable at all about writing the portfolio. I found this whole idea of writing our own opinions about what we were doing and learning or about what was going on in our groups quite awkward. (Interview with Chloe)

Another student made a similar comment and admitted that he never enjoyed engaging in the type of reflective work required when writing a portfolio:

I’ve never been into journal writing or this type of reflective stuff, I’ve never liked writing stuff about myself or other people or reflecting about whatever issues…this portfolio business was quite a challenge for me. (Interview with Dylan)
Nevertheless, when asked to comment on how they felt about the portfolio writing exercise as time progressed, most of the students admitted that, as they got used to the process of regularly writing their entries and reflecting back on their learning experience, they became more comfortable with the whole reflective practice and were able, to some extent, to overcome their resistance to the process. It is interesting to note that, despite the initial feelings of awkwardness and uncertainty about engaging in a reflective process with their portfolio entries, the majority of the students interviewed ultimately embraced the opportunity to express their thoughts and feelings through their writing. The following comment is revealing of this positive shift in students’ perception of the reflective writing process:

Having to write the portfolio was definitely not fun in the beginning...I couldn’t see the point of doing it, I really couldn’t see how it could help my learning in any way...but as time went on and as I kept writing, I got more and more into it and I used it more and more as an opportunity to put my thoughts and feelings into words. (Interview with Diana)

Another student pointed out that her approach to the portfolio writing changed as she realised that there were many ideas that she could contribute to it, and as she started to view it as an opportunity to develop her ideas and articulate them freely and openly:

My approach changed when I started to realise that there were actually many things that I could write about and that I could reflect on, so I started to see it [the portfolio] as a place where I could just express everything I had in mind about the project and just follow my own train of thoughts without worrying about whether I was writing something interesting or intelligent. (Interview with Martina)

These comments indicate that the students’ approach to portfolio writing changed significantly as they became accustomed to the writing task and as they developed a greater confidence in their ability to express themselves through their writing, and in the value of their own ideas. This shift in the students’ perception of the reflective process, together with the students’ willingness to surrender to the experience, enabled them to follow the development of their ideas, regardless of whether these ideas were perceived as relevant or irrelevant. According to Bolton (2014), one of the key principles of reflective practice is the acknowledgement that everything is relevant, even it is seems insignificant, and that it is impossible to write wrongly about one’s own experience and
feelings. It was by coming to trust the writing process and letting go of their resistance, as suggested by Bolton (2014), that these students started to acknowledge the value of the reflective experience and to explore and express their ideas, thus also opening themselves up to new personal insight and new learning.

The link between the development of ideas through reflective writing and student learning has been emphasised by Moon (2006, 2013), who claims that it is in the development and exploration of ideas that new ideas can develop and that, in developing, they can lead to new learning. In the particular context of this project, students’ learning was facilitated by allowing their ideas to arise freely and openly and to take shape through the reflective writing process.

**Developing critical self-awareness**

The reflective writing process also encouraged some of the students to develop a greater level of awareness about some of the issues and difficulties related to the collaborative work within the groups and about their own attitudes and approaches towards them.

At the conclusion of the first iteration, for example, Nicholas wrote an entry about his experience of working with Chloe and Bianca and described their different approaches to the task and their opposing ideas about its development. Nicholas explained that, as his group members were unable to reach an agreement about the focus of the itinerary, he found himself in the position of having to mediate between them and help them find a common ground in order to ensure that the project could be completed on time.

Nicholas described his approach to his mediating role and reflected on whether he could have acted differently:

> The challenging bit was that Chloe and Bianca had completely different ideas about everything that had to do with the task and for a long time they couldn’t reach an agreement on anything…I had to mediate of course, there was no other way forward…I didn’t take sides, I just tried to be very careful and diplomatic so that nobody would get upset…in some way it worked because we finished the itinerary and we did a good job…but whether it was the best approach I don’t really know, I kind of wonder whether it would have been more helpful to be more straightforward about my opinions and just agree with either one or the other. (Portfolio entry, Nicholas)
Despite acknowledging that the outcome of his mediating role had been positive, Nicholas was able to look critically at his approach to his group members’ disagreements and asked himself whether it would have been more helpful to express his thoughts and ideas more clearly, taking sides with either one person or the other. Nicholas’s portfolio entry is revealing of his ability to engage in a process of meaningful reflection about his approach to group work and to question its helpfulness and value. According to Bolton (2014), meaningful questioning leads to enhanced self-understanding and greater self-awareness. In the case of Nicholas, his critical approach and his ability to reflect and ask himself questions about his own attitudes and about the effectiveness of his approach to the collaborative process, led to a greater level of self-awareness and self-understanding.

**Promoting an action-oriented approach**

As well as reflecting on some of the issues and difficulties of the collaborative work and on their attitudes towards them, some of the students also used the reflective writing process to develop strategies to overcome some of those issues and to actively change their approach to group work when they realised that it was not beneficial to the completion of the tasks.

This was exemplified in the following comment by Chloe, who acknowledged that the portfolio writing encouraged her to reflect on some of the problems of group work and on the way she approach them and also prompted her to outline a number of possible strategies to solve them:

> It helped me to think about some of the issues that came up within our group and to reflect about the way I dealt with difficult situations… not very well I must admit…but it also gave me the chance to come up with practical strategies to overcome some of those problems. (Interview with Chloe)

Julie took the process a step further and pointed out that, by reflecting on the communication problems within her group and on her difficulties dealing effectively with some of her group members, she gained a deeper understanding of her own issues and actively made an effort to change her approach to the collaborative work and to develop a more positive and supportive attitude towards the others:

> As I was writing my portfolio I thought a lot about the problems we had communicating with each other and also about the difficulties I had trying to
communicate with some of the people in my group...I realised that it wasn’t always their fault and that I probably wasn’t very good at communicating with them either...I guess I became more aware about my own communication problems and about my own lack of patience and tolerance. I made a big effort to change my attitude and I tried really hard to be more positive and understanding with the others. (Interview with Julie)

The reflective process in which Julie engaged with her portfolio writing not only encouraged her to become more aware of her own personal communication difficulties and weaknesses, but also prompted her to change her own attitude towards her group members and to try to relate to others in a more positive way.

This type of action-oriented reflective process is consistent with the view held by Kemmis (1985) of reflection as a process that is not just internal and individual but social and action-oriented. Both Chloe and Julie not only reflected individually on the collaborative experience and developed a greater awareness of the difficulties encountered and of their own personal limitations and weaknesses, but also made use of that awareness to bring about change and arrive at a positive outcome for the whole group. Learners were able to move beyond the individual reflection on their own experience and issues to arrive at practical solutions that could bring a collective benefit.

The collective reflective process

Knights (1985) emphasises the importance of offering students many opportunities to reflect in order to help them arrive at a rewarding learning experience. As well as reflecting individually through their learning portfolios and the individual interviews, students also had the opportunity to share their thoughts and ideas with their peers during the collaborative work on the tasks and during the focus group interviews carried out at the end of the first iteration.

Promoting critical thinking and collaborative discussion

An analysis of the transcripts of the individual groups’ online discussions and of students’ comments in the focus group interviews revealed that many students frequently contributed their own experiences and shared their thoughts and reflections on different aspects of their work and on some of the difficulties and challenges that arose during the collaboration. In the following comment, Diana described how the
experiences and ideas of one of her group members supported the collective reflective process:

When Marie told us about her experience of living and travelling in Sicily she put forward many ideas and suggestions…we got to think about those ideas and we got to discuss them in our group. We all reflected together on what she was proposing and then we made decisions about where to go and what to do. (Interview with Diana)

The collaborative nature of the tasks stimulated and facilitated the process of reflection by encouraging students to think critically about the experiences and ideas of their peers and to engage in a process of collaborative discussion and reflection that assisted the decision-making process of the whole group in relation to the development of the tasks.

According to Bolton (2014), the type of reflective process facilitated by collaborative group work supports developmental learning by providing students with the opportunity to think critically about the experiences and suggestions of others and to construct together knowledge and understanding of those experiences and ideas.

Students’ participation in the focus group interviews carried out at the end of the first iteration provided them with the opportunity to share their ideas and opinions about the successes and challenges of the collaborative work on the first task, as well as engage in collaborative discussion on possible solutions to the issues encountered and on strategies that could be developed and employed in the future in order to improve the outcome of the second iteration. This was reflected in the following excerpt from the focus group interview with the New South Wales group:

Elise: Some of the things we did worked out really well like our descriptions and also the brochure with all the photos…it was pretty cool.

Josie: Yeah, the brochure was cool…the layout was definitely original…like we didn’t just cut and paste information from the web…

Tessa: And it was well written…Jess did a good job fixing the grammar

Elise: Yeah, the descriptions were written really well…they were almost perfect.
Josie: I was quite happy with it…it was a big job though and I had to do it all on the weekend because we left it until the last minute…and that was a bit stressful…

Lara: A bit stressful? I almost had a nervous breakdown…we were completely disorganised for the first three weeks and then we had to work like crazy to finish it.

Elise: We had some problems organising our work and getting things done on time, that was our main problem I think…

Lara: And we had problems splitting the work fairly…like some of us ended up doing everything and others did not much at all, which was extremely annoying…

Elise: It was annoying because we thought we had to split the work evenly but then we realised that we all had different things we were good at and it was just a matter of finding out who was good at what so that we could use our skills in the best way possible.

Tessa: I agree, I think this is what we should do for the next task from the very beginning…deciding who is doing what and get started sooner

Elise: And we should definitely try to use our time better and make sure we meet our deadlines.

Students’ participation in the focus group interview also supported the collective reflective process of the Queensland group by encouraging students to discuss some of the problems that arose while working collaboratively on the task and to reflect on their individual responsibilities. This was reflected in the following excerpt in which students acknowledged that they all had some responsibility in creating a positive outcome and a positive learning experience for the group:

Nathan: There were quite a few things that didn’t work well for us…we couldn’t decide what to do and we spent quite a bit of time trying to figure things out.

Yuki: And we couldn’t communicate properly…I mean, Nathan and I discussed a lot of things but Dylan and Midori didn’t participate as much…they didn’t take part in the discussion…

Dylan: Thanks Yuki
Yuki: I’m not saying you were not helpful at all, but you have to admit that in the beginning you didn’t contribute that much.

Dylan: Yes I know…I admit I didn’t contribute…I’m not used to teamwork and I found it challenging…I mean…the collaboration…I wasn’t quite sure what my place was and how I was supposed to contribute.

Nathan: The problem was that for a long time we couldn't make decisions because we needed everyone to be on board.

Midori: I’m sorry I didn’t participate very much…I’ve been busy with other courses.

Nathan: It wasn’t just because of Dylan and Midori…we all had some responsibility if things didn’t work out as well as they could have…

Yuki: I guess you’re right…we were all responsible for making it work for us and for having a positive experience as a group…and we could have all pushed ourselves.

These comments provided evidence of students’ willingness to reflect together on some of the problems encountered during the collaboration, to clarify their level of commitment to the collaborative work, and to acknowledge that they were all responsible for the outcomes of the task and for creating a positive learning experience for the whole group. The fact that these students were critical about their strategies and commitment and were able to recognise their own individual responsibilities is an important aspect of the learning process (Thorpe, 2004). According to Thorpe, learning occurs when students become aware of their own strategies and styles and when they acknowledge that their learning is their own responsibility.

The process of collective dialogue and reflection that took place within the collaborative groups both during the collaborative work and the focus group interviews supports the view of Knights (1985) that reflection is not just a solitary, individual activity, but a reciprocal, two-way collaborative process, which occurs with the “aware attention” of another person. The presence and aware attention of the other students in the groups aided the process of collective reflection and assisted the group in the exploration of possible solutions to some the issues and challenges related to the collaborative work.
Summary of reflection

The authentic tasks which students were required to complete enabled them to actively make choices about the content and development of the tasks and to reflect on their learning experience both individually and collectively.

The open-ended nature of the tasks provided students with the opportunity to make choices related to their own interests, and to research themes and ideas that were relevant and meaningful to them. This had a positive effect on student learning as it motivated students to contribute to the project and engage fully with the tasks. Students also had the opportunity to reflect on their learning experience both individually, through the reflective portfolio writing and the individual interviews, and collectively, during the collaborative work and the focus group interviews.

An analysis of students’ contributions to the reflective portfolios and online group discussions, and of the comments made in the focus group and individual interviews, provided evidence of the process of reflection that took place as students contributed their thoughts and observations on their experience of working on the tasks and on their approach and attitude towards the collaboration.

Despite the fact that some of the students initially did not feel comfortable about the reflective writing process and found the experience quite challenging, the majority of them attributed a valuable role to the portfolios in aiding the process of reflection.

Students’ increasing ability to reflect on the collaborative experience and their greater level of critical awareness about their own working styles and the way they dealt with challenging situations, encouraged some of them to move beyond their individual reflective process to develop strategies to overcome some of the issues that became apparent and to actively change their approach and attitude towards group work and other group members in order to bring about a positive change and a collective group benefit. According to Kemmis (1985), this type of reflective process that is social and action-oriented rather than internal and individual, promotes a deeper approach to learning because it encourages students not only to develop insight into their own experiences and their own learning processes and styles, but also to learn from those experiences and processes and to generate significant development and positive collective change.
The collaborative nature of the tasks enabled students to engage in a process of collaborative dialogue and discussion in which they shared with others their thoughts and ideas and reflected together about the successes and challenges of the collaboration. This process of collaborative dialogue and reflection encouraged students not only to develop critical thinking skills and an insight into the ideas of others but also to construct knowledge and understanding of those ideas together.

Both the individual and collective reflective process provided significant opportunities for learning as they encouraged students to develop critical thinking skills and a deeper insight into the ideas of others and into their own learning processes and styles. The reflective process also promoted a more active approach to learning as students acknowledged their individual responsibilities and endeavoured to change their approach and attitude towards their peers and to develop strategies to improve the outcome of the collaboration in the future.

7. Integration and application across different subject areas

An important characteristic of authentic tasks is that they are not confined to a single domain or subject area but can be integrated and applied across different disciplines and lead beyond domain-specific outcomes. As well as providing students with the opportunity to develop their oral and written target language skills, the two tasks enabled them to extend their knowledge about subject areas such as Australian and Italian geography and history, art and architecture, and contemporary Australian and Italian culture and society.

Developing cultural, historical and geographical awareness

One of the most frequently mentioned benefits related to the integration and application of the tasks across different study areas was learning about the geographical features and the natural environment of Australia and Italy. Comments such as such as: “I learned a lot about the geography of Australia and Italy”, “I got a much better idea of some aspects of the landscape” and “we became more familiar with things like locations and distances” were typical examples of the types of statements made by the students about the value of this aspect of authentic tasks.

Several students also commented very positively about the opportunity to broaden their knowledge of specific historical, artistic and cultural aspects of the areas of Australia
and Italy explored while working on the two tasks. This was reflected in the following comment by Marie, an exchange student living and studying in Australia for one semester:

I found it very interesting and relevant to learn about some aspects of Australian history and culture when we researched the Northern Territory. I am interested in Indigenous art and culture and I had the opportunity to deepen my knowledge about Aboriginal rock art and Indigenous music, which are unique. (Interview with Marie)

Caroline spoke about the opportunity to learn about the history and culture of different areas of Italy:

It was good in that it gave me exposure to the history and culture of different parts in Italy. I knew a few things about Milan and Venice, but apart from that there were places like Como, Verona and Siena which I didn’t really know about, so it was good in that I was also able to learn about the history, art and culture of those places. (Interview with Caroline)

Similarly, another student noted that, as she planned her itinerary in Umbria, she learned about the historical, cultural and religious significance of various sites and monuments in the region and about a variety of major contemporary artistic and historical events:

I got to learn a lot of interesting things about some of the most important sites and monuments in Umbria...things like their historical and cultural value and their religious meaning. I also learned about Umbria’s famous festivals such as the Umbria Jazz Festival, which is one of the most important jazz festivals in the world, and the medieval festivals which celebrate different medieval rituals and traditions. (Interview with Chloe)

As well as appreciating the value of broadening their knowledge about different areas of study, many students also commented positively about the fact that what they had learned while working on the two tasks connected with what they had previously learned in other courses.
Summary of integration and application across subject areas

The fact that the tasks could be integrated and applied across different disciplines and were not limited to a single domain encouraged students to broaden their knowledge about different subject areas. As well as developing their oral and written target language skill, students learned about the geography of Australia and Italy and about specific historical, artistic, cultural and religious aspects of the areas explored while working on the two tasks. Students also acknowledged the fact that there was integration between the tasks and other domains and areas of study, and appreciated the interconnection between their previously acquired knowledge the new learning experience.

8. Integration with assessment

An important characteristic of authentic tasks is that assessment is seamlessly integrated with the tasks to reflect real-life assessment rather than being separate and removed from the nature of the tasks. The students were required to complete the two assigned tasks and produce a comprehensive itinerary and travel guide for each of them. At the conclusion of each of the two iterations, students were also required to present the final product of their collaborative work to the class and to submit a reflective portfolio on their learning experience. Rather than being tested on the specific linguistic or cultural knowledge acquired through those tasks, students were assessed on a wide range of abilities and skills developed while working collaboratively, which included research skills, organisational skills, teamwork skills, problem-solving skills, geographical, historical and cultural awareness and linguistic competence.

When asked to comment on this aspect of authentic tasks several students admitted that they initially found it “unusual” to be assessed on a variety of skills rather than being tested on their linguistic proficiency and cultural competence. These students noted that this type of assessment did not reflect their expectations and pointed out that it would have been “more straightforward” to sit traditional tests or quizzes. This was reflected in the following comment by one of the students:

It wasn’t exactly the type of assessment you normally have in a language course…it certainly wasn’t what I expected…it would have been much more straightforward to sit tests and quizzes the usual way. (Interview with Caroline)
Another student made a similar comment and spoke about the reassuring aspect of traditional assessment tasks:

Normally it’s like, there’s a test next week and you need to know such and such. You kind of know what to expect and you know what you need to learn to get a good mark… (Interview with Elise)

The preoccupation of not achieving good results seemed to be driving students’ initial perception of this aspect of the tasks:

I was worried I would not get a good result because it wasn’t just about getting a 100% score in the grammar tests…there were many more things that were part of the tasks and part of the assessment. (Interview with Lara)

Nevertheless, when asked to comment about how they felt about this aspect of the task later on in the semester, most of the students admitted that they came to appreciate the value of being assessed on a number of different skills and on having the opportunity to demonstrate a different range of abilities. This was reflected in the following comment by Chloe:

I realised that this type of assessment was much more holistic…it was good to be assessed on different skills because we could express ourselves in more than one way and show our strengths in different areas. (Interview with Chloe)

Diana pointed out that, as time progressed and she became more familiar with the tasks and their requirements, she appreciated the reasons for being assessed on different skills and acknowledged that this type of authentic assessment reflected the type of real-life tasks to be completed:

It took a bit of a shift in perspective because the assessment was different from what we were used to…as I got more into the tasks and I understood what was required, I appreciated why we were assessed in that way…it kind of made sense because this type of real-life assessment was linked to the tasks themselves. (Interview with Diana)

The idea that the authentic nature of the assessment reflected the real-world nature of the activities is in line with the requirement of seamlessly integrating authentic assessment of student learning with the tasks themselves in a way that reflects
real-world assessment (Herrington & Herrington, 2006; Herrington, Reeves & Oliver, 2010; Reeves & Okey, 1996; Young, 1995).

Although students did not explicitly acknowledge the value of authentic assessment tasks in supporting their learning, the integrated and authentic nature of the assessment effectively engaged learners and encouraged them to develop skills and abilities that connected and transferred to the world beyond the formal context of the classroom and that could be used and applied in the future.

9. Development of polished products

An important characteristic of authentic tasks is that they culminate in the creation of a tangible and polished product that is complete and finished in its own right rather than an exercise to be completed in preparation for something else.

All of the students commented positively on the fact that the final product of the tasks was a finished product. This was reflected in the following comment about the motivating value of creating an itinerary that could be used if students wanted to travel to the areas that they had researched while working on the tasks:

I liked the fact that by we got to create a full itinerary…it kept me motivated because I knew that the final outcome was going to be a finished product that I could use in the future if I wanted to go and travel to those places. (Interview with Lara)

The fact that the product of the tasks was a tangible product that could be useful in the future was also appreciated by Tessa:

It felt good to create something tangible that could be useful one day if we go and visit some parts of Australia or Italy. (Interview with Tessa)

The creation of a real product had a positive impact on learners’ motivation to carry out the activities. The completeness and concreteness of the final product stimulated students to carry out the tasks in a professional and immersive manner, and to engage fully with the activities.
10. Competing solutions and diversity of outcome

Authentic tasks allow a range and diversity of outcomes and are open to multiple interpretations and solutions rather than a single correct response.

Although some of the students acknowledged the challenging aspect of working on tasks which could be interpreted and developed in many different ways, the majority of the respondents appreciated the fact that the two tasks did not require them to provide a single correct answer but were open to a wide range of interpretations and solutions. This was reflected in the following comment:

> It was good in that there wasn’t just one right way to do it...in fact we could have done it in a hundred different ways...like we were able to pick where we wanted to go and how we wanted the whole itinerary to look like… (Interview with Dylan)

Several other students welcomed the opportunity to be creative and “think outside the box” in order to arrive at a particular outcome:

> I loved having the opportunity to think outside the box and be creative…I liked the fact that the whole project was open for a bit of creativity and that we could develop our product the way we wanted. (Interview with Chloe)

As well as appreciating the opportunity to interpret and develop the tasks in different ways and express themselves creatively, students also spoke positively about the value of being exposed to, and learn from, the unique ideas and interpretations of others. This was reflected in the following comment by Nathan:

> I enjoyed looking at how the other groups developed their own itineraries…everyone read the tasks differently and everyone did things in a different way…I learned a lot from listening to the other groups’ ideas, particularly those that were more innovative and alternative. (Interview with Nathan)

The fact that the tasks were open to multiple interpretations and solutions provided learners with the opportunity to develop their ideas creatively and to learn from other participants’ ideas and interpretations. The open-ended nature of the tasks had the positive effect of allowing students the freedom to create their own product and arrive at
their own unique outcome, as well as encouraging them to learn from the ideas and interpretations of others.

**Discussion**

The two tasks which students were required to complete during this study were designed according to the 10 defining elements of authentic tasks as described in Herrington, Oliver and Reeves (2003), Herrington, Reeves and Oliver (2010) and Herrington, Reeves, Oliver and Woo (2004). Each of these 10 elements was examined and analysed in relation to its impact on student learning in a community of practice.

The real-world relevance of the tasks supported students’ learning by motivating them to engage fully with the context of the tasks, which was perceived and accepted as real, and by encouraging them to establish a direct connection between their own personal experiences and interests and the new task. In line with the cognitive constructivist view of learning, this integration between students’ experiences and the tasks enabled them to actively construct new ideas and new understanding by transferring their current or past knowledge and experiences to the new scenarios that were presented to them. Another significant benefit related to the real-world nature of the tasks was that it enabled students to be exposed to and gain an understanding of the target language as it is used in real-life situations and to apply the language structures and expressions learned in class or from the textbook to the wider context of authentic communication. The real-world nature of the tasks supported the development of a range of practical and transferable skills that students could apply to a variety of situations likely to be encountered outside the formal context of the classroom.

The ill-defined and unstructured nature of the tasks and the fact that they were complex and had to be investigated over a sustained period of time enabled learners to explore complex scenarios that reflected the ambiguities typical of real-world situations and encouraged them to identify and respond to the type of challenges that they were likely to encounter in real life. These aspects of the tasks motivated learners to develop their problem-solving skills by identifying the problems related to the tasks and develop appropriate solutions and strategies to solve them, and to develop their time management and organisational skills.

The opportunity to be exposed to the multiple perspectives of other participants and to access multiple resources had the positive effect of encouraging learners to widen and
deepen their own individual perspectives and to develop a broader knowledge and understanding of a particular domain or situation. By accessing multiple resources, students learned to be proactive in identifying the information that was relevant to the development of the tasks and in disregarding that which was irrelevant, and to actively define the direction and focus of the tasks. In line with the tenets of the situated learning model, students were able to construct their own knowledge and create their own learning. Finally, the opportunities to access multiple resources enabled learners to develop their target language reading comprehension skills and to be exposed to a variety of linguistic registers and communicative conventions that are typical of specific social and situational contexts.

The collaborative nature of the authentic tasks had a very significant impact on student learning. The regular communicative practice and interpersonal interaction allowed by the collaboration contributed greatly to the development of learners’ target language oral and written communication skills. The collaboration also enabled students to learn from peers who had a higher level of linguistic proficiency, were more competent in the use of technology or had had more developed organisational and time management skills. The opportunity to collaborate with more competent or advanced peers allowed students to extend their skills beyond their regular level and progress through their ZPD. Finally, students developed valuable teamwork skills as well as effective negotiation and mediation skills and learned to work with others to achieve a common goal.

The opportunity to make choices had a positive impact on learners’ motivation and level of engagement with the tasks as students felt that they had the freedom to pursue their own interests and select the most relevant and meaningful options and alternatives. The opportunity to reflect, provided by the tasks, impacted positively on students’ confidence in the value of their own ideas and in their ability to express them, and led them to a deeper level of self-awareness and self-understanding in relation to their own approaches and their own attitudes in relation to others. This greater level of critical awareness promoted a deeper approach to learning as it encouraged some of the students to think about and learn from their experiences and processes and change their approaches and attitudes in order to create a positive change that could improve the outcome of the collaboration and benefit the whole group.
The fact that the tasks could be integrated and applied across different disciplines enabled students to develop their awareness and broaden their knowledge and establish a connection between their previously acquired knowledge and the new learning.

The integration of the tasks with the assessment allowed learners to be assessed on a wide range of skills in a way that reflected real-world assessment and encouraged them to develop skills and abilities that connected and transferred to the world beyond the context of the classroom and that could be used and applied in the future.

Similarly to the learning outcomes discussed for the real-world nature of the tasks, the fact that the final product of the activities was a finished and tangible product that could be useful and valuable in the future, supported students’ learning by motivating them to engage fully with the tasks and to complete them. The relevance and potential usefulness of the finished product of the tasks enabled learners to appreciate the integration between the tasks and their future experiences.

Finally, the openness of the tasks to multiple interpretations and a diversity of outcomes enabled students to express themselves creatively while developing the tasks and to be exposed to, and learn from, the unique ideas and interpretations of others.

A summary of the findings described above, together with a series of design principles to guide the design and development of authentic learning tasks in a second language learning context, is presented in the following section.

**Design principles**

Table 5.2 presents a summary of the findings in relation to each of the 10 elements of authentic tasks on student learning in an online community of learners. It also provides (in Column 3) a series of design principles and recommendations to guide the design and development of authentic learning tasks in a second language learning context, based on the findings of the study.
<table>
<thead>
<tr>
<th>Element of authentic tasks</th>
<th>Impact on student learning</th>
<th>Design principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Real-world relevance</td>
<td>• enables learners to engage with context and relate the tasks to personal interests and experiences • enables learners to apply and transfer prior knowledge and experiences to the new tasks • enables learners to apply and integrate what has been learned to real-life situations and contexts • enables the development of real-life, transferable competences and skills • impacts positively on motivation and creates a sense of purpose • promotes the development of communicative competence through authentic and meaningful target language communication with peers and native speakers</td>
<td>Design tasks which: • are set within a meaningful context and relate to the target language culture • are engaging and relevant to learners’ personal interests and experiences • require learners to transfer prior knowledge and experiences to the tasks and to use and develop a variety of competencies and skills • require students to communicate with peers and native speaker participants in the target language</td>
</tr>
<tr>
<td>2. Ill-defined nature of the activities</td>
<td>• enables learners to define the tasks and sub-tasks required to complete the activity • enables learners to encounter practical problems and explore multiple paths and develop different strategies towards a solution</td>
<td>Design tasks which: • are presented in the form of scenarios • allow students to encounter problems and explore multiple paths towards a solution • provide an opportunity for students to define the tasks and sub-tasks required to complete the activity • provide the opportunity to detect relevant versus irrelevant information</td>
</tr>
<tr>
<td>3. Complexity and sustained effort</td>
<td>• enables learners to work on the tasks over a sustained period of time • enables learners to determine a course of action to complete the tasks • enables learners to develop time management and organisational skills</td>
<td>Design tasks which: • are presented with a single open-ended complex context for each iteration • require a sustained period of time to be completed • require students to determine a course of action to complete the tasks • encourage students to set and make themselves accountable for deadlines</td>
</tr>
<tr>
<td>Element of authentic tasks</td>
<td>Impact on student learning</td>
<td>Design principles</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------------------</td>
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</tr>
</tbody>
</table>
| **4. Multiple perspectives and resources** | • encourage learners to access and integrate the different perspectives of others and contribute their own perspective  
• encourage learners to be open-minded about the ideas of others and enhance cognitive flexibility  
• enable learners to develop target language cultural awareness  
• encourage learners to obtain information from multiple sources  
• enable learners to define the direction of the tasks and pursue their own interests  
• enable learners to develop target language reading skills and cultural awareness | Design tasks which:  
• require students to access, contribute and integrate different perspectives and points of view  
• encourage students to be open-minded and accepting about the ideas of others  
• encourage students to clarify and express their own thoughts and opinions and to compare their interpretations to those of others  
• require students to access and obtain information from a variety of authentic resources in the target language  
• enable students to define the direction of the tasks and leave them the freedom to pursue their own interests |
| **5. Collaboration** | • enables learners to use the target language to interact and collaborate with peers and native speaker participants  
• enables learners to develop oral and written communicative skills  
• enables learners to learn from more competent peers and native speakers and develop competencies above their current level  
• enables learners to develop organisational and time management skills  
• enables learners to develop negotiation and mediation skills to overcome issues and difficulties  
• enables learners to collaboratively construct knowledge  
• enables learners to develop a sense of belonging and connection, which impacts positively on motivation | Design tasks which:  
• require students to work in collaborative groups rather than individually  
• encourage all students to interact and collaborate with peers and native speaker participants  
• support the collaborative construction of knowledge  
• provide an incentive structure for whole group achievement |
| **6. Reflection** | • enables learners to make choices individually and collectively  
• enables learners to develop critical self-awareness and gain an understanding of individual and collaborative learning processes  
• enables learners to engage in critical thinking and collaborative discussion and develop strategies for effective collaboration | Design tasks which:  
• encourage students to make choices both individually and collectively  
• enable students to reflect on their learning experience both individually and collectively  
• encourage discussion with the collaborative groups to enable collective reflection on lessons learned and future strategies |
<table>
<thead>
<tr>
<th>Element of authentic tasks</th>
<th>Impact on student learning</th>
<th>Design principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Integration and application across different subject areas</td>
<td>• enable learners to develop knowledge about different subject areas</td>
<td>Design tasks which: • can be integrated and applied across different disciplines • require learners to develop a range of competencies and knowledge of different subject areas • encourage students to make links between different disciplines and transfer previously acquired competencies and knowledge to the new task</td>
</tr>
<tr>
<td></td>
<td>• enable learners to transfer previously acquired competencies and knowledge to the new task</td>
<td></td>
</tr>
<tr>
<td>8. Integration with assessment</td>
<td>• enables learners to demonstrate a different range of abilities and skills that connect and transfer to the real world</td>
<td>Design tasks which: • integrate authentic assessment of learning within the tasks rather than base assessment on discrete tests • assess students on a range of abilities and skills developed while completing the tasks (including language skills, research skills, organisational and teamwork skills, problem-solving skills, oral presentation skills) • involve students in the assessment and evaluation process of their work and that of their peers (i.e. peer assessment for the oral presentations)</td>
</tr>
<tr>
<td>9. Development of polished products</td>
<td>• enables learners to develop a product that could be used and be useful outside the context of the subject</td>
<td>Design tasks which: • require students to develop a finished product that is shared and could be used outside the context of the course</td>
</tr>
<tr>
<td>10. Competing solutions and diversity of outcome</td>
<td>• enable learners to be creative and to interpret and develop the tasks in different ways</td>
<td>Design tasks which: • do not require a single correct answer but allow a range and diversity of outcomes • encourage students to be creative and learn from the ideas and unique interpretations of others • are open to multiple interpretations and solutions</td>
</tr>
<tr>
<td></td>
<td>• enable learners to learn from the ideas and unique interpretations of others</td>
<td></td>
</tr>
</tbody>
</table>

This chapter has analysed and discussed the impact of each of the 10 defining elements of authentic tasks on student learning in an online community of learners. The following chapter investigates the process that students followed to collaborate on the authentic tasks and the strategies that they employed to overcome some of the issues that threatened to prevent them from successfully completing the tasks and thus to arrive at a positive outcome.
Collaboration in an online community of learners

Collaboration is one of the critical elements of situated learning environments and one of the 10 defining elements of authentic tasks, as determined from the literature. As previously described, the 10 critical elements of authentic tasks derived by Herrington, Oliver and Reeves (2003), Herrington, Reeves and Oliver (2010) and Herrington, Reeves, Oliver and Woo (2004) were incorporated into the design of the online learning environment of this study. Chapter 5 described the findings of an investigation into the impact of each of these 10 defining elements on student learning in an online community of learners. This chapter looks more deeply into the collaborative process among participants and discusses some of the problems encountered by the collaborative groups and the strategies employed by learners to overcome them and arrive at a positive outcome.

Research question 2

How do students collaborate and solve problems in an online community of learners?

Framework and method of analysis

As described in Chapter 5, techniques of qualitative analysis recommended by Marshall and Rossman (2014), McCracken and Morgan (2009), Miles, Huberman and Saldaña (2013) and Patton (2015) were used to analyse the data collected from the focus group and individual interviews with students, the individual interviews with the facilitators, the transcripts of the messages contributed to the online threaded discussion forums and the synchronous chat, email messages, the students’ reflective portfolios and other documents and notes. The process of coding data was described in detail in Chapter 5 and similar methods were used for the analysis of data related to research question 2.
The analysis was conducted using a combination of the template organising approach and the constant comparative method. As described in Chapter 5, the template organising approach allowed the researcher to identify and code different sections of text present in the data according to 10 *a priori* categories based on the defining elements of authentic tasks.

As one of the 10 *a priori* categories of analysis identified in this initial phase related to collaboration, all the segments of text appropriate to this particular code had already been clustered together in the same document ready to be coded and analysed. The constant comparative method was then adopted to progressively review and refine existing sub-categories and to identify new emerging categories and themes within the previously established collaboration code.

After the existing sub-categories were refined and new codes and themes were identified, data was organised into displays. Observations and interpretations about the meaning of the data were then made and the conclusions were drawn. The findings related to research question 2 are discussed in detail in the section that follows.

**Collaboration**

Collaboration has been identified in the literature as a critical element of the situated learning model. As described in Chapter 2, this model supports the development of tasks directed to a small group of students rather than an individual and the collaborative construction of knowledge and collective development of solutions that would not otherwise be possible or achievable (Brown, Collins & Duguid, 1989; Collins, Brown & Holm, 1991; Collins, Brown & Newman, 1989). Collaboration is also supported by Vygotskian sociocultural theory, which maintains that ideas are constructed through a process of social interaction with others and that cognitive development occurs when learners have the opportunity to engage in communicative activities and collaborate with each other in meaningful, goal-oriented communicative tasks with the aim of achieving a common goal (Lantolf & Thorne, 2006; Lantolf, Thorne & Poehner, 2014; Otha, 2000; Swain, Kinnear & Steinman, 2015). Collaboration and cooperation among participants of a learning community is also supported by the concept of community of practice which involves the mutual engagement of its participants in a joint enterprise or activity and the development of a
shared repertoire of communal resources and a shared knowledge (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott & Snyder, 2002).

In order to complete the two authentic tasks, students were required to collaborate both in small groups and with the rest of the class. From an analysis of the transcripts of students’ online and class discussions, students’ reflective portfolios and the teacher’s class observations and interviews, seven phases of the collaboration were identified for both the first and the second task. These seven phases are described in detail below.

**The seven phases of the collaboration**

**Phase 1: Brainstorming ideas**

After being presented with the assigned task at the beginning of each of the two iterations, all students in the class spent about one hour brainstorming their ideas and expressing their opinions about how they thought the tasks should be developed.

For the first task, which required students to develop an itinerary and a comprehensive travel guide of Australia for a group of visiting Italian students, the discussion revolved around matters such as the areas of Australia that would be of interest to the visiting students, the type of activities to be organised and length of the different sections of the trip. Students also spoke at length about the unique aspects of Australian landscape, wildlife and culture, and agreed that, in order to provide the visiting students with a meaningful travel experience, it would be important to organise a road trip that involved spending time in contact with nature as well as visiting major cities and attending cultural and sporting events. Students then took turns looking at a wall map of Australia that the teacher had brought to class and made suggestions about possible itineraries.

For the second task, which required students to prepare an itinerary and a travel guide of Italy for the whole class, students brainstormed their ideas about significant cultural and artistic events that take place in Italy and made suggestions about different travel destinations and possible itineraries. Several students spoke about their past experiences of living and travelling in Italy.

At the conclusion of both the first and the second brainstorming phase of the collaboration, one student wrote on the whiteboard a brief summary of the ideas proposed by the class and one possible itinerary to be developed by each of the individual collaborative groups.
The teacher did not become involved in the brainstorming phases of the collaboration but acted as a moderator of the discussion and assisted in turn taking when it was needed.

**Phase 2: Forming the groups**

After the conclusion of the initial brainstorming phase, in which students shared their ideas about the development of the task, students formed four collaborative groups of three to five students. The students were able to choose their own group members as they wished, without any external input or intervention from the teacher, who did not get involved in the process of forming the groups, and without any pressure from the other students in the class, who respected the choices made by their classmates. After the groups were formed, each of the four groups selected one Australian State as the main focus of the travel guide and named itself as the chosen State. Table 6.1 lists the composition of the groups and the geographical focus of their project.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Travel destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lara, Elise, Tessa, Josie</td>
<td>New South Wales (NSW)</td>
</tr>
<tr>
<td>Nathan, Julian, Yuki, Midori</td>
<td>Queensland (QLD)</td>
</tr>
<tr>
<td>Martina, Diana, Julie, Caroline, Marie</td>
<td>Northern Territory (NT)</td>
</tr>
<tr>
<td>Bianca, Chloe, Nicholas</td>
<td>Victoria (VIC)</td>
</tr>
</tbody>
</table>

One student suggested that, given that, within the scenario context, the visiting Italian students were going to be in Australia for approximately one month, each group should prepare an itinerary and a travel guide for one week. Another student raised the issue that spending only one week in some of the States would not be sufficient because of the great geographical distances to be covered in a short time. There was some discussion on the possibility to dedicate a different amount of time to the different States. However, in the end students agreed that, in order for each group to have an equal workload, it would be necessary to divide the time equally among the different States, and that each group would be responsible for planning and organising the itinerary for its allocated week as efficiently as possible.

As one of the aspects of the collaboration that some of the students identified as problematic during the focus group interviews was the high number of participants in
the collaborative groups, when students approached the second task they decided to organise themselves into five groups of three students each.

After the groups were formed, each of the groups chose one or two Italian regions and named itself as the chosen region/s. Table 6.2 lists the composition of the groups and the geographical focus of their project.

Table 6.2
The five groups and their travel destination: Iteration 2

<table>
<thead>
<tr>
<th>Participants</th>
<th>Travel destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathan, Julian, Yuki</td>
<td>Lombardia–Veneto</td>
</tr>
<tr>
<td>Lara, Elise, Nicholas</td>
<td>Toscana</td>
</tr>
<tr>
<td>Caroline, Bianca, Chloe</td>
<td>Lazio–Umbria</td>
</tr>
<tr>
<td>Tessa, Josie, Julie</td>
<td>Campania</td>
</tr>
<tr>
<td>Martina, Diana, Marie</td>
<td>Sicilia</td>
</tr>
</tbody>
</table>

Phase 3: Planning the individual itineraries

This phase of the collaboration took place after the individual groups had been formed and after the class had come to an agreement about the overall structure of the task. During this phase, each group met to discuss the organisation and development of their individual itinerary. During both the first and second iterations, this initial group planning meeting took place face-to-face outside of regular class time. In the following week, the groups presented to the class a preliminary outline of their itinerary. The groups’ presentations took place entirely in the target language during the allocated class time.

Phase 4: Negotiating roles and responsibilities

During this fourth collaborative phase, which took place after the groups had prepared an outline of their itinerary and had presented them to the whole class, students negotiated their roles and responsibilities within their own individual groups. Most of this negotiation occurred face-to-face outside of regular class time. In order to complete this phase of the collaboration, the groups employed two different strategies which are summarised below.

Strategy 1: Dividing the itinerary into equal parts

This strategy, which was employed by three of the four collaborative groups during the first iteration, and by four of the five groups during the second iteration, involved
dividing the one-week group itinerary into equal parts so that each group member could take full responsibility for a specific geographical area and could develop individually one or two days of the itinerary.

**Strategy 2: Dividing the task according to individual skills**

This strategy, which was initially employed by two groups during the first iteration and by one group during the second iteration, involved dividing students’ roles and responsibilities according to their skills and abilities. Table 6.3 and Table 6.4 summarise the strategies employed by the collaborative groups during the first and second iteration.

<table>
<thead>
<tr>
<th>Table 6.3</th>
<th>Strategies employed by the collaborative groups: iteration 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group 1: NSW</td>
</tr>
<tr>
<td>Equal division of itinerary</td>
<td>✓</td>
</tr>
<tr>
<td>Task divided according to individual skills</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 6.4</th>
<th>Strategies employed by the collaborative groups: iteration 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal division of itinerary</td>
<td></td>
</tr>
<tr>
<td>Task divided according to individual skills</td>
<td>✓</td>
</tr>
</tbody>
</table>

As can be seen from these tables, the great majority of the groups employed the first strategy and divided their itineraries into equal parts. Students from these groups admitted that they felt this was a more effective and equitable approach and spoke about the importance for each of them to be fully responsible for one section of the trip and to be able to make their own choices independently as to how they wanted to develop their individual part of the itinerary.

The Queensland and the Lombardia–Veneto groups adopted the second approach. It is interesting to note that, with the exception of one student who had withdrawn after the end of the first iteration, these two groups had the same student composition and negotiated the division of roles and responsibilities in the same way for both iterations. Students from these groups commented that, although at the beginning of the second iteration there was some discussion within their group about the possibility of dividing
the task into equal parts, they made the decision to continue with the same approach of the first iteration. These students recognised that they all had different skills and abilities and that it was important for each of them to make use of their unique strengths and talents even if it meant not splitting the work equally among them.

Only the students in the Victoria group employed a combination of both strategies. This group divided the itinerary into equal parts and also allocated to each group member different roles and responsibilities according to their skills and abilities.

**Phase 5: Working independently**

During this phase, the students from all the collaborative groups worked independently on their specific sub-tasks. During both the first and the second iteration, each group had set specific deadlines that the individual students were required to meet in order to complete the task within the allocated timeframe. As the majority of students reported in the individual interviews and in their reflective portfolios, the main benefit of this phase of the work was the fact that it gave them the freedom to make their own independent choices as to how they wanted to develop their specific sub-tasks.

**Phase 6: Negotiating ideas and providing assistance and feedback**

During this phase, which partly overlapped with the previous phase of independent work by the individual students, all groups held face-to-face meetings both in class and outside of regular class time to discuss their individual contributions and negotiate how these would all fit together in order to create the final product. During this phase of the collaboration, students also provided each other with relevant feedback and assistance as needed. As well as meeting in person, students from all the collaborative groups made use of the online resources provided to communicate and negotiate their ideas with the other members of their group and with the other groups in the class. In the majority of the collaborative groups, the negotiation process that took place during this phase of the collaboration was relatively simple and straightforward, as students generally accepted and appreciated each other’s contributions and feedback. In some of the collaborative groups, however, the negotiation process was more complex as students experienced a number of problems and difficulties which required them to renegotiate their ideas with the other members of their group and, in some cases, to change their contributions in order to bring them to the standard sought by their group members. Some of the problems and issues encountered by the collaborative groups
during this phase of the collaboration, together with the strategies that students employed in order to solve them, are explored in greater depth in the second part of this chapter.

**Phase 7: Developing the final product**

During this final phase, which took place after students had completed their individual sections of the task and had provided each other with feedback on their work, student group members worked together to develop the final product and prepare the presentation.

During both the first and the second iteration, the students who had a higher level of linguistic target language proficiency corrected and edited the writing of the less proficient students, whereas the students who had more advanced skills and a greater interest in the uses of technology took on the responsibility of preparing the PowerPoint presentations, editing the videos or developing the group websites.

**Observations on the two iterations**

From an analysis of the data collected, a number of observations were made about the development of these seven collaborative phases during the first and the second iteration. Several differences are discussed below.

**Duration and efficiency of the collaborative phases**

During the first iteration, the brainstorming and group forming phases of the collaboration took considerably longer to be completed than during the second iteration. Students’ familiarity with the requirements of the first task encouraged them to start working on the second task earlier and in a much more focused and efficient way.

**Students’ approach to collaboration**

Students generally appeared to be more confident about expressing their ideas and making suggestions about the development of the second task than they did while collaborating on the first task. In the individual interviews, several students pointed out that during the second iteration they felt less frustrated when the other students disagreed with what was proposed because they were aware of the fact that the activity would eventually allow a lot of freedom and that there would be room for individual and independent choices at some point during the development of the task. Students
also appeared to be clearer about their ideas and choices in the negotiation of their roles and responsibilities within their groups. Students commented that, having reflected on their experience with the first activity and having reassessed each group member’s contribution to the task, they were able to make a more thoroughly-based decision on how best to divide the collaborative work during the second iteration and on how to make use of their individual skills to assist and support each other while working on the task.

**Students’ use of the target language**

During the first iteration, the collaboration took place both in Italian and in English. Although the majority of the participants made an effort to communicate their ideas in Italian and only reverted to English sporadically when they had difficulties expressing themselves clearly, a few students with less developed target language skills communicated mostly in English. In the individual interviews with the researcher, some of these students explained that in the first weeks of the semester they did not yet feel confident about their linguistic abilities and preferred to communicate in their native language. During the second iteration, students’ use of the target language increased substantially. An analysis of the data collected revealed that the students with a lower level of linguistic ability also made an attempt to communicate in the target language and reverted to English less frequently than in the first iteration. These students commented that they had felt progressively more comfortable expressing their ideas in Italian to a wider audience.

**Problems encountered by the collaborative groups**

According to Forman and Cazden (1985), true collaboration does not simply occur when participants work together, but when they collaboratively solve a problem or create a product which could not have been completed individually.

In analysing the transcripts of students’ interviews and online discussions as well as students’ reflective portfolios, a number of problems were identified in relation to the collaborative work on the activities. These problems, which occurred during the first iteration, are outlined in detail below, together with the strategies that students collaboratively employed to overcome them and complete the final product.
Problem 1: Unequal contribution of effort

Two students from the New South Wales group, which was composed of four second-year students, commented negatively about the fact that some of their group members did not contribute substantially to the task. Lara described the frustration she experienced while collaborating with two members of her group and made the following comment in relation to their work:

It was quite frustrating because I felt like Elise and I were the only people doing something about the project. The others only did the minimum, they did the skeleton of the itinerary and that was it…I wasn't impressed at all. (Interview with Lara)

Elise made a similar comment about her group members’ lack of commitment to the task:

The main problem was that some students didn’t pull their finger out…they just didn’t put in the work and that was very annoying. (Interview with Elise)

When asked to comment on the issue of unequal contribution and commitment to the task raised by Lara and Elise, one of the students accused of not contributing much to the project admitted that her work was not very detailed and that she was not good at planning and organising the various aspects of an itinerary:

I did my part but I didn’t do it in great detail…it was pretty basic…I guess I’m not good at planning and organising stuff like that. (Interview with Josie)

Similarly, the other student admitted that she did not contribute to the task as much as the other group members and spoke about her uncertainties about the process of completing her work:

I probably didn’t contribute as much as the others because I didn’t put in a lot of information and details. I know I should have done it differently but I wasn’t quite sure how to do it. (Interview with Tessa)

These comments are revealing not only of the different levels of contribution to the tasks of the students in the group but also because of the insight they provide on the difficulties that some group members had in working to the same standard as the others.
The fact that one of the group members had very high expectations, which other students were unable to meet, created tension within the group and impacted negatively on students’ confidence in their ability to carry out the task. This was reflected in the following comment by Tessa, who admitted that she felt intimidated and pressured to do things according to Lara’s instructions:

I didn’t really know what I could do to make my work better and I found the whole thing pretty intimidating because what I did obviously wasn’t good enough for her...she had different expectations and there was a lot of pressure to do things her way. (Interview with Tessa)

Josie made a similar comment and spoke about Lara’s criticism of her work:

It’s hard when you work with someone with such high expectations, because you can’t meet them...at least I couldn’t...she wasn’t happy about what I did...got back to me saying that it wasn’t good enough, that I had to do more or do it differently. (Interview with Josie)

Students in this group were not able to find the right balance between their level of contribution to the task and the expectations of some of their group members about how the task should be completed.

**Strategies to overcome issues of unequal contribution**

After realising that some of the students in the group were not working on the task in a way that she considered satisfactory, Lara posted a number of messages to the group forum to encourage those students to improve their work. Lara made the following comment in relation to her attempts to lift the level of her group members’ contributions to the task:

I wanted them to do more so I tried to push them to do things. I went on the forum and started to send messages like “you have to do this, you have to do that, you need to put in more details, you need to be more specific” then I sent them my part of the itinerary as an example of how it should be done…but it didn’t work, they didn’t do anything I asked them to do, they just ignored my messages. (Interview with Lara)

The lack of response to Lara’s messages prompted Elise to call a meeting to discuss the problem and try to find a solution. All students agreed to meet for one hour before the
scheduled class. During this meeting, Lara and Elise pointed out that not all group members were contributing sufficiently to the task and that this was preventing the group from successfully completing the project. Then Elise asked each member of the group to talk about their issues or concerns in relation to the task and to come up with some ideas on how to move forward. The following entry in Elise’s portfolio summarises the outcomes of the meeting:

Today we met to talk about our project and to try and find some ideas to make things happen. It was a very productive meeting. We all put forward our ideas and listened to everyone else’s. Tessa and Jess made it clear that they didn’t have any interest in planning the logistics of the trip (and they obviously didn’t have the skills to do it) but said that they would’ve been happy to work on something else instead. So we started to think about a different way to split the work and we came up with the idea of dividing the project on the basis of our skills. This is what we planned:

<table>
<thead>
<tr>
<th>Names</th>
<th>Skills</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lara</td>
<td>Good organisation skills, Thorough, Whole picture, Original ideas</td>
<td>Plan all the activities, Develop the itinerary</td>
</tr>
<tr>
<td>Elise</td>
<td>Good research skills, Good at putting things together, Creative</td>
<td>Find information on the areas of interest and find photos, Prepare presentation and brochure</td>
</tr>
<tr>
<td>Tessa &amp; Josie</td>
<td>Proficient with the language</td>
<td>Help with the writing, Fix up the grammatical mistakes and edit writing</td>
</tr>
</tbody>
</table>

Everyone was happy about this new arrangement. I think it’s good to make use of people’s skills because it’s more motivating to do something that we can do well. (Portfolio entry, Elise)

The importance of providing students with the opportunity to use their skills and their strengths while working on the task was also recognised by Lara, who commented positively about the new division of the group members’ responsibilities:

After we decided to divide the work in a different way, things started to pick up. I was happy to keep working on the itinerary because I wanted to plan it and develop some ideas and Elise was keen to put together the presentation and the brochure because she is a bit more creative. Josie and Tessa decided to
focus on the language part because they had pretty good language skills, and they were good at sorting out the grammar mistakes and editing the writing. So, in the end things worked out well for us…we all did what we were good at and what we wanted to do and we didn’t get frustrated with each other, well, not too much… (Interview with Lara)

Students recognised that simply dividing the work into equal parts, as the group had originally done, prevented them from successfully completing the task and arrive at a positive outcome. The fact that students did not contribute equally to the task caused resentment and frustration both towards the group members who contributed less and towards those who expected more. The solution that the group collaboratively found involved dividing students’ roles and responsibilities according to their skills and preferences, rather than employing a simple division of labour. This strategy not only made it possible for the group to complete the task but also had the effect of increasing students’ motivation and confidence in their abilities to provide a valuable contribution to the project.

The members of this group arrived at some interesting conclusions about the nature of group work and recognised that it is not necessary for all group members to contribute equally to the project if this does not lead to a positive outcome and if it causes unnecessary tension and frustration within the group. Students acknowledged the importance of keeping the focus on the main goal of completing the task and of employing a more flexible approach in order to allow all group members to contribute to the task according to their skills and abilities.

**Problem 2: Communication difficulties**

Students from the Northern Territory group, which was composed of two second-year and three third-year students of Italian, reported to have had difficulties communicating in the target language within the group because of the different levels of target language proficiency of its members. This was reflected in the following comment by one of the second-year students in the group who spoke about the difficulties of interacting with students with a higher level of proficiency:

The third year students were obviously at a much higher level than us and so we had some problems communicating with them. They insisted on speaking and writing in Italian all the time, which was great because we had to use the language, but it was also very stressful because sometimes it was hard to
understand everything that was going on and we were much slower at expressing ourselves. So we had some communication breakdowns because of the language barrier and I think it must have been quite annoying for them as well. (Interview with Julie)

One of the third-year students in the group made a similar comment and pointed out that the language barrier was the most challenging aspect of the collaboration on the task:

The language skills of the second year students were not that good and this made it hard to communicate with them sometimes, because they wouldn’t understand what we were saying and they would give a reply which didn’t have anything to do with the question. I think this was the most challenging part, working out how to put our ideas back and forth so that everyone could understand and participate in the project. (Interview with Diana)

The communication difficulties among the members of this collaborative group were evident in one of the dialogues that two of the students had in class during the third week of the first iteration and in the postings to the group discussion forum that immediately followed it. Diana, one of the advanced level students in the group, asked Caroline, a second year student, to talk about the activities that she had planned for the third day of the trip in the Northern Territory. The dialogue reported below, which took place entirely in the target language, was recorded by the teacher and was later transcribed and translated into English.

Diana: Ok, let’s move on to day three…Caroline, what did you plan?

Caroline: Well…[hesitates] ok, I wrote it here…yes, I think the Kakadu National Park…

Diana: Sounds good. What’s the itinerary going to look like?

Caroline: Ok, I think the Kakadu is a very interesting place to visit because there are many different bird species and insects and plants.

Diana: Yes, that’s great…but what about the itinerary? How long will it take to get there from Darwin? And what are these students going to do once they get there? Can we organise some bush walking perhaps?

Caroline: I think it’s very far away, I don’t think you can walk there…

Diana: I didn’t mean we should walk there from Darwin, I asked if there is some bush walking to do there…in the Kakadu…
Caroline: Oh sorry, I didn’t understand...I don’t know, but I think it’s possible to camp there at night...

At this point Martina, another third year student, intervened and asked Caroline to post her itinerary to the group discussion forum, so that everyone could look at it and provide some feedback or suggestions in writing. The discussion then moved to a different topic.

The same day Caroline posted her itinerary to the class discussion forum and some of her group members replied to her posting. The online dialogue, which took place entirely in Italian (translated into English by the researcher), is reported below.

**Day Three** - Caroline - Thu, 24 Aug 2006, 16:00

This is day three of the trip:

- 6.00am: Leave from the hostel in Darwin to go to Kakadu National Park. Bus trip to Kakadu.
- 10am: Walk to Ubirr Rock and look at ancient aboriginal rock art.
- 11am: Leave to go to Bowali Visitor Centre.
- 12pm: Bowali Visitor Centre. Exhibitions on the Northern Territory and Aboriginal culture.
- 12.30pm: Lunch.
- 1.30pm: Leave to go to Cooinda.
- 2.30pm: Yellow Waters Wetland Cruise. Looking at crocodiles and native birds.
- 3.30pm: Bus trip to Jabiru Airport.
- 4.30pm: Scenic flight over Kakadu and Arnhem land and Jim Jim Waterfalls (one hour).

Is it all right?

Caroline

**Re: Day Three** - Martina - Thu, 24 Aug 2006, 17:56

Hi Caroline,

I think that one hour (from 10 to 11) to go to Ubirr and come back, stopping to enjoy the view and admire the rock art is not enough. The walk itself is not very long but I don’t think one hour is enough to do everything. And also for the Yellow Waters cruise and the scenic flight we will need more time. I don’t think the time you have allocated will be enough. Martina
Re: Day Three - Caroline - Thu, 24 Aug 2006, 18:05

Yes but we hope that the weather will be fine… Caroline

Re: Day Three - Martina - Thu, 24 Aug 2006, 18:16

We all hope so (I meant TIME and not WEATHER). I said that I don’t I think we can do everything in one day. Perhaps we could camp there and stay the next day as well… Martina

Re: Day Three - Diana - Thu, 24 Aug 2006, 20:56

Hi Caroline, I think Martina is right. We can’t do so many things in one day And also, how much does it cost to do a scenic flight? Perhaps you should find out because we only have a small budget. Diana

Re: Day Three - Caroline - Thu, 24 Aug 2006, 23:56

I think if the weather is fine it’s ok to fly. Caroline

In Italian both the word *time* and *weather* are translated with *tempo*. Caroline did not understand that Martina was concerned about the amount of time available to do the walk and not about the weather.

The online discussion continued the next day with Julie, a second year student, suggesting that the group met the following week before class. The other students replied and agreed on a time to meet.

Re: Day Three - Julie - Fri, 25 Aug 2006, 13:56

Let’s talk about this before class next week. What about meeting at 3.30 in the lab? Julie

Re: Day Three - Martina -Fri, 24 Aug 2006, 15:31

It’s fine with me. Martina

Re: Day Three - Caroline - Fri, 25 Aug 2006, 17:15

Ok. Caroline

Re: Day Three - Diana - Sat, 26 Aug 2006, 9:54

Fine, Caroline, bring your work and we’ll have another look. Diana

Both the dialogue that took place in class and the online discussion that immediately followed are revealing of the communication difficulties among some of the students. The more proficient students communicated fluently in the target language whereas Caroline, whose proficiency level was considerably lower, did not always understand
their comments and questions and was often not able to provide an appropriate reply to them.

**Strategies to overcome communication difficulties**

In the week that followed the class and online discussions, four of the five students in the group (one student was absent for two weeks) met for about two hours outside of class time. Martina described how the group was able to solve the communication problems that were hindering the collaborative completion of the task:

> We decided to get together for a couple of hours and spend some time trying to communicate our ideas as clearly as possible. So we all sat down with a cup of coffee and went over the problem areas in Caroline’s itinerary. We made a list of all the points that we had to change or improve and we assigned each other small tasks to do before the end of the week. Then we did the same for all the other parts of the itinerary. We decided to write everything down both in Italian and English so that everyone could understand what we needed to do. (Interview with Martina)

The importance both of allocating a sufficient amount of time to work together and discuss issues related to the tasks, and of allowing for the communication to take place in English as well as in Italian so that everyone in the group could fully understand what was discussed and planned, was also recognised by Julie:

> It was good that we took time to go over what wasn’t working and to help each other with the language. We translated things into English when it was needed and for some of us this was really helpful. (Interview with Julie)

The process of reaching the decision to communicate in English as well as in Italian was described in one of Diana’s portfolio entries in which she reflected on the importance of ensuring that communication was flowing in all directions and of allowing for some flexibility in relation to the use of Italian and English in order to bring the project to a successful outcome for the whole group:

> I learned a few things from this experience. First, that communication goes in many directions and that it’s also up to me to make an effort to make myself clear, and I can’t just expect others to understand me if I don’t do anything to make it easier for them to do so. The other thing is that for a task like this you need to allow for some flexibility when it comes to communicating in Italian or
English. I didn’t like having to resort to English because the whole point of the task was to use our Italian and improve our speaking and writing skills, and I was very strict about this when we were communicating in the group, but then I realised that the important thing was to fix our trip even if it meant using some English to facilitate the communication. I think I was a bit rigid in my ideas and I have learned that it’s important to let go sometimes for the sake of achieving a common objective. (Portfolio entry, Diana)

The fact that the group communicated in English as well as in Italian when the requirements and content of the task needed to be clarified or made more explicit, enabled all students to participate in the discussion and to contribute meaningfully to the completion of the task.

**Problem 3: Disagreement among group members**

Two of the three students in the Victoria group had conflicting views on how to develop the task and, for the first part of the first iteration, were unable to reach an agreement about the focus of the itinerary. This was reflected in the following comment by Nicholas, the third student in the group:

…Chloe and Bianca had completely different ideas about everything that had to do with the task and for a long time they couldn’t reach an agreement on anything… (Portfolio entry, Nicholas)

In the individual interviews with the researcher, Nicholas expressed his frustration at the fact that, despite having brainstormed and discussed their ideas for several weeks, the group did not seem to be able to make a decision on how to structure the activity, as none of his group members was willing to listen to or acknowledge the other person’s point of view:

I found it extremely frustrating and annoying that they were so stubborn and rigid…we kept brainstorming our ideas and we considered pretty much every possible option for weeks and weeks but they kept going back to the own ideas over and over…nobody was even remotely interested in trying to listen or acknowledge what the other person was trying to say. (Interview with Nicholas)
Nicholas explained that the disagreement between Chloe and Bianca prevented his group from making any significant progress with the task and greatly delayed their work, adding to more frustration and stress:

…time kept ticking along and we were going nowhere…we were not making any real progress…it was very frustrating and stressful. (Interview with Nicholas)

**Strategies to overcome disagreement**

In the third week of the iteration Nicholas decided that it was up to him to find a solution to the issues that were preventing the group from moving forward with the task, and started to act as a mediator between his two group members to help them communicate and find a common ground. Nicholas’s entry in his reflective portfolio summarises his approach:

I had to mediate…there was no other way forward…I didn’t take sides, I just tried to be very careful and diplomatic so that nobody would get upset…

(Portfolio entry, Nicholas)

When asked to comment about his approach, Nicholas explained that, despite agreeing more with one of the two group members, he decided not to take sides because he did not want to bring about more conflict:

I certainly preferred Chloe’s idea of a camping trip in the wild than the night clubbing and shopping spree that Bianca had in mind…but I didn’t want to create even more conflict or tension…so I didn’t take sides but I tried to help them to see the positives in the other person’s ideas and reach some sort of compromise. (Interview with Nicholas)

Nicholas concluded by commenting that he felt that his role was not to determine who was right and who was wrong or who had planned the best itinerary, but rather to ensure that the group could come to an agreement and that everyone was able to contribute some of their ideas to the task. His strategy proved to be successful as the group members ended up reaching a compromise on their ideas and developing a final itinerary which included both one section of the adventure travel plan proposed by Chloe and one section of the city tour suggested by Bianca.
Although neither Chloe nor Bianca acknowledged the role played by Nicholas in helping them solve their disagreement, they both admitted that the end result was positive:

We finished the itinerary and we did a good job. I’m not sure how we got there, but we got there somehow…I was very happy with the result. (Interview with Bianca)

It took a while to reach a compromise but in the end things worked out…the whole itinerary turned out to be quite good. (Interview with Chloe)

Chloe added that she realised she had to be more open-minded about the ideas of others:

I realised I had to be more open-minded about the ideas of other people, even if they were very different from my own ideas and even if I thought they were not that good…it was unfair to disregard them completely without trying to see if there was something good in them. (Interview with Chloe)

This comment is significant as it reveals an important principle of collaboration which is the opportunity to observe and become more open-minded about the different perspectives and ideas of others and to appreciate the positive aspects of these ideas while negotiating differences in order to create a shared vision (John-Steiner, 2006; Laurillard, 2013; Rogoff, 1998).

Discussion

This chapter has investigated the process that students followed to collaborate on the authentic tasks and the strategies that they used to solve the problems that arose during the collaboration. The findings show that all the collaborative groups approached the tasks systematically and appeared to follow a sequence of seven collaborative phases both during the first and second iteration: brainstorming ideas, forming the groups, planning the individual itineraries, negotiating roles and responsibilities, working independently, negotiating ideas and providing assistance and feedback, and developing the final product.

The first three phases of the collaborative process were common to all of the collaborative groups. The fourth phase of the collaboration, which involved the negotiation of roles and responsibilities, was carried out using two different processes.
The majority of the collaborative groups opted for an equal distribution of the work among the group members. Three of the nine collaborative groups preferred to allocate different tasks to individual group members in accordance with their skills and abilities. The collaborative process of the final three phases did not vary significantly between individual groups.

The findings show that, although the seven collaborative phases were common to all groups, a number of differences were identified in the development of these phases during the first and the second iteration. These differences related to the shorter duration of the initial phases of the collaboration and the higher level of efficiency and focus with which students worked on them during the second iteration compared to the first, the higher level of students’ confidence about expressing their ideas and opinions and the significantly lower level of frustration experienced when dealing with disagreement within the groups while working on the second task. A final difference related to students’ increased use of the target language during the second iteration and their greater level of confidence in their linguistic abilities.

Analysis of the data also shows that the collaboration within the individual groups was not without its challenges. The findings suggest that the most significant issues encountered by the collaborative groups occurred during the first iteration. These issues, which were evident in three of the four collaborative groups, involved the unequal contribution of individual group members to the task, difficulties communicating in the target language and disagreement among students who held opposing views about the development of the task. The strategies that the groups employed collaboratively to solve these issues included re-negotiating students’ roles and responsibilities to reflect their skills and abilities, facilitating communication through discussion and mediation among group members and, in some cases, allowing for the communication to take place in English as well as in Italian to facilitate the discussion.

When asked during the focus group interviews held at the end of the first iteration to reflect and comment on their collaborative experience of completing the first tasks, students identified some key lessons and derived some general principles to be followed during the collaborative work on the second task. These included forming smaller collaborative groups and allocating sufficient time to collaborative work, identifying compatible group members and endeavouring to develop positive interpersonal relationships within the group, accepting that each group member had different skills
and abilities and could bring a unique contribution to the task, keeping an open mind about other participants’ opinions and ideas and adopting a flexible approach to the development of the task.

The findings suggest that the collaborative process was generally more successful during the second iteration, as students had the opportunity to implement the strategies and principles derived from their reflections on the issues and challenges encountered during the collaboration on the first task and were able to benefit from their prior experience. The findings also show that the three initial phases of the collaboration described earlier were completed by the collaborative groups considerably more quickly and efficiently during the collaborative work on the second task. Students displayed a higher level of confidence, a markedly lower level of frustration in dealing with disagreement and an increased use of the target language when collaborating on the second task. They were also generally able to establish a more positive rapport with the other members of their individual groups, which facilitated the collaborative process and assisted the groups to complete the task successfully.

Design principles

Table 6.5 presents a summary of the strategies for effective collaboration employed by the students and a series of design principles and recommendations to assist language teachers who may wish to facilitate the collaborative process in a similar learning environment.
Table 6.5
Strategies for effective collaboration and design principles

<table>
<thead>
<tr>
<th>Element of collaboration</th>
<th>Strategies for effective collaboration</th>
<th>Design principles</th>
</tr>
</thead>
</table>
| 1. Brainstorming ideas   | • designate a student to act as scribe and write down the ideas that emerge from the brainstorming session  
                           • communicate your ideas clearly  
                           • listen attentively and do not interrupt others  
                           • keep an open mind about other participants’ ideas and avoid evaluating and criticising them  
                           • provide advice on how to successfully brainstorm and negotiate ideas as a class  
                           • encourage all students to integrate different perspectives and points of view and share their ideas with others  
                           • help to guide the conversation if needed | |
| 2. Forming the groups    | • identify compatible group members  
                           • form small collaborative groups (3 students would be the optimal size) | • allow students to identify suitable group members but be available to offer assistance and make suggestions if students have difficulties forming viable collaborative groups  
                           • encourage students to explore multiple collaborative options before making a final decision |
| 3. Planning the individual itineraries | • organise a preliminary meeting with the collaborative group to discuss the planning and development of the individual itineraries | • emphasise the importance of the initial planning phase of the tasks and remind students that it might take time to complete it |
| 4. Negotiating roles and responsibilities | • accept that each group member has different skills and abilities and can bring a unique contribution to the tasks  
                           • negotiate roles and responsibilities to reflect different skills and abilities | • raise awareness of the fact that each group member has a different set of abilities and skills and can bring a unique contribution to the group  
                           • raise awareness of the fact that there are different ways to allocate roles and divide responsibilities within a collaborative group and encourage students to maintain a flexible approach to the negotiation of roles  
                           • provide mentoring and assist students in this process if there are difficulties |
| 5. Working independently | • start working independently as soon as possible  
                           • set a timeframe for completion and make yourself accountable for deadlines  
                           • make independent choices  
                           • communicate your ideas to the other members of your group and inform them of the progress of your work | • encourage students to set and make themselves accountable for deadlines  
                           • highlight the importance of good time management and provide mentoring if needed  
                           • encourage students to make independent choices but also to communicate their ideas to the other group members |
<table>
<thead>
<tr>
<th>Element of collaboration</th>
<th>Strategies for effective collaboration</th>
<th>Design principles</th>
</tr>
</thead>
</table>
| 6. Negotiating ideas and providing assistance and feedback | • allow sufficient time for collaborative discussion within the group  
• be open-minded about other participants’ opinions and ideas and be willing to negotiate differences and facilitate communication through discussion and mediation  
• be available to assist others  
• provide positive and constructive feedback | • encourage students to organise discussions within the collaborative groups to enable collective reflection on lessons learned and future strategies  
• encourage students to be open-minded and willing to negotiate differences and facilitate communication through discussion and mediation  
• encourage students to be proactive in assisting others with their difficulties or problems  
• encourage students to provide positive and constructive feedback to others |
| 7. Developing the final product | • recognise and make use of fellow students’ skills and abilities to develop the final product  
• aim for consistency of presentation when combining the different individual itineraries | • encourage students to make use of each other’s skills and abilities  
• highlight the importance of presenting the different individual itineraries in a consistent way |

This chapter has investigated the process that students followed to collaborate on the tasks, and the strategies that they employed collaboratively to solve the problems that threatened to prevent them from successfully completing them. The following chapter discusses the nature and extent of students’ contributions to the computer-mediated communication tools and resources provided to support interaction and collaboration in the online learning community.
CHAPTER 7

Technology

Information and Communication Technology played a crucial role in the design and implementation of the learning environment of this study. A learning management system which offered a combination of internet-based synchronous and asynchronous computer-mediated communication (CMC) tools was adopted to support collaboration and interaction within the online community of practice.

Chapter 5 described the findings of an investigation into the process that students followed to collaborate on the authentic tasks and the strategies that they employed collaboratively to solve the problems that threatened to prevent them from successfully completing them. This chapter provides an analysis and discussion on the nature and extent of students’ contributions to the CMC tools and resources provided to support interaction and collaboration in an online community of learners.

Research question 3

What was the nature and extent of students’ contributions to the Computer Mediated Communication features and resources provided to support interaction and collaboration in an online community of learners?

Framework and method of analysis

In order to answer this research question, the transcripts of the messages contributed to the online threaded discussion forums and the synchronous chat, and the students’ email messages were analysed with the use of a classification scheme. The framework for the analysis and the classification scheme were developed from the data collected during the two iterations and from the content analysis model originally developed by Henri (1992).
According to Henri, the examination of the actual content of the messages exchanged between the student participants in a computer-mediated conferencing environment is the appropriate means for evaluating whether the learning experience has made full use of the potential of the medium. Henri’s model is based on a cognitive view of learning and uses a framework of five categories to analyse the different dimensions of students’ computer-mediated interactions: participative, social, interactive, cognitive and metacognitive. The participative dimension provides quantitative information about the number of participants and the number of messages contributed by each participant during a computer conference. The other four dimensions provide information about the nature of the online interaction observed between the student participants.

The model developed by Henri was used as a starting point for analysing the content of the messages posted by the students through the online communication tools provided to them over the course of the two iterations. The qualitative approach of this model and its focus on the type of exchange that occurs between the participants make it a useful framework for the classification scheme used in this study. However, due to the different forms of asynchronous and synchronous online interaction used by the participants and to the specific requirements of the online collaborative tasks, Henri’s content analysis model was modified and adapted to reflect and accommodate the data collected.

Several researchers have employed Henri’s content analysis model and have refined it and adapted it to fit the purpose of their own investigations into nature of online discussions. In their study of interpersonal interaction in small groups in distance education programs, McDonald and Gibson (1998) have modified Henri’s approach and added an interpersonal dimension to the original categories of analysis. Similarly, in an evaluation of the effectiveness of an online discussion group, McKenzie and Murphy (2000) have slightly modified Henri’s model to include additional information in some of the initial categories of analysis. Hara, Bonk and Angeli (2000) have also employed the model to analyse the electronic discourse of a group of postgraduate students and have combined it with other theories and conceptual frameworks to assist the process of visualising CMC data through maps, graphs and conceptual hierarchies. Lockhorst, Admiraal, Pilot and Veen (2003) used the analytical framework developed by Henri to develop a method based on five perspectives which focuses on the quality of the learning strategies used by students to cooperate online.
In order to analyse the content of students’ contributions to the first and second class discussion threads, three distinct categories were developed: Introductory, Content-oriented and Social. The category Introductory is not accommodated in the Henri (1992) model but was created as an *a priori* category to classify all the introductory messages posted by the participants to each of the two class discussion threads. The category Content-oriented is not made explicit in the Henri (1992) framework but was created to classify all messages related to the content of the tasks. The category Social is based on the Henri model and was used to classify all the messages that were social in nature.

In order to analyse the content of students’ contributions to the individual group discussion threads and the synchronous chat sessions, as well as the content of their email messages, two additional categories were created: Procedural and Technical. The category Procedural is not accommodated in the Henri (1992) framework but is added in Henri and Rigault (1996) as a category defined as Organisational. This category is used to classify all messages that relate to the process of completing the task. The category Technical was added to classify the messages that discussed technical issues or difficulties related to the use of the online communication tools. These message categories are defined in Table 7.1

<table>
<thead>
<tr>
<th>Message Category</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory</td>
<td>Initial message to introduce the participants</td>
<td>&quot;My name is Nathan and I’m 23 years old. I’m studying Commerce and Italian and this is my final year at university&quot;</td>
</tr>
<tr>
<td>Content-oriented</td>
<td>A message that focuses on issues related to the content the task</td>
<td>&quot;There’s an interesting museum inside the Duomo…might be worth a visit&quot;</td>
</tr>
<tr>
<td>Procedural</td>
<td>A message that focuses on how the task should be completed and/or on the steps to follow in order to do it</td>
<td>&quot;I’ve finished the PowerPoint. Let me know what you think and if you want anything changed&quot;</td>
</tr>
</tbody>
</table>
| Social            | A message that does not relate to the content or process of the task but is social in nature | "Have a nice weekend guys!"  
"Coffee break at 11?" |
| Technical         | A message relating to technical issues and/or difficulties in using the online tools to complete the task | "There’s a technical problem of some kind. I can’t access the group forum from home" |

The process of coding and analysing the data was carried out by considering all participants’ contributions and by assigning each message to a single category. This approach was chosen because, with the exception of a small number of instances in
which participants’ contributions used more than one type of category within a single message, each message focused predominantly on one theme and generally remained within a single category. This method enabled the detection of the majority of the themes that appeared in the messages and the mapping of all the contributions made by the participants over the course of the two iterations. It was therefore deemed appropriate for analysing the data collected in this study.

**Analysis of participants’ contributions**

In analysing the participants’ online contributions, no attempt was made to reflect on the linguistic aspects of the communication such as grammatical accuracy, lexical range and spelling, or on the roles of individual participants as producers or recipients of messages.

The analysis was carried out separately for each of the communication tools provided (i.e. class discussion threads, group discussion threads, email and text chat). The researcher reviewed and coded all the online transcripts related to each of the tools, assigning each message to a specific category. The messages contributed to the first and second class discussion threads were coded according to three categories: *Introductory*, *Content-oriented* and *Social*. Colour coding was used to code the messages in each of these categories. The messages contributed to the individual group discussion threads and the asynchronous chat sessions, and all the emails exchanged between the students were coded according to four categories: *Content-oriented, Procedural, Social* and *Technical*.

After coding and assigning each message to a different category, separate tables were created to represent the participants’ contributions to each of the different communication tools. All contributions were presented in chronological order to evaluate the level of students’ engagement in the online interactions over time.

Observations about the meaning of the data were then made and the conclusions were written up in order to be included in the thesis. The comments made by the participants in the focus group and individual interviews, and the researcher’s field notes and observations in relation to the participants’ use of the CMC tools were also analysed and incorporated in the conclusions.

The process of coding the data is summarised in Table 7.2.
Table 7.2

<table>
<thead>
<tr>
<th>Stages of analysis of data: Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary organisation of data</td>
</tr>
<tr>
<td>Coding</td>
</tr>
<tr>
<td>Ordering and displaying</td>
</tr>
<tr>
<td>Observation</td>
</tr>
<tr>
<td>Conclusion drawing</td>
</tr>
<tr>
<td>Verifying</td>
</tr>
</tbody>
</table>

In order to verify coding reliability and ensure that the representation of the numerical data relating to students’ online contributions was accurate, the first two pages of the transcript of each class and group discussion forum and of each of the synchronous chat sessions, as well as a sample of the email messages exchanged by the participants, were check-coded by two of the native speaker facilitators. Check-coding is a technique recommended by Miles, Huberman and Saldaña (2013) to ensure the clarity and reliability of codes, and is carried out by having two separate researchers complete two rounds of coding. The first round of coding needs to be completed independently by each of the coders and the second round in collaboration with the researcher. According to Miles, Huberman and Saldaña (2013), a coding consistency of 90% needs to be achieved when the results of the separate rounds of coding are examined and evaluated by coders.

The coders were given a description and definition of each of the message categories described above, and an example of a message that represented an unambiguous example of the category. The coders completed the two rounds of independent and collaborative coding. The discussion that followed the second coding exercise allowed the researcher to identify potential issues or problems with the coding system and to adjust the message categories created for each of the online communication tools prior to their use and application on the data collected. Table 7.3 shows the reliability figures obtained in the first and second round of coding for each of the online tools available.
Table 7.3
Reliability of coding

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<thead>
<tr>
<th></th>
<th>Coder 1</th>
<th>Coder 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>85%</td>
<td>79%</td>
</tr>
<tr>
<td>Round 2</td>
<td>96%</td>
<td>93%</td>
</tr>
</tbody>
</table>

The results achieved in the first round of coding were 85% code reliability for the first coder and 79% for the second coder. In the second round a coding reliability of 96% and 93% was achieved for the first and the second coder respectively. As the coding consistency between the researcher and the two coders was higher than 90%, the coding process was deemed to be sufficiently reliable.

The CMC tools used in the study

Four CMC tools were used in the course and included both asynchronous and synchronous tools. The asynchronous tools were a class threaded discussion forum, an individual discussion forum and email, for each of the collaborative groups. The synchronous tool was the synchronous chat. The following section describes the participants’ use of the CMC tools provided during the collaborative work on the two tasks.

The class discussion forum

The first class discussion forum: Iteration 1

A threaded class discussion forum titled *Forum di classe 1* was created in the course website to provide a platform for communication and discussion for all members of the online community during the collaborative work on the first task. All the participating students, the four facilitators recruited to support students’ collaboration and the class teacher had access to this forum and were able to post their messages and read all the messages posted by others.

Upon examining the online transcripts of the threaded discussions, three different message categories were identified as representative of how participants used the first class discussion forum. These three categories were adapted from the content analysis model of Henri (1992) described above and were labelled *Introductory*, *Content-oriented* and *Social*. 


The following figure illustrates all the messages posted to the forum by each of the participants over the five weeks allocated to the first iteration. Each message is represented with a different colour according to the message categories described above.

**Introductory messages**

In the first week allocated to the first iteration (Week 2 of the semester) the class teacher posted an introductory message to this class forum to welcome the participating students and the facilitators to the online community and to invite all community members to post an introduction of themselves in Italian to the discussion list. This initial message and all of the subsequent messages posted by participants to the discussion forums over the course of the study were written in Italian and then translated into English by the class teacher.
Dear students and facilitators,

Welcome to the first group discussion forum for the courses ITAL252 and ITAL352! This forum has been created to provide you with a space to discuss any aspects of the first collaborative task with the rest of the class, with the facilitators and with myself. First of all, you will need to post an introductory message in Italian to the whole forum to introduce yourself to all the other community members. You will need to post your introduction this week or early next week. You will then be able to use this forum to post any comments, ideas, concerns, questions you may have regarding this project, to respond to any comments or questions posted by others and to discuss any aspects of your collaborative work on the task. This is an opportunity to use your Italian to communicate with all the other members of this online community. I hope you will enjoy this space! Mariolina (Introductory message posted by the class teacher, first class discussion forum)

Following the teacher’s message, all of the 16 participating students posted to the forum a personal introduction of themselves in Italian. The content and length of these initial messages varied, but most of them included information about the student’s age, university studies, personal interests, work and travel experiences and future travel plans. The following messages are examples of the introductions posted by the students in the first two weeks of the first iteration:

My name is Julie. I’m studying Journalism and Italian (obviously!). This is my last semester (yey!). I live near the beach and in summer I go swimming every day. In winter I like going for a walk on the beach instead. I work with children as a nanny—it’s a great job because I can play and go to the beach, etc. I love travelling, any type of dance and meeting my friends. I love Italian food, which probably has got something to do with my choice of studying Italian! Last year I went to Italy—it’s been a great experience! I hope I can go back there soon.

Julie (Introductory message posted by Julie, first class discussion forum)

My name is Diana and I’m a third year university student. I was born in Croatia, but I’ve been living in Australia for 10 years. I’m 26 year old and I live on my own, but I have a cat—his name is Ninja—he is black and very cute. Apart from studying at the University of […], I work part-time for a television broadcaster which broadcasts foreign language channels from all over the world. I’m a telephone consultant and I love my job. Two years ago I did an internship in the production section of their Italian channel, Teleitalia. It has
been a great experience because I discovered the best of Italian TV and because I worked with a lot of very talented people. My dream is to go and live in Italy, at least for a few months. This is why I’ve chosen to study this language—and when I’ll graduate I hope I can find a way to realise this dream. Cheers, Diana
(Introductory message posted by Diana, first class discussion forum)

The four facilitators also posted their own introductory messages to the forum. These messages were also written in Italian and included some information about themselves and their interests. (A detailed analysis of the native speaker facilitators’ role in supporting students in the process of completing the collaborative tasks is provided in Chapter 8). The following messages are samples of the introductions posted by the facilitators:

My name is Davide and I’ve been chosen to be one of the facilitators for this project. I’m honoured to have this role; the selection process has been really hard. There were only 4 positions available and among all the people who applied (= zero), I have been chosen!!! Some information about myself: I’m Italian, I’m older than 20 and younger than 70 years old, I love soccer and I hate mushrooms. For the moment I don’t have anything else to add, but I’m sure we’ll be in touch again soon. By for now, Davide (Introductory message posted by Davide, first class discussion forum)

I’m Simon and, like Davide, I’ve been selected to be a facilitator…I live in […] where I teach Italian at the University of […]. I’m the same age as Kylie Minogue (and we are both Gemini—that is, born in May!). I’m married and the father of two girls. My hobbies include reading (I’ve just finished reading “The Historian” by Elizabeth Kostova and I’m reading “Forever young” by Gianni Biondillo—I can recommend them, they are wonderful books), sport (yoga, swimming but not competitive), cooking, music (I also have a degree in music), internet. My favourite TV programs are Lost, Alias (Jennifer Garner is a myth!), Wonder Woman (very 70s/80s!), Australian Idol (I know!) and Doctor Who. I’m very happy to collaborate with you and I’m looking forward to starting our “trip” together…Warm greetings to all, S (Introductory message posted by Simon, first class discussion forum)

Content-oriented messages
Following the participants’ opening contributions, seven content-oriented messages were posted to the first class forum. The majority of these messages were posted to ask
other students specific questions in relation to the itinerary and to reply to these questions. This use of the forum is illustrated in the following excerpt:

Bianca: Just wanted to know if the last stop of the trip is Melbourne or if we need to get them back to Sydney. If anyone could let me know, it would be much appreciated! Bianca

Julie: Hi Bianca, the last stop should be Melbourne. According to my notes the students will be flying back to Italy from Melbourne airport. See you next week! J. (Messages posted by Bianca and Julie, first class discussion forum)

The following excerpt provides another example of how the students used the class forum during the first iteration:

Diana: Hi, We are planning our last two days in the NT and we’re thinking of ending the trip in Alice Springs. From Alice we can fly to Melbourne airport. Just checking with the Victoria group if this would be ok and at what time we should be planning to get to Melbourne on day seven. Diana

Chloe: Hi Diana, Yes, that’s fine with us. If they can get to Melbourne in the early evening that would be perfect, we’re planning to leave for the Great Ocean Road the next day. Talk soon, Chloe (Messages posted by Diana and Chloe, first class discussion forum)

Both these exchanges, which took place in the second week of the first iteration, involved a simple request of specific information or clarification about the logistics of the itineraries and a brief and concise reply. These postings did not lead to further discussion or dialogue about the particular issues that needed clarification and there were no follow up messages from any of the participants in relation to the information provided.

In Week 5 of the first iteration, three students, each from a different group, posted a message to the forum to provide an outline of their completed individual group’s itinerary. The following message posted by Chloe illustrates this content-oriented use of the forum:

Hi everyone! Our group has decided to rent a private minibus to take the students around Victoria…The itinerary starts with adventurous activities and
ends with more relaxing activities in Melbourne. During the first three days the students will do a tour, which will take them to Apollo Bay, Port Fairy and Halls Gap, as suggested by the website www.visitvictoria.com.au. They will go back to Melbourne on day four. We have organised a number of activities in every place and every day such as surf classes, kayak with the seals and several walks in the National Parks...They will also go to Ballarat where they can look for gold and learn about the Eureka rebellion. On days 5, 6 and 7 the students will go to the aquarium, the Rialto Tower lookout and the Yarra River. They will go shopping and will spend a multicultural day in the Greek, Italian and Chinese suburbs. I won’t tell you more or you’ll be bored when we’ll give our presentation next week…Bianca, Nicholas and Chloe (Message posted by Chloe, first class discussion forum)

The two itineraries posted by Josie and Julie in the same week provided a succinct outline of their group’s trip in list form. Josie’s itinerary comprised the following:

Hi, this is our itinerary so far:

Day 1: Sydney – Darling Harbour, Circular Quay, Taronga Zoo
Day 2: Sydney – Bondi, Coogee, Bronte. Travel to the North Coast
Day 3: Nelson Bay, Port Macquarie
Day 4: South West Rocks, Coffs Harbour
Day 5: Coffs Harbour, Byron Bay
Day 6: Byron Bay. Travel to Brisbane
Josie (Message posted by Josie, first class discussion forum)

And Julie’s itinerary comprised:

Hi everyone, this is the final version of the NT itinerary:

Day 1: Darwin – Arrive at Darwin Airport, Crocodile Farm, Dinner at Mango Winery
Day 2: Private Bus to Kakadu – Bushwalking, Yellow Waters Wetland Cruise, Bush Tucker dinner – Camping
Day 3: Travel to Alice Springs
Day 4: Alice Springs – Scenic flight, BBQ lunch, Aboriginal Tour
Day 5: Private Bus to Kings Canyon – Walking and Camping
Day 6: Travel to Uluru – Camel Rides, Uluru at sunset, Observatory at night, Camping
Bay 7: Return to Alice Springs, Flight to Melbourne

Julie (Message posted by Julie, first class discussion forum)

All of these concluding messages consisted of a brief summary of the group’s itinerary. They did not include a detailed description of the different parts of the itinerary nor did they request or invite comments or observations from the other groups in relation to the proposed plans. There were no further messages from any of the participants in relation to the information provided in these postings or how to use it for the purpose of completing the task.

Social messages

Nine messages posted to the first class discussion forum involved two-way exchanges that had a purely social nature and were therefore classified under the Social category. These messages did not replicate the type of personal information provided by the participants in their initial introductory messages, nor did they relate to the content of the tasks. The following excerpt, in which two students exchanged personal information, illustrates this social use of the forum:

Lara: Hi Bianca, This is Lara. Not sure if you remember me, we did our HSC together two years ago. How come this is your first year at uni? Lara

Bianca: Hi Lara, of course I remember! I went to Italy for one year (didn’t mean to stay that long!) I got back this year and enrolled at uni. B.

Lara: Italy for 1 year! How fun! Talk to you in class! Lara (Messages posted by Lara and Bianca, first class discussion forum)

The following excerpt provides another example of a social use of the class forum:

Marie: I can’t go back to France until I’ve learned how to surf!!! Just waiting for the nice whether!! In the meantime I’m looking for a sport called capoeira…anyone knows it? M.

Chloe: Hi Marie, I found a poster at uni with an invitation to learn and practice capoeira…here at the uni gym! I gave it to Midori yesterday…sounds like fun! See you on Wednesday. Chloe

Marie: Thank you so much! I’ll check it out!! M. (Messages posted by Marie and Chloe, first class discussion forum)
A social use of the forum is also exemplified in the following good luck message posted by Elise on the day preceding the oral presentation in which she apologises for not contributing to the forum and asks the other students to please not ask difficult questions during the presentation:

Sorry I didn’t get to post to this forum. Just wanted to wish everyone good luck for the presentations and please don’t ask difficult questions on Wednesday!

Thank you ☺ (Message posted by Elise, first class discussion forum)

The presence of these social-oriented messages indicates that there was a social dimension to the forum and that some of the participants took advantage of the opportunity to post messages of a personal nature to the whole online community.

Figure 7.2 shows the proportion of message categories identified for the first class discussion forum: Introductory, Content-oriented and Social.

![Figure 7.2. Proportion of categories: first class discussion forum](image)

As can be seen from this figure, more than half of the messages posted to this first class forum were introductory messages. Less than one quarter of the total number of messages was classified under the Content-oriented category and about one quarter fell into the Social category.

**The second class discussion forum: Iteration 2**

In the first week of the second iteration, the class teacher created another class discussion forum titled *Forum di classe 2*, to be used as a platform for discussion by all community participants while collaborating on the second task.
All the messages posted to this forum were classified according to the message categories described for the first class forum: *Introductory, Content-oriented* and *Social*.

The following figure illustrates all the messages posted to the forum by each of the participants over the five weeks allocated to the second iteration. As with the first task, each message is identified with a different colour according to the message categories described above.

Introductory messages

In the first week allocated to the second iteration, the teacher posted a brief introductory message to the forum to present the second collaborative task and welcome the new facilitators selected to support students’ collaboration to the online community. This message was similar to the introductory message posted by the teacher at the beginning of the first iteration:
Dear students and facilitators,

Welcome to the second group discussion forum! You can use this forum to post your comments and discuss any aspects of the second collaborative task with all the other members of the online community. As for the first task, you will need to post an introductory message to the whole forum to introduce yourself to all the other participants (we have three new facilitators for this task and this is an opportunity for them to get to know everyone in the class). Please post your introduction (in Italian) by the end of the week. Enjoy this space! Mariolina

(Introductory message posted by the class teacher, second class discussion forum)

Following this message, 13 of the 15 participating students (one student had withdrawn from the subject in Week 7 of the semester) and the five facilitators recruited to assist students with the second task posted their own introductory message to the forum in the first week of the second iteration. The messages posted by the students were all written in Italian and included some information about themselves and about the reasons for their interest in developing a particular itinerary. The following messages are examples of the introductions posted by the students:

Hi everyone! My name is Marie, I’m 21 years old and I’m a French student. I’m doing an exchange program for six months. I love Australia!!!!

I’m in my fourth year of applied language studies, that is, English and Italian, applied to economy, law and management. I really like this course, particularly because it gives me the opportunity to study abroad, which is fantastic! Before coming to Australia I spent six months in Italy…I decided to go to Sicily because I didn’t know the south of Italy (in fact my father is Italian, but he comes from a totally different area: Friuli!) so I went to Catania, and I spent quite a bit of time travelling around Sicily…fabulous! This is why we decided to focus on Sicily for our group project. I have a lot of photos that I took when I was there and a lot of great videos…I hope we’ll motivate everyone to discover Sicily! Marie (Introductory message posted by Marie, second class discussion forum)

Hi, my name is Lara. I’m 19 years old and I’ve been studying Italian since I was 12. I’ve never been to Italy but I love the idea of travelling there! When I finish my degree I’m planning to go to Europe and visit places like Austria, Malta and Latvia (where my family comes from) and of course also Italy! For this project, I’m in the Toscana group with Elise and Nicholas. I have a lot of
ideas for this trip: I would like to include a cooking class and perhaps a ceramic class and also some other activities that focus on art and history. I would also like to organise to go a classical music concert because I love music and the idea of going to the opera in Italy is really exciting. I hope our itinerary will be full of interesting activities for everyone. Lara (Introductory message posted by Lara, second class discussion forum)

The facilitators’ introductory messages were also written in Italian and included some information about themselves as well as some preliminary information about the geographical areas to be explored during the course of the task:

Hi everyone! My name is Anna and I will be your facilitator in the forum Campania. To start getting to know each other, here is some information about me. I was born in Naples, in the Campania region, and I live in a new residential area in hills of the city. I’m an English teacher in a high school located in the city centre of the city.

The Campania region has a lot to offer to tourists. Naples, as well as having wonderful views, also has very important museums (for example the Museo Archeologico Nazionale and the Museo Capodimonte), four castles (Castel dell’Ovo, Castel Nuovo, Castel Sant’Elmo and Castel Capuano) and two palaces. Half an hour from Naples there is the famous Reggia di Caserta, with its beautiful gardens and fountains. Let’s not forget islands like Capri and Ischia, the Amalfi and Sorrento coasts and Pompei and Ercolano. To get some initial ideas have a look at the following websites…

There is an integrated ticket called ARTECARD (www.campaniaartecard.it) that you can purchase to access all the regional public transport, museums and archaeological sites. It might be worth considering it as it can be really good value for tourists.

Well, now that I have given you some ideas I’ll wait for you to get started. I’ll be available to help in any way I can. Regards, Anna (Introductory message posted by Anna, second class discussion forum)

Hi guys, I’m Chris and I just got back from a two month trip to Australia. I’m now in Italy again. I live in Belluno, the northern province of the Veneto region. Veneto is one of the richest regions in Italy—it has a thriving economy and stunning landscapes. I’m a high school teacher and I’ll be very happy to offer my support to anyone who needs it. Chris (Introductory message posted by Chris, second class discussion forum)
In addition to the student participants and the five facilitators, two Italian university students, Chiara and Sandra, had been invited to join the online community and contribute their ideas to the class forum during this second iteration. Both of these external members posted an initial introduction of themselves in Italian:

Hi everyone! My name is Chiara, I’m an Italian student and I will help you (at least I hope so) with this project. I joined the group Lombardia–Veneto because these are the regions that I know better. I’m 18 years old and I live in Brescia, a town located 100km from Milano and 150km from Venezia. A strategic position! There are three lakes near Brescia: Garda, Iseo and Idro, which definitely deserve a visit, and there are also some great mountains for hiking (in summer) and skiing (in winter). I hope you’ll enjoy this trip. Chiara (Introductory message posted by Chiara, second class discussion forum)

Hi everyone! I’m really happy to participate in this project, because in this way I won’t risk forgetting my own language!!!! Well, I’ll introduce myself. My name is Sandra and I’m Italian. I come from Sardinia, a beautiful island in the centre of the Mediterranean Sea…if you have a look in Google Earth you can see where it is and just admire the colour of the water! I’m studying international relations in Bologna (if you need any information about studying and living in Bologna feel free to ask me) and for this year I live here!!!! I think that’s all for now but we’ll talk again soon. Sandra (Introductory message posted by Sandra, second class discussion forum)

Many of the introductory messages posted to the second forum appear to have a task focus that was not present in the messages posted at the beginning of the first iteration. In these messages, the participants, as well as contributing personal information similar to that presented to the first class forum, also included information or comments that related, in different ways, to the content of the task to be developed during the second iteration.

**Content-oriented messages**

Following the participants’ opening messages, 23 *content-oriented* messages were posted to the second class forum. The majority of these messages were posted to ask other participants specific questions related to practical details of the itineraries and to reply to these questions by providing specific information such as dates and times of
arrival or departure from a particular destination of their itinerary. This use of the forum is illustrated in the following excerpt:

Diana: Hi, just a question—is it possible to know the date we arrive in Sicily? I need it to organise our transport because the train timetable varies from one day to another…Thank you

Yuki: Hi Diana, We decided to arrive in Milano on Sunday 3rd September, which means that for each group the first day of travel is a Sunday. Is that ok with you?

Diana: That’s perfect! Thank you so much!!! (Messages posted by Diana and Yuki, second class discussion forum)

The following excerpt provides another example of a similar use of the forum:

Bianca: Hi, I’m from the Lazio–Umbria group. At what time are we supposed to get to Naples on Sunday the 23rd? I checked the train timetable and it takes about one hour to get to Naples from Formia (near Gaeta).

Josie: Hi Bianca, if you can get to Naples at about 10am it would be good. We’ll spend the rest of the day in the city and there’s a lot to do!

Bianca: We can catch the 9.13am train that gets there at 10.10am. Bianca

Josie: Sounds good! See you then!!!! (Messages posted by Bianca and Josie, second class discussion forum)

These exchanges of information about the logistics of the itineraries were very similar to the type of exchanges that took place among the students during the first iteration. As with the first iteration, these postings involved only a simple request of specific information and a brief reply and did not lead to further discussion or dialogue about any of the information provided or to the type of sustained dialogue required for students to engage in a deeper level of discussion with others.

In Week 3 of the second iteration, one of the participating students posted to the class forum an outline of the full itinerary of the trip as planned by the students during one of the face-to-face sessions organised in the first two weeks of the second iteration. In the following message Nicholas summarised, on behalf of the whole class, the five main sections of the itinerary that each of the collaborative groups had agreed to develop:
Dear all, Here is a breakdown of our trip around Italy. Please take note of the
dates and make sure you plan your bits accordingly. We arrive in Milan on
Sunday 2nd September and we visit Milan (one day is probably enough). We’ll
do a day trip to the Lakes Como and Maggiore and we’ll come back to Milan.
Travel to Verona by train and visit the city. Travel to Venice by train and spend
one day and one night in Venice. Travel North to the Dolomites and do a hike,
if feeling energetic, alternatively just enjoy the fresh air and the views (Tre
Cime di Lavaredo). Must end this leg on the 9th of September. Travel to
Florence on 9th September. Two days in Florence, half a day in Pisa and four
days in Siena. In Siena: Italian language course and cooking classes. From
Siena we’ll do afternoon trips to S. Gimignano, Montepulciano and the Chianti
area. This will be a more relaxing leg of the trip, with a focus on language and
culture. Travel from Siena to Gualdo Tadino by train on Sunday 16th
September. Festa Medievale in Gualdo Tadino. Travel to Perugia (one day in
Perugia to visit the city). The next day we’ll travel from Perugia to Assisi and
then to Orvieto. Travel to Rome. Two days in Rome and then travel to Sabaudia
(cooking classes). Gaeta and Formia. This week is super packed—but Bianca
has everything under control...Travel to Naples—Sunday 23rd September—
Visit to Napoli, Reggia di Caserta, Capri, Sorrento and Positano. Travel to
Amalfi. Catch a train to Messina on Sunday the 30th. This will be a more
relaxing week, with time for sunbaking and shopping...We’ll spend our last
week in Sicily and then we’ll travel back to Australia on the 7th of October.

(Message posted by Nicholas, second class discussion forum)

Following this preliminary itinerary drafted by Nicholas, none of the participants posted
further comments or follow up messages about any of the information provided. As the
outline itinerary clearly stated the dates of arrival and departure from the different
destinations, there was no need for students to engage in the type of service
communication that they had carried out until that moment to request information or
clarification about the logistics of the trip. This message served as a reference point for
all participants because it provided exactly the information about the other groups’
plans that students needed for their own section of the trip.

Unlike the first iteration, none of the students posted their group’s completed itineraries
to this class forum. Although the information provided by Nicholas about the different
sections of the trip was not comprehensive, it was sufficiently detailed so that the
students from the individual groups did not feel it necessary to duplicate the same information by posting their own individual itinerary to the forum.

**Social messages**

Only four social messages were posted to the second class discussion forum. One of these messages was posted by Bianca as a comment to one of the facilitators’ social-oriented messages:

Hi Simon, it’s Bianca, from the first task, the Victoria trip. I’m in the Lazio-Umbria group now with Chloe and Caroline. I know you’ve been assigned to Toscana this time, but I just wanted to say hi and thank you so much for your help with the other project! It was great! Bye (Message posted by Bianca, second class discussion forum)

This message attracted Simon’s reply:

Hi Bianca, You are very welcome! Good luck with this second project, I’m looking forward to seeing your itinerary for this wonderful part of Italy! Simon (Message posted by Simon, second class discussion forum)

Another social message was posted by Lara and was directed to all students in the class:

Hi everyone, this is Lara from the group “Cheese-and-Wine-a-Go-Go-Land” (I think the name is “fab” but we opted for a more traditional name instead—Toscana). I’m writing to remind everyone about the concert tonight at the Unibar. It’s going to be fun! Hope to see you all there! Lara (Message posted by Lara, second class discussion forum)

Interestingly, the only two students who contributed social messages to this second forum had also engaged in an exchange of personal information in the first class thread, a clear indication that only a small minority of students used the class discussion threads to contribute messages of a personal nature.

Figure 7.4 shows the proportion of message categories identified for the second class discussion forum: *Introductory*, *Content-oriented* and *Social*.
As can be seen from this figure, less than half of the total number of messages posted to the second class discussion forum was classified under the *Introductory* category, a slightly lower proportion compared to the first class forum. The proportion of *Content-oriented* messages contributed to this forum was slightly higher than the proportion of introductory messages and considerably higher than the percentage of content-related messages posted to the first forum. The students made very limited use of the second class discussion forum to exchange personal, non-content related messages. These messages only accounted for a very low proportion of the total number of messages contributed.

**Discussion of class forums**

The first and the second class discussion forums were used by the participants to introduce themselves to the other community members, discuss issues related to the content of the tasks and to post social messages. The content analysis of the participants’ contributions to these two forums shows that there was a clear development in the way students used the discussion threads over the course of the two iterations. While the number and content of the introductory messages posted to the two threads remained almost the same during the first and the second iteration (21 versus 20 messages respectively), some of the preliminary messages posted to the second forum also included information that related specifically to the content of the task. The fact that, in these initial messages, students wrote about their prior travel experiences in Italy and about their interest in developing a particular itinerary for a certain area seems to indicate that, having already introduced themselves to the other participants in the first class forum and having familiarised themselves with the requirements and timeframe of
the project, the students were eager to direct their attention to the new task from the beginning, and to make the most of the time allocated to complete the new itinerary.

From an analysis of students’ comments in the individual interviews carried out at the conclusion of the project, it also appears that there was generally a greater interest in this second task compared to the first, and that many of the students were able immediately to relate the task to their prior travel experiences and future plans.

Another interesting finding was that the proportion of content-related messages posted to the class forum increased substantially from the first to the second iteration. The relatively lower presence of these messages during the first iteration seems to indicate that the students were, in this first phase of the project, reluctant to present their ideas and post their comments related to the task to a large group of participants that included all the other students in the class and all the native speaker facilitators. The fact that the participants made greater use of the second class forum to discuss content-related issues indicates that, as time progressed, they felt more confident about communicating their ideas about the task to the whole online community. These findings were confirmed by some of the comments made by the students during the individual interviews, in which they admitted that their level of confidence in their ideas and in their ability to present them in writing in the target language increased dramatically over the course of the semester. Students also pointed out that, as time progressed, they came to appreciate the value and usefulness of being able to communicate and collaborate with the rest of the online community through a dedicated discussion forum.

The proportion of social messages posted to the class forum decreased substantially over the course of the two iterations, an indication that, as time progressed and the students got to know the other participants outside of the online context, they increasingly used the allocated class time and the group face-to-face sessions as opportunities for social interaction and came to rely less on the discussion threads to post messages of a social nature to the rest of the class.

The group discussion forums

The first group discussion forums: Iteration 1

A group discussion forum was created in the first week of the first iteration for each of the four collaborative groups formed by the students. The purpose of these discussion threads was to support students’ interaction with the other members of their individual
groups (i.e. the other students, their designated facilitator and other native speaker participants) and with the class teacher, by providing a space for online communication and discussion during the collaborative work on the first task. Each forum was given the name of the individual group’s chosen section of the itinerary: New South Wales Group Forum, Queensland Group Forum, Northern Territory Group Forum and Victoria Group Forum.

Access to each group forum was not restricted to the individual group’s members but was extended to all members of the online community. All community participants were able to read all messages posted to each forum and could contribute their own postings to the other groups’ discussion threads.

Upon examining the online transcripts, four different message categories were identified as representative of how participants used their individual group discussion forum. These categories were labelled Content-oriented, Procedural, Social and Technical.

There were great variations in how the different groups used their individual group forum during the course of the first iteration. The following section discusses the participants’ contributions to each forum according to the classification scheme described above. Each message is identified with a different colour to reflect the distinct message categories.
Group forum 1: New South Wales group discussion forum

The New South Wales group comprised four students: Lara, Elise, Josie and Tessa. The facilitator assigned to this group was Sabrina. The following figure illustrates the group members’ contributions to the New South Wales group discussion forum over the five weeks allocated to the first iteration.

![Figure 7.5. Messages posted to the New South Wales group discussion forum](image)

As can be seen from Figure 7.5, the New South Wales group discussion forum was used extensively by all members of the group over the duration of the first task. There were a total of 75 messages posted to this forum. Of these messages, 30 dealt specifically with the content of the task, 31 related to the process of the task, eight were of a social nature and three related to technical issues or difficulties in using the online tools provided in the course website. Of the remainder, two messages were repeat messages and one was an empty message. Table 7.4 provides a breakdown of the messages posted to the forum and includes some examples from the discussion threads.
Table 7.4
Messages posted to the New South Wales group discussion forum

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No. of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>On task – content focus</td>
<td>“What are the best things to do in Syd? For someone who has never been here I’d say going to the Opera House and then catch a ferry to Manly or to the zoo (I love the zoo!). Then of course going to Bondi (surf lessons anyone?)” (Tessa)</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>“How about going to the Blue Mountains for a day or two? There’s a nice hostel called Central Blue Mts Backpackers. It might be nice to stay there for one night. What do you guys think?” (Elise)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Let’s plan a few stops along the way to prevent long hours of boredom on the coach. Just imagine spending an entire day on a bus! How dreadful!” (Lara)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Nelson Bay would be a nice stop over and then Coffs Harbour if there’s enough time” (Elise)</td>
<td></td>
</tr>
<tr>
<td>On task – process focus</td>
<td>“Oh my godfather. Everyone has done a different bloody tense! We need to write it all in the same tense! Let’s meet tomorrow at 12pm? Just so we can go over it and figure out how to fix it” (Lara)</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>“Nearly finished fixing it up. Just adding a few more details” (Josie)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Ok guys, I’ve finished the PowerPoint and sent it to your emails. Please let me know what you think and if you need anything changed” (Elise)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Any questions on this section? Let me know before tomorrow” (Tessa)</td>
<td></td>
</tr>
<tr>
<td>Off task – social</td>
<td>“Just wanted to say hi to everyone and welcome Sabrina to our group” (Elise)</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>“This is all quite stressful. Deary me” (Lara)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Hi girls! Thanks for your comments! I think we’re doing a great job!” (Tessa)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Have a good weekend girls. =)” (Tessa)</td>
<td></td>
</tr>
<tr>
<td>Off task – technical</td>
<td>“The attachment won’t open, it says it can’t find the file” (Tessa)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>“Technology isn’t going my way 2day! I can’t open the file! Any way of fixing this prob?” (Tessa)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Must be your computer. I can open it on all my roommates’ computers and on my work computer…” (Lara)</td>
<td></td>
</tr>
</tbody>
</table>

This forum was used mainly to post messages that dealt with the content and process of the task. The content-oriented messages were posted by the participants to contribute ideas, to post different sections of the itinerary to the other group members and to provide them with comments and feedback about various aspects and details of the task. The process-oriented messages were posted by the students to organise face-to-face meetings outside of regular class time and to plan the details of the final product and the delivery of their presentation to the rest of the class.

Of the eight messages that had a social nature, four were posted in the first week of the iteration and involved questions or comments about some of the personal information presented by the students in class or in the first class discussion forum. The remaining
four messages were posted in the final weeks of the iteration and consisted of comments related to the students’ feelings of satisfaction or frustration about their work on the task and expressions of verbal support or encouragement to the other members of the group.

Only three messages involved comments about technical issues or difficulties related to using the online tools provided. Two of these messages were posted by a student who experienced some difficulties with opening an attachment and asked for some assistance. This student’s messages did not attract any replies by the other group members except for Lara’s comment, which hinted that the problem must have been with the student’s own computer. There were no follow-up messages about these technical issues, which indicates that the student had somehow managed to solve the problems. Figure 7.6 shows the proportion of message categories identified for the New South Wales group discussion forum: Content-oriented, Procedural, Technical and Social.

![Figure 7.6. Proportion of categories: New South Wales group discussion forum](image)

The New South Wales group contributed an almost equal amount of content and process-related messages to their individual group forum. These messages accounted for the great majority of the total number of contributions, and reflected both the strong task focus of the group’s interaction and the argumentative nature of the collaboration. Although the process-oriented messages posted to the forum did not deal directly with issues related to the negotiation of an equitable distribution of the work within the group, their frequency and their often repetitive content is an indication that the students posted many of these messages to make themselves visible in the forum and to prove to their other group members that they were participating actively in the online discussion. Social messages accounted for only a moderate proportion of the total number of postings and messages about technical issues were kept to a minimum.
Group forum 2: Queensland group discussion forum

The Queensland group comprised four students: Nathan, Dylan, Yuki and Midori. The facilitator assigned to this group was Carla. The following figure illustrates the group members’ contributions to the Queensland group discussion forum during the first iteration.

There were a total of 36 messages posted to this forum. Of these messages, 21 dealt specifically with the content of the task, five related to the process of the task, nine were of a social nature and one message related to a technical difficulty in accessing the group discussion forum. Table 7.5 provides a breakdown of the messages and includes some examples from the discussion threads.
### Table 7.5
**Messages posted to the Queensland group discussion forum**

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On task – content focus</strong></td>
<td>“We’ve finally made some decisions about our itinerary. We’ll pick up from where the NSW group is finishing (Byron Bay) and drive to Brisbane. Please check the itinerary that follows and let me know if there’s anything else we could add. As you can see there are a lot of fun activities (for example surfing, swimming with the dolphins, hot air balloon flights), but also some time to relax on the QLD beaches…” (Yuki)</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>“I’d skip the relaxing on the beach part because they can do it anywhere (no need to come all the way to Australia for this – very bad for the skin) and organise some scuba diving or snorkelling on the Great Barrier Reef instead. The Daintree Rainforest is also worth a visit if there’s enough time” (Nathan)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Camping in the Daintree forest sounds like fun, just add it to the plan and take something else out if we’re running out of time” (Dylan)</td>
<td></td>
</tr>
<tr>
<td><strong>On task – process focus</strong></td>
<td>“I’ve almost finished the flyer/pamphlet thing I was talking about the other day… but just double checking on what Nathan has put into the website so they don’t differ too much” (Dylan)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>“The website is still under construction. Don’t panic guys! It will be ready on Wednesday morning! Dylan, you can send me the info and I’ll add it to what I have” (Nathan)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Let’s meet on Wednesday to check the grammar and fix all the mistakes. Dylan you must come and help or we’ll all be in real trouble! How about 11 am in the library? I’ll bring my laptop” (Yuki)</td>
<td></td>
</tr>
<tr>
<td><strong>Off task – social</strong></td>
<td>“Just wanted to say sorry for not writing. I have so many deadlines right now. I don’t even have time for sleeping! I’ll write again after I hand in this essay on Friday” (Midori)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>“Hi guys! Here I am! Apologies for not writing earlier. I’ve been busy with other assignments and stuff… now I’m ready to work on this one” (Dylan)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Come and meet my Italian friend Giorgio at Unibar tomorrow arvo, good opportunity to practise our Italian…” (Nathan)</td>
<td></td>
</tr>
<tr>
<td><strong>Off task – technical</strong></td>
<td>“Sorry this is late. There’s a technical problem of some kind. I can’t access the group forum from home. I’m writing from the library now. Nathan can you drop by and have a look later?” (Yuki)</td>
<td>1</td>
</tr>
</tbody>
</table>

This forum was used mainly to post messages that dealt with the content of the task. The students posted these content-oriented messages to present their ideas and their itineraries to the other members of the group and to comment on the other participants’ plans and itineraries. Students contributed a small number of process-oriented messages, which involved an update or discussion about the development of the final product (i.e. website or flyer) or a request to meet the other group members outside of class time to correct the written form of the presentation.

Of the nine messages that had a social nature, three were introductory messages posted by the students and the group’s facilitator, three were messages posted by some of the students to apologise about not contributing to the forum, and one was a message posted
by Nathan to invite his group members to meet an Italian friend who was visiting the university. The remaining two messages were posted by the group’s facilitator and by the class teacher, to provide encouragement to the students.

Only one message involved a comment about a technical problem and explicitly requested the assistance of Nathan, one of the more technology-proficient students in the group. This message did not attract Nathan’s direct reply or any further comment by any of the other group members.

As can be seen from Table 7.5, there were great variations in the way students used this group discussion forum and in the total number of contributions made by the different participants over the five weeks allocated to the task. Yuki and Nathan contributed the great majority of the postings (18) and used the forum to discuss and refine their itineraries. Dylan contributed a total of five messages during the last two weeks of the iteration in which he presented relevant content and edited his group members’ written expression. Midori only posted three short contributions, which included a brief content-oriented message and two social messages.

Of all the messages contributed to the forum, Yuki and Nathan’s postings were the ones that drove the development of the task. Dylan’s postings, despite being relatively limited in frequency, also proved to be valuable to the development of the final product as they involved correcting the written form of the presentation. Midori’s contributions had a considerably more limited scope and did not impact greatly on the overall development of the task. Figure 7.8 shows the proportion of message categories identified for the Queensland group discussion forum.
The Queensland group contributed a substantial proportion of content-related messages to their group forum. These messages accounted for more than half of the total number of contributions and reflect the content-oriented focus of the online interaction. Process-oriented messages accounted only for a moderate proportion of the total number of messages, an indication that students in this group preferred to plan the procedural details of the task in face-to-face mode rather than online. Social-oriented messages accounted for one quarter of the total number of messages, a proportion higher than in any other groups, whilst technical-related messages accounted only for a minimal percentage.

**Group forum 3: Northern Territory group discussion forum**

The Northern Territory group comprised five students: Diana, Marie, Martina, Julie and Caroline. The facilitator assigned to this group was Davide. The following figure illustrates the group members’ contributions to the Northern Territory group discussion forum during the first iteration.

<table>
<thead>
<tr>
<th></th>
<th>week 1</th>
<th>week 2</th>
<th>week 3</th>
<th>week 4</th>
<th>week 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diana</td>
<td>● ● ● ●</td>
<td>● ●</td>
<td>●</td>
<td>●</td>
<td>● ●</td>
</tr>
<tr>
<td>Martina</td>
<td>● ●</td>
<td>● ● ● ●</td>
<td>● ● ●</td>
<td>● ●</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>Marie</td>
<td>●</td>
<td>●</td>
<td>● ●</td>
<td>●</td>
<td>● ●</td>
</tr>
<tr>
<td>Julie</td>
<td>●</td>
<td>● ● ● ●</td>
<td>● ●</td>
<td>●</td>
<td>● ● ●</td>
</tr>
<tr>
<td>Caroline</td>
<td>●</td>
<td>● ●</td>
<td>● ● ● ●</td>
<td>● ●</td>
<td>● ●</td>
</tr>
<tr>
<td>Davide</td>
<td>●</td>
<td>● ●</td>
<td>● ●</td>
<td>● ●</td>
<td>● ●</td>
</tr>
<tr>
<td>Teacher</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

*Figure 7.9. Messages posted to the Northern Territory group discussion forum*

There were a total of 53 messages posted to this discussion forum. Of these messages, 26 related to the content of the task, 15 dealt with the process of the task and eight were of a social nature. Two messages were posted specifically to attach Word documents and images and did not include any text, and two were repeat messages. None of the messages related specifically to technical issues or difficulties or involved requests for
assistance in using the online tools provided. Table 7.6 provides a breakdown of the messages with examples from the discussion threads.

Table 7.6
*Messages posted to the Northern Territory group discussion forum*

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No of messages</th>
</tr>
</thead>
</table>
| On task – content        | “Hi girls! In Darwin we could visit the Crocodile Farm (only $10 per person) and then have a nice dinner at the Mango Winery where we can taste the famous mango wine. What do you think?” (Diana)  
“I’d like to include some information about the first Australians (Aborigines) and explain that the word ‘aboriginal’ means ‘native’” (Caroline).  
“For the Yellow Water Cruise and the scenic flight we need more time. I don’t think the time you have allocated is enough” (Martina)                                                                                                                                                                                                                                    | 26             |
| On task – process focus  | “We’re thinking of doing a PowerPoint presentation. It would be good to include a lot of photos and perhaps a nice video” (Marie)  
“Caroline and I have some photos and maps for the PowerPoint. Please check them out!” (Julie)  
“Can we meet next week to discuss what we’ve done so far? Are you free on Monday or Tuesday?” (Martina)                                                                                                                                                                                                                           | 15             |
| Off task – social        | “Hi everyone! I won’t be here for the next two weeks. I’m flying to Brisbane tomorrow to meet my parents and will be travelling around Queensland with them! I’ll see you when I get back” (Marie)  
“Hi girls! Sorry I wasn’t in class today… I’m sick with a virus. Hope to catch up with you next week” (Martina)  
“I’m really sorry for disappearing from the forum… My trip to Queensland was magnificent! We loved the warm weather! Hope to travel some more after the exams. See you in class!” (Marie)  
“Hi guys! I think our trip is coming along nicely! I’d like to thank Davide for his patience and for his helpful comments and suggestions. Much appreciated!” (Diana)                                                      | 8              |

This forum was used mainly to post messages that related to the content of the task. In these content-related messages, the students presented their ideas and posted their sections of the itinerary to the other members of the group. They also provided the others with comments and feedback on their work and on the various sections of the itineraries that had been developed.

Of the 15 process-oriented messages posted to this forum, 13 involved the planning of face-to-face meetings with the other group members and two messages related to the development of the PowerPoint slides for the final presentation.

Of the eight messages that had a social nature, five were posted by the students to inform the other group members of their absences from class, or to thank the facilitator and the teacher for their assistance during their work on the task. The remaining three
messages were posted by the teacher and the group’s facilitator to welcome students to the forum (2 messages), and wish them good luck for the final presentation (1 message).

As can be seen from Table 7.6, with the exception of Marie, who was absent from class for about two weeks, all of the other students in the group used the forum regularly over the duration of the iteration. Of all the messages contributed to the forum, Diana, Martina and Julie’s postings were the ones that had the greatest impact on the development of the task. Caroline’s postings were slightly more limited in scope, due to the student’s lower level of linguistic proficiency, and often involved a brief outline of a specific section of the itinerary or a reply to the other students’ questions or requests for clarification in relation to the development of some aspects of the task. Marie’s contributions, which consisted of one content-oriented message posted in the first week of the iteration, one process-focused message posted in the final week of the iteration and two social-oriented messages written to update the other group members about her own travel plans during the course of the semester, did not have any impact on the overall development of the task. Figure 7.10 shows the proportion of message categories identified for the Northern Territory group discussion forum.

![Figure 7.10. Proportion of categories: Northern Territory group discussion forum](image)

The Northern Territory group contributed a substantial proportion of content-related messages to their group forum. These messages accounted for more than half of the total number of messages contributed. Process-oriented messages accounted for about one third of the total number of messages, whereas social-oriented messages accounted for a lower proportion of the total number of postings. There were no technical-related messages posted in this forum.
Group forum 4: Victoria group discussion forum

The Victoria group comprised three students: Chloe, Bianca and Nicholas. The facilitator assigned to this group was Simon. The following figure illustrates all the contributions to the Victoria group discussion forum during the first iteration.

![Figure 7.11. Messages posted to the Victoria group discussion forum](image)

There were a total of 32 messages posted to this forum. Of these messages, 14 related to the content of the task, 12 dealt with the process of the task and six were of a social nature. None of the messages related specifically to technical issues or difficulties encountered while working on the task or involved requests of assistance with the use of the online tools. Table 7.7 provides a breakdown of the messages with examples from the discussion threads.
Table 7.7
Messages posted to the Victoria group discussion forum

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No of messages</th>
</tr>
</thead>
</table>
| On task – content focus | “Hi guys, I found a website www.bigstickadventures.com. There are a lot of ideas that we could incorporate in our trip to the coast… Let me know what you think” (Chloe)  
“To go to the Great Ocean road they will need a car. Unfortunately to rent a car the driver has to be at least 21. How old are the students?” (Nicholas)  
“I’d like to find some places with live music, bars or clubs for the two nights in Melbourne. Any suggestions? They should be easy to get to from the hostel” (Bianca) | 14             |
| On task – process focus | “Hi Bianca and Nicholas… I’m not going to make it to class today but I was thinking that we should split the itinerary into 3… my suggestion is: Nicholas – Days 1-2  
Chloe - Days 3-5 (am happy to do extra days…)  
Bianca - Day 6-7” (Chloe)  
“If we aim to have the completed itinerary ready by Wednesday (12.30 in front of the library?), then we can edit etc and start to actually discuss how we are going to present it… what do you think? And then we could send it to Simon for superior advice…” (Chloe)  
“Good idea. I’ll see you on Wednesday at 12.30” (Nicholas)  
“Hi Chloe and Nicholas, When you are finished with your part can you send it to me so I can organise the maps and photos etc… thanks” (Bianca) | 12             |
| Off task – social       | “Hi Chloe and Nicholas, I’m having a coffee with Deb H. on Friday. She’s going to America for one year to do a work experience. If you are free come along to Picasso after 11am” (Bianca).  
“Hi Bianca, thanks but I’m working on Friday. Good luck to Deb!” (Chloe).  
“I’ll drop by at 11.30” (Nicholas) | 6              |

As with the other groups, this discussion forum was used mainly to post messages related to the content and process of the task. Students contributed a total 14 content-related messages. In these messages students presented their ideas, posted their sections of the itinerary to the group and asked their group’s facilitator to provide advice and feedback on their work. The participants did not use the forum to discuss issues related to the development of the task or to provide comments and feedback on the other students’ work. This type of discussion tended to take place in face-to-face mode rather than through the online communication tools provided.

Students posted a total of 12 process-oriented messages. The majority of these messages dealt with the distribution of the work among the group members and with the planning and delivery of the final oral presentation. Only two process-oriented messages involved specifically the planning of face-to-face meetings with the other group members.
Of the six messages that had a social nature, three involved organising a meeting with a former student of Italian who was about to travel to America for one year. The remaining three messages were posted by the group’s facilitator to welcome the participating students to the forum and to wish them good luck for the final presentation.

All three students in the Victoria group made regular use of the forum during the course of the iteration. Bianca and Chloe were the more active participants in the group discussions, regularly presenting and promoting their ideas and their itineraries to the other members of the group. Nicholas’s contributions, although less frequent and consistent than those of his other group members, were nevertheless equally relevant and, in some respects, even crucial to the overall development of the task. The fact that all the students in this group had a good level of linguistic proficiency in the target language allowed them to contribute their ideas effectively and relatively effortlessly to the discussion forum. Figure 7.12 shows the proportion of message categories identified for the Victoria group discussion forum.

The proportion of content-related messages posted by the Victoria group accounted for less than half the total number of messages, a percentage similar to that of the New South Wales group. Another similarity with the New South Wales group is the relatively higher proportion of process-oriented messages. As with the New South Wales group, these messages reflect some of the difficulties experienced by the students during their collaborative work on the task. Students disagreed on a number of procedural issues and posted a considerable number of messages aimed at negotiating the process of the task and at discussing the details of the final product with the other group members. The proportion of social-oriented messages was in line with the other
groups’ contributions and accounted for about one fifth of the total number of postings. As with the Northern Territory group, there were no technical-related messages posted in this forum.

The second group discussion forums: Iteration 2

A group discussion forum was created in Week 1 of the second iteration for each of the five collaborative groups formed by the students at the start of the second task. As for the first iteration, the purpose of these discussion threads was to provide an online space that could support students’ interaction and collaboration with the other members of their group, their designated facilitator and the class teacher while completing the second collaborative task. Each forum was given the name of the specific section of the itinerary chosen by the individual groups: Lombardia–Veneto Group Forum, Toscana Group Forum, Lazio–Umbria Group Forum, Campania Group Forum and Sicilia Group Forum.

As for the first iteration, all members of the online community were able to access and contribute their own postings to all of the other group discussion forums.

The four message categories identified as representative of how participants used their individual group discussion forum during the first iteration were also used to describe the participants’ use of the group forums for the second iteration. The four categories are Content-oriented, Procedural, Social and Technical and were defined in Table 7.1. The following section discusses the participants’ use of each group discussion forum during the second iteration.

Group forum 1: Lombardia–Veneto group discussion forum

The Lombardia–Veneto group comprised three students: Nathan, Dylan and Yuki. The facilitator assigned to this group was Chris. Chiara, one of the two Italian university students who volunteered to participate in the project, was also invited to take part in this forum as a guest participant. The following figure illustrates the group members’ contributions to the Lombardia–Veneto group discussion forum over the five weeks allocated to the second iteration.
There were a total of 21 messages posted to this forum over the duration of the second task. Of these messages, 17 related to the content of the task and four were social messages posted by the group’s facilitator and by the Italian student participant. None of the messages dealt specifically with the process of the task or with technical issues or difficulties related to the use of the online tools. Table 7.8 provides some examples of content-focused messages posted by the students to the discussion forum.

Table 7.8
_messages posted to the Lombardia–Veneto group discussion forum_

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>On task – content focus</td>
<td>“We’re thinking of starting our trip in Milan (on a Sunday morning) and finishing in Venice. We can have a day trip to the lakes (returning to Milan) and a visit to Verona on the way to Venice” (Nathan)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>“Hi guys, check out these links: <a href="http://www.globalgeografia.com/italy_regions/lombardy.htm">www.globalgeografia.com/italy_regions/lombardy.htm</a> <a href="http://www.globalgeografia.com/italy_regions/veneto.htm">www.globalgeografia.com/italy_regions/veneto.htm</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>There’s a lot of information about monuments and famous sites for tourists but also suggestions for alternative routes, in case we want to do something a bit different” (Dylan)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“In Milan we can visit the Duomo and then climb up to the top to have a view of the city. The climb doesn’t require a high level of fitness and we should all be able to do it!” (Yuki)</td>
<td></td>
</tr>
<tr>
<td>Off task – social</td>
<td>“We’re getting closer to the end of summer and it’s getting pretty cold up here”</td>
<td>4</td>
</tr>
</tbody>
</table>

In the 17 content-related messages posted to this forum, which accounted for over 80% of the total number of messages, the students contributed their ideas about the development of the task, posted the different sections of their itinerary as they...
developed them, and replied to the questions posted by the members of the other groups. Students did not use the group forum to discuss the process of developing the task or to post comments and feedback about the work completed by the other members of the group.

None of the participating students used the forum to contribute messages that had a process-oriented nature or that involved comments about technical issues or difficulties related to using the online tools. The four social messages posted to this forum were all written by the group’s facilitator and by the Italian student guest.

Not all members of the group contributed regularly to the discussion forum. During the five weeks allocated to the task, Nathan posted a total of six messages. The first message was posted in Week 1 and the remaining five messages in Weeks 3 and 4. Yuki posted a total of four messages, all in the first two weeks of the iteration, and Dylan contributed only one message, in the first week. Figure 7.14 shows the proportion of message categories identified for the Lombardia–Veneto group discussion forum.

![Pie chart showing the proportion of content and social messages.](image)

*Figure 7.14. Proportion of categories: Lombardia–Veneto group discussion forum*

The proportion of content-related messages posted by the Lombardia–Veneto group accounted for over 80% of the total number of messages posted to the forum, a percentage substantially higher than that of any other group during the first iteration. The proportion of social-oriented messages accounted for about one fifth of the total number of postings. There were no procedural and technical-related messages posted to this forum.

While the absence of technical-related messages is not an unexpected result, the strong prevalence of content-related messages and the complete absence of procedural messages are very significant findings. It appears that the students in this group, having
already completed the first task and having already negotiated all the significant process-related issues of the project during the first iteration, were able to direct all of their attention to developing the content of the task without having to communicate any procedural matters through the forum. These results are also an indication that students in this group preferred to discuss any process-related matters through email communication or during the face-to-face sessions.

**Group forum 2: Toscana group discussion forum**

The Toscana group comprised three students: Lara, Elise and Nicholas. The facilitator assigned to this group was Simon. The following figure illustrates the group members’ contributions to the Toscana group discussion forum during the second iteration.

There were a total of 53 messages posted to this forum. Of these messages, 23 related to the content of the task, 16 dealt with the process of the task, six were of a social nature and one related to a technical problem encountered while attaching a document. There were three empty messages and four messages with only attachments and no text. Table 7.9 provides a breakdown of the messages with examples from the discussion threads.
As with the other groups, the students’ contributions to this forum consisted mainly of content-related messages. The majority of these messages, which accounted for half of the total number of contributions, involved an outline of the different sections of the itinerary as they were developed by each of the students over the duration of the task. A small number of messages included specific comments about the ideas presented in the draft itineraries or a reply to the feedback provided by the facilitator about their development.

The majority of the 16 messages that focused on the process of completing the task dealt with the development of the PowerPoint presentation and the planning of face-to-face meetings with the other group members.

Of the six messages that had a social nature, two were posted by the students in the first week of the iteration to provide some personal information to the other group members. The remaining four messages were all posted in the final week of the iteration and
included personal comments about the students’ demanding commitments or the planning of social coffee breaks with the other group members. Only one message involved a comment about a technical difficulty experienced by one of the student participants while attaching a document to the group discussion forum.

All three students in the group made regular use of the forum during the course of the iteration and contributed an equal number of messages. Figure 7.16 shows the proportion of message categories identified for the Toscana group discussion forum.

![Figure 7.16. Proportion of categories: Toscana group discussion forum](image)

The proportion of content-related messages contributed by the Toscana group accounted for half of the total number of messages posted to the forum, a result in line with the other groups’ content-related contributions during the first iteration. Process-oriented messages accounted for over one third of the total number of messages, a percentage similar to the proportion of procedural messages posted to the Northern Territory and Victoria forums during the first iteration, and an indication of the students’ willingness to discuss procedural matters through the forum. Social-oriented messages accounted for a moderate proportion of the total number of postings and technical-related messages accounted only for a minimal percentage.
The Lazio–Umbria group comprised three students: Bianca, Chloe and Caroline. The facilitator assigned to this group was Davide. The following figure illustrates the group members’ contributions to the Lazio–Umbria group discussion forum during the second iteration.

There were a total of 35 messages posted to this forum. Of these messages, 21 dealt with the content of the task, nine with the process of the task, one was of a social nature and four were empty messages. Table 7.10 provides a breakdown of the messages with examples from the discussion threads.
Table 7.10
Messages posted to the Lazio–Umbria group discussion forum

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No of messages</th>
</tr>
</thead>
</table>
| On task – content focus | "Hi everyone, it would be fun to enrol in a short course or workshop at the University for Foreigners while we are in Perugia. Have a look at the website: http://www.unistrapg.it" (Caroline)  
I looked up some short-trip options from Perugia (such as Norcia and Assisi). Still possible to do the intensive language workshop in the morning and then do some sightseeing in the afternoon" (Bianca)  
"I don’t think three days in Umbria are enough to try and fit in language lessons in Perugia. I’m not sure it’s worth it because there’s a lot of paperwork and some sort of tax to pay” (Chloe) | 21 |
| On task – process focus | "Can we meet at 12.30 on Thursday? I’ll book a room in the library” (Bianca)  
"I can make it but will need to leave 1.15. Perhaps we can look at the Umbria section first” (Chloe)  
"I’ve finalised the Rome part of the itinerary. I haven’t seen Chloe’s final draft but I assume the days are confirmed. Let me know if there are any changes” (Caroline) | 9 |
| Off task – social | "Hi Bianca, thanks for the photos, they are beautiful!! Let’s catch up next week. When are you free?” (Josie) | 1 |

The students in this group contributed mainly content-related messages to this group discussion forum. In these messages, which accounted for two thirds of the total number of contributions to the forum, they presented their ideas about the development of the task and posted an outline of the different sections of their itinerary as they developed them. Students did not use the forum to post specific comments or feedback about the ideas presented by the other group members in their draft itineraries.

Of the nine messages that focused on the process of completing the task, six involved the planning of face-to-face meetings with the other group members. The remaining three messages involved updating the group about the development and delivery of the oral presentation.

With the exception of one personal message posted by a student from another group, none of the messages contributed to the forum had a social nature or dealt with technical issues related to the task.

As can be seen from Table 7.10, the three members of the group did not contribute equally to the discussion forum during the course of the iteration. Bianca, who took a leading role in the development of the task, posted a total of 12 messages, whereas each of the other two group members (Chloe and Caroline) contributed only four messages.
Figure 7.18 shows the proportion of message categories identified for the Lazio–Umbria group discussion forum

![Proportion of categories: Lazio–Umbria group discussion forum](image)

The proportion of content-related messages posted by the Lazio–Umbria group accounted for two thirds of the total number of messages posted to the forum, a percentage substantially higher than that of any other group during the first iteration but lower than the proportion of content-related messages posted to the Lombardia–Veneto group during the second iteration. Process-oriented messages accounted for less than one third of the total number of messages, a result in line with the other groups’ process-related contributions during the first iteration, whilst social-oriented messages accounted for a minimal proportion of the total number of postings. There were no technical-related messages posted in this forum. The most significant finding in the proportion of messages posted to this group forum is the almost complete absence of social-oriented messages. This seems to indicate that students in this group preferred to rely on their face-to-face sessions for all their social communication and interaction rather than posting their messages to the forum.

**Group forum 4: Campania group discussion forum**

The Campania group comprised three students: Julie, Josie and Tessa. The facilitator assigned to this group was Anna. The following figure illustrates the group members’ contributions to the Campania group discussion forum during the second iteration.
There were a total of 55 messages posted to this forum. Of these messages, 19 related to the content of the task, 32 dealt with the process of the task, three with technical issues and one was a repeat message. Table 7.11 provides a breakdown of the messages with examples from the discussion threads.

Table 7.11
Messages posted to the Campania group discussion forum

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>On task – content focus</td>
<td>&quot;Hi Anna, thank you so much for your post. We'll be in Campania in the fourth week of our Italian trip and we're planning of visit Naples, Reggia di Caserta, Pompei, Sorrento, Capri, Positano, Amalfi and Ravello. What do you think?&quot; (Julie)</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>&quot;I think it would be good to travel from Pompei to Mount Vesuvio with the inea Vesuviana Mobilità&quot; (Tessa).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;We can stay two nights in Napoli and do two day trips. Day 1: Reggia di Caserta; Day 2: Pompei and Vesuvio&quot; (Josie).</td>
<td></td>
</tr>
<tr>
<td>On task – process focus</td>
<td>&quot;Hi everyone, Bianca sent me some great photos of Napoli, Reggia di Caserta and Positano. We can use them in our slides. I'll send them to your email addresses now&quot; (Josie)</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>&quot;Hi Josie, I sent the new PowerPoint to your email address. Can you add your photos and send it back to me? I'll bring the final version to class tomorrow&quot; (Tessa)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;I can’t meet tomorrow because I have to work. How about Wednesday at 12.30?&quot; (Julie)</td>
<td></td>
</tr>
<tr>
<td>Off task – technical</td>
<td>&quot;Hi Josie, I tried to send the PowerPoint to your uni email address but it didn’t work. Do you have another address I can try?&quot; (Julie)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>&quot;Hi Julie, sorry, my inbox was too full! It’s all clear now. Can you try again? Thanks!&quot; (Josie)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 7.19. Messages posted to the Campania group discussion forum
Students used this group forum mostly to post messages related to the process of the task. With these messages, which accounted for the great majority of the total number of contributions to this forum, students discussed the development of the PowerPoint presentation and organised face-to-face meetings with each other.

Students also posted a total of 19 content-related messages in which they contributed their ideas about the development of the task and posted various drafts of the different sections of their itinerary.

Three messages involved comments about difficulties of posting documents and photos to the forum or to the other group members’ email addresses. None of the messages posted to this forum had a social nature.

The three members of the group contributed regular messages to their discussion forum during the course of the iteration. Josie and Tessa contributed mostly process-oriented messages, whereas Julie focused more on the content of the task. Figure 7.20 shows the proportion of message categories identified for the Campania group discussion forum.

![Figure 7.20. Proportion of categories: Campania group discussion forum](image)

The proportion of content-related messages by the Campania group to their group forum accounted for slightly over one third of the total number of messages, a proportion much lower than that of any other group during both the first and second iterations, whereas the proportion of process-related messages accounted for the great majority of the total number of messages contributed. There were no social-oriented messages posted to this forum while technical-related messages accounted for a minimal proportion of the total number of postings.
These findings indicate that the focus of students’ interaction in this forum was oriented more towards the process of completing the tasks rather than towards developing its content. The students in this group had very clear ideas about the content of the task but were uncertain about the steps to take to complete it. The complete absence of social-oriented messages appears to indicate that students in this group, like the students in the Lazio–Umbria group, preferred to rely on their face-to-face sessions for their social communication and interaction.

**Group forum 5: Sicilia group discussion forum**

The Sicilia group had three students: Diana, Marie and Martina. The facilitator assigned to this group was Linda. The following figure illustrates the group members’ contributions to the Sicilia group discussion forum during the second iteration.

![Figure 7.21. Messages posted to the Sicilia group discussion forum](image)

There were a total of 27 messages posted to this forum. Of these messages, 24 related to the content of the task and three to the process of the task. Table 7.12 provides a breakdown of the messages with examples from the discussion threads.
### Table 7.12

*Messages posted to the Sicilia group discussion forum*

<table>
<thead>
<tr>
<th>Discourse category</th>
<th>Examples</th>
<th>No of messages</th>
</tr>
</thead>
</table>
| On task – content focus    | “Our preliminary itinerary includes: Messina, Isole Lipari, Taormina, Catania, Siracusa, Agrigento, Palermo and Cefalú” (Diana)  
“...I think it would be great fun to do something like that. I’ll check with the Campania group first to see if they are already going to the Vesuvio. If they are, we might not do Mount Etna as it could be a bit boring to see two volcanos in two weeks” (Martina) | 24             |
| On task – process focus    | “I’m waiting to hear from the Lombardia–Veneto group about the flights. Hopefully we can sort this out before our meeting today” (Martina)  
“Hi girls, just reminding you that we have a meeting this afternoon at 3pm. See you then” (Martina) | 3              |

Almost all of the messages posted to this forum related to the content of the task. With these messages students contributed their ideas and comments about the development of the task, posted the different drafts of the itinerary to the other group members and updated the group’s facilitator about the progress of their work.

Two of the three messages that dealt with the process of completing the task were posted by Martina and involved an update about her communication with another group and a reminder about a group meeting. The third message was posted by the teacher and involved a request for information related to the group’s progress with the itinerary.

None of the messages had a social nature or dealt with technical issues related to the task.

As can be seen from Figure 7.21, the three members of the group did not contribute equally to the discussion forum during the course of the iteration. Diana was the most active participant and posted a total of 10 messages, all content-related. Martina contributed five messages and Marie contributed only three messages. Figure 7.22 shows the proportion of message categories identified for the Sicilia group discussion forum.
The proportion of content-related messages posted to the Sicilia group forum accounted for almost all of the total number of messages posted to the forum and was higher than that of any other groups during both the first and second iterations. The proportion of process-oriented messages was moderate, and lower than the proportion of procedural contributions posted by most of the other groups. There were no social and technical-related messages posted to this forum.

These findings indicate that the group used the forum almost exclusively to discuss issues related to the content of the task. The low proportion of process-related messages appears to indicate that the students, having already negotiated all the significant process-related issues of the first task, were very clear about how they wanted to complete the new task and did not feel the need to discuss procedural matters through the online forum. The complete absence of social-oriented messages is a further indication of the strong content focus of the group’s interaction and of the fact that the participants preferred to engage in social interaction during regular class time or during the face-to-face sessions. The absence of technical-related messages is in line with the contributions from the majority of the other groups and is an indication that there were no technical issues to be discussed in this forum.

**Discussion of individual group forums**

The individual group discussion forums were used by the participants to comment on and discuss issues related to the content and process of the task, to post social messages and to talk about technical difficulties experienced while using the online communication tools. Figure 7.23 and Figure 7.24 show the message categories identified for each of the group discussion forums in both the first and second iterations:
The content analysis of the participants’ contributions to the individual group discussion forums clearly shows that students used their group forum predominantly to post messages that related to the content of the tasks. With the exception of the Campania group, which contributed a lower proportion of content-related messages compared to the proportion of process-oriented contributions, these messages accounted on average for the majority of the total number of messages posted to each of the individual threads, and reflect the participants’ interest and strong focus on discussing and developing the content of the task during both the first and the second iterations.
Messages that focused on the process of completing the tasks were generally present in a lower proportion compared to the content-related messages. The analysis of students’ contributions, however, shows that there were significant variations in the number of these process-related messages across the different group discussion threads during the course of the two iterations. An interesting finding was that the New South Wales group, which contributed a higher number of procedural messages during the first iteration, was the group which experienced some difficulties during their collaborative work on the task. The students from this group posted a relatively higher number of messages that focused on the procedural aspects of the task and on negotiating their responsibilities compared to the other groups. During the second iteration, however, the high number of process-related messages posted to the Campania group forum was not an indication of any issue or difficulty in the collaboration, but rather a reflection of the group’s uncertainties about the steps to take in order to complete the task. Another interesting finding was the complete absence of process-oriented messages in the Lombardia–Veneto group thread. The students in this group did not post any process-related messages but posted a very high proportion of content-related messages, an indication of the fact that that they were able to direct their attention almost exclusively to the content of the task and were able to discuss their process-related matters either face-to-face or via email communication.

Social-oriented messages were present as the third most numerous message category in all nine group discussion threads. As was the case with the class discussion threads, there was a substantial decrease in the presence and proportion of social messages from the first to the second iteration, a clear indication that, as time progressed and the students got to know their group members, they relied less on the individual forums and more on face-to-face communication for their non-task-related interaction with the other students. These finding were also confirmed in the students’ individual interviews that took place at the conclusion of the second iteration, in which several students noted that, when they were working on the second task, they did not feel the need to use the group forums to post messages of a social nature as they were regularly meeting socially outside of normal class time.

Technical-related messages accounted for a minimal proportion of the total number of messages posted to the individual discussion threads, a reflection of the fact that students did not encounter too many obstacles and technical difficulties in using the online features and resources to interact and collaborate in the online community. This
finding is in line with the feedback provided by the students during the individual interviews in which they confirmed that they did not experienced technical difficulties while working on the tasks.

**Email communication**

In addition to contributing to the class discussion forum and their individual group discussion forum, some of the participants also used the asynchronous email to communicate directly with individual members of their group or with other students in the class.

Upon examining the transcripts of students’ emails, two different message categories were identified as representative of how participants used email communication while working on the two tasks: *Content-oriented* and *Procedural*. The following figure illustrates the individual groups’ use of email communication during the first iteration:

![Figure 7.25. Categories of asynchronous communication: Iteration 1](image)

Note. There were no email messages from the NSW group.

**Email communication: New South Wales group**

None of the students from the New South Wales group used email to communicate with the other members of their group or with other students in the class during their collaborative work on the first task.
Email communication: Queensland group

The four students from the Queensland group were the most active email users and exchanged a total of 16 email messages. Ten of these messages were content-oriented and involved the presentation and discussion of ideas with the other group members. The remaining six messages were process-oriented and involved the negotiation of responsibilities within the group.

Email communication: Northern Territory group

The five students from the Northern Territory group exchanged a total of 11 process-related messages. Seven of these messages dealt with the negotiation of responsibilities within the group and four involved the planning of group meetings. With the exception of Marie, who did not contribute any email messages, all the other students used email communication as an alternative to posting messages to the group forum when they needed to provide information quickly and directly to individual members of the group.

Email communication: Victoria group

The three students from the Victoria group wrote a total of 14 email messages. All students contributed a similar number of emails over the duration of the task. Nine of these messages were written to negotiate and discuss ideas related to the task and to negotiate roles and responsibilities within the group. The remaining five messages were sent by Nicholas with the aim of mediating between his other two group members and help them reach an agreement about the content of the itinerary.

The following figure illustrates the individual groups’ use of email communication during the second iteration:
Figure 7.26. Categories of asynchronous communication: Iteration 2

Note. There were no email messages from the Sicilia group.

**Email communication: Lombardia–Veneto group**

The students from the Lombardia–Veneto group exchanged a total of seven email messages. Three of these messages related to the content of the task and involved the presentation of the itinerary to the other group members. The remaining four messages related to the process of the task and involved a discussion about the format and layout of the final product. Nathan contributed five of the seven email messages. Yuki and Dylan contributed one email each.

**Email communication: Toscana group**

The students from the Toscana group wrote a total of five process-related emails. All of these emails involved the planning of group meetings and were posted in the last two weeks of the iteration. Elise and Lara contributed two emails each while Nicholas contributed one message.

**Email communication: Lazio–Umbria group**

The three students from the Lazio–Umbria group wrote a total of 15 email messages. Eleven of these messages were exchanged to discuss the development of the final product and the details of the oral presentation with the other members of the group. All three students in this group contributed equally to this type of email discussion. Bianca and Caroline wrote four emails each and Chloe contributed three messages. The remaining four process-oriented emails were all sent by Bianca to individual students.
from other groups and consisted of brief messages with a number of photos attachments related to specific sections of itinerary.

**Email communication: Campania group**

The students from the Campania group sent a total of eight process-oriented emails, which consisted exclusively of brief messages with attached PowerPoint slides. None of the students contributed other process or content-oriented emails. For the students in this group, email was the preferred communication tool only for the purpose of posting the PowerPoint slides as attachments when the course website did not support it.

**Email communication: Sicilia group**

The students from the Sicilia group did not use email to communicate with other members of their group or with other students in the class.

**Discussion of email communication**

The content analysis of students’ use of email communication shows that email was the preferred communication tool for discussing the process-related aspects of the tasks. Students from all of the seven collaborative groups which communicated via email contributed process-oriented emails during both the first and the second iteration. During the first iteration, these process-related emails mostly involved the negotiation of responsibilities among the group members. During the second iteration, these contributions dealt with a much broader variety of practical issues, including discussing the development of the final itinerary and the details of the oral presentation, organising face-to-face meetings and posting documents or photos as attachments when it was difficult to do so through the course website.

Only three of the nine individual groups used email communication to contribute content-oriented messages. Almost all of these content-oriented emails were posted during the first iteration by the Queensland and the Victoria groups. These emails accounted for a substantial proportion of the total number of emails written by these two groups and mainly involved the presentation and discussion of plans and ideas about the itinerary. During the second iteration only three content-oriented emails involving the presentation and discussion of issues related to the task were posted by the Lombardia–Veneto group.
The broader scope of the process-related emails and the substantial decrease in the number of content oriented emails during the second iteration seem to indicate that there was a shift in the purpose and focus of email communication from the first to the second iteration. As time progressed, students’ email contributions revolved almost exclusively around the discussion and negotiation of a variety of practical issues related to the tasks and considerably less around the discussion of content related themes or issues.

**Synchronous chat**

A synchronous chat tool was available to the participants to allow them to interact simultaneously with others while collaborating on the two tasks. This tool was used by only two of the collaborative groups over the course of the two iterations. The following section outlines those groups’ use of the tool and provides some examples of the interaction that took place during the online discussions

**Synchronous chat: Victoria group**

During the third week of the first iteration the three members of the Victoria group agreed on a day and time to enter the synchronous chat space and participated in an online discussion that lasted for approximately 40 minutes. The group’s facilitator was not invited to take part in the discussion.

The online interaction occurred mostly in Italian and involved almost exclusively coming to an agreement about the planning of the itinerary and the type of activities to be organised during the Victoria section of the trip. Bianca and Chloe had very strong and opposing views about how they wanted to develop the task and for the first 20 minutes of the discussion continued to present the activities they had planned for the trip and explain the reasons for their choices without acknowledging the other person’s plan and ideas. There was no real dialogue during this first phase of the online discussion as neither Bianca nor Chloe seemed willing to consider the other person’s point of view or engage in a constructive exchange of ideas. The following excerpt represents four minutes of online discourse that occurred approximately five minutes into the online discussion.
Aug 9, 21.45 Bianca: there’s so much to do Melbourne, we can spend the whole week there

Aug 9, 21.46 Chloe: I like the idea of a camping trip on the great ocean road—a one week camping/safari with bush walking in the national parks, surfing, whale watching

Aug 9, 21.47 Bianca: I made a list of all the best places for sightseeing and shopping and for going out at night (restaurants, jazz bars with live music, cocktail bars and the casino)

Aug 9, 21.48 Chloe: watching the glow worms at Melba Gully, past Cape Otway

Aug 9, 21.49 Bianca: we’ll go to the rialto towers (great 360 views over the city) and federation square, we’ll have lunch in one of the restaurants on the Yarra river and then shopping in St Kilda in the afternoon, back to the Yarra River, Crown Casino at night

During the second part of the discussion, Nicholas started to mediate actively between his group members by encouraging them to think about ways they could modify their plans and ideas and reach a compromise. Both Chloe and Bianca responded positively to Nicholas’s mediation strategy and started to revise some of their original plans. This second phase of the online discussion involved all members of the group. The following excerpt represents eight minutes of discourse that occurred approximately 30 minutes into the online discussion.

Aug 9, 22.11 Nicholas: how about camping and travelling around for a few days and then spending some time in Melbourne?

Aug 9, 22.12 Chloe: you mean travelling for 3 or 4 days?

Aug 9, 22.13 Nicholas: yes—if you can think of a way to make the camping/safari trip a bit shorter, then there’s time to go to the city and do all the other stuff as well

Aug 9, 22.14 Chloe: I suppose it’s possible—we could go to the Great Ocean Rd and just camp in two or three different places…it’s possible…
Aug 9, 22.14 Nicholas: that would be perfect
Aug 9, 22.14 Nicholas: Bianca, what do you think?
Aug 9, 22.15 Bianca: fine with me, no need to camp for too long…
Aug 9, 22.15 Nicholas: do you think we could cut down on the time in Melbourne? One week is too long
Aug 9, 22.16 Bianca: how many days can we have there?
Aug 9, 22.16 Nicholas: a couple of days, maybe three—enough to get an idea of the city
Aug 9, 22.17 Bianca: I can try to revise the itinerary and fit it all into two days, two and a half
Aug 9, 22.18 Bianca: three days would be better
Aug 9, 22.18 Nicholas: that’s fine—Chloe?
Aug 9, 22.19 Chloe: sounds good to me

The online discussion concluded a few minutes later with the three students leaving the room simultaneously and saying that they would continue the discussion face-to-face in class.

Almost all of the messages posted to this online chat space related to the content of the task. In the first part of the discussion the students seemed focused on presenting their itineraries and defending their opinions. In the second part of the discussion the focus shifted on trying to overcome the disagreements between Bianca and Chloe and on resolving the issues that were hindering the development of the task. During the course of the online session the students exchanged only a minimal number of process-oriented messages and no social-oriented messages.

**First synchronous chat: Lazio–Umbria group**

During the second week of the second iteration the three members of the Lazio–Umbria group entered the synchronous chat space and participated in an online discussion that lasted for approximately one hour. The group’s facilitator did not take part in the discussion.

The online interaction occurred almost exclusively in Italian. In the first part of the chat session, which lasted for approximately five minutes, the students exchanged greetings and talked about their plans for the weekend.
Sep 14, 10.32 Bianca: hi girls, how are you?
Sep 14, 10.32 Chloe: very well
Sep 14, 10.33 Caroline: good thanks
Sep 14, 10.33 Bianca: what are you up to this weekend?
Sep 14, 10.34 Chloe: not much, just working on Saturday (boring), and hopefully wring an essay on Sunday (very boring)
Sep 14, 10.35 Bianca: sounds like fun…
Sep 14, 10.35 Bianca: how about you Caroline?
Sep 14, 10.36 Caroline: I’m going to Sydney to visit some friends
Sep 14, 10.37 Chloe: Bianca?
Sep 14, 10.37 Bianca: working on Saturday morning…maybe going to a party if I’m not too tired…

In the second part of the session, which accounted for approximately 40 minutes of online discussion, the students updated the other group members about the research that they had carried out individually during the first week dedicated to the task and discussed their plans for the itinerary. The following excerpt represents 10 minutes of online discourse that occurred approximately five minutes into the online discussion.

Sep 14, 10.38 Chloe: I’ve done some research on the area around Perugia and found a medieval festival in Gualdo Tadino—it’s on the Sunday and it looks like a lot of fun
Sep 14, 10.39 Bianca: where’s Gualdo Tadino?
Sep 14, 10.39 Chloe: about one hour from Perugia
Sep 14, 10.40 Caroline: I’m just looking it up on the map…it’s in the north east of Umbria
Sep 14, 10.41 Bianca: how long are we staying in Gualdo Tadino?
Sep 14, 10.42 Chloe: not long we can spend the morning there and then go to Perugia in the afternoon
Sep 14, 10.42 Bianca: Caroline—I went to the Vatican tour website…the one you gave me…but I couldn’t find at what time it starts
Sep 14, 10.43 Caroline: one moment, I can look it up
Sep 14, 10.43 Bianca: Chloe?
Sep 14, 10.43 Bianca: are you still there?
Sep 14, 10.44 Chloe: what do you think about Gualdo Tadino?
Sep 14, 10.45 Bianca: I think it’s fine
Sep 14, 10.45 Bianca: we can do it if you want
Sep 14, 10.46 Caroline: the Vatican tour starts at 1.30
Sep 14, 10.47 Bianca: ok we can go to the Colosseum in the morning and then go and do the Vatican tour at 1.30
Sep 14, 10.48 Caroline: I found a river cruise at night from 9.30 to 11.30
Sep 14, 10.48 Caroline: would you like to do it?
Sep 14, 10.48 Bianca: sure, Rome by night is magic

The final part of the discussion lasted for approximately 20 minutes and involved the planning of another synchronous chat session the following week. The following excerpt represents five minutes of online discourse that occurred approximately 10 minutes before the conclusion of the online discussion.

Sep 14, 11.18 Bianca: can we organise a time for another chat? When are you free?
Sep 14, 11.18 Chloe: I’m free tomorrow morning before 11
Sep 14, 11.19 Bianca: I can do tomorrow morning – Caroline?
Sep 14, 11.20 Caroline: I have a class at 10.30
Sep 14, 11.20 Chloe: how about Thursday morning?
Sep 14, 11.21 Bianca: I can’t, I have to be at work at 10
Sep 14, 11.21 Chloe: tomorrow night at about 6?
Sep 14, 11.21 Bianca: yes, tomorrow night at 6 is fine
Sep 14, 11.22 Caroline: fine with me
Sep 14, 11.23 Chloe: good, we’ll chat tomorrow night at 6

The online discussion concluded with the three students leaving the room simultaneously and saying that they would chat again the next day.
With the exception of the first five minutes of online discussion in which the students exchanged greetings, the discussion involved mostly content or process-related messages.

Bianca contributed 87 of the total 158 messages posted to this space and was by far the most active and engaged of the three participants, often initiating the dialogue and conducting two different threads of discussion at the same time. Chloe contributed a total of 42 messages and Caroline 29. Both Chloe and Caroline mostly engaged in a single thread of discussion with Bianca.

Bianca and Chloe, who had a higher level of linguistic proficiency, were able to read the other members’ contributions very quickly and generally composed longer and more articulated messages. Caroline, who had a considerably lower level of written proficiency, composed fewer and shorter messages generally aimed at answering specific questions or addressing issues raised by the other group members.

**Second synchronous chat: Lazio–Umbria group**

The day after the conclusion of their first synchronous chat discussion, the three members of the Lazio–Umbria group participated in another online discussion that lasted for approximately 80 minutes. As with the first chat session, all of the messages posted to this space were written in Italian and the group’s facilitator did not participate in the discussion.

The three students entered the synchronous chat space at different times. The first two students to enter the space were Bianca and Caroline. Bianca and Caroline immediately started to discuss the details of a video prepared by Bianca for the final presentation. Bianca assigned Caroline a number of tasks to complete before the following week. The following excerpt illustrates the first five minutes of online discussion:

Sep 15, 6.11 Bianca: I finished the video!!! It’s really good!!!
Sep 15, 6.12 Caroline: well done! How long is it?
Sep 15, 6.12 Bianca: about 10 minutes
Sep 15, 6.13 Caroline: and the music?
Sep 15, 11.13 Bianca: Eros Ramazzotti
Sep 15, 11.14 Caroline: 10 minutes of Eros Ramazzotti?
Sep 15, 11.14 Bianca: I’m sure you’ll like it
Chloe joined the session approximately 25 minutes after the online discussion had commenced and apologised for being late. The conversation shifted to the section of the itinerary prepared by Chloe. Bianca and Chloe conducted most of the discussion while Caroline struggled to keep up with the fast pace of the dialogue. In this session there was only one thread of discussion happening at any one time.

Sep 15, 6.42 Chloe: Hi girls…. sorry for being late
Sep 15, 6.42 Chloe: did you see my post?
Sep 15, 6.43 Caroline: no, I didn’t
Sep 15, 11.43 Bianca: which one? The one about the third day?
Sep 15, 11.44 Chloe: yes, I posted my latest news about Umbria
Sep 15, 11.44 Chloe: I need help with the last day
Sep 15, 11.44 Bianca: what do you need?
Sep 15, 11.45 Chloe: We can’t do both Assisi and Orvieto…we have to get to Rome that night
Sep 15, 11.45 Chloe: we need to make a choice
Sep 15, 11.45 Bianca: they are both interesting but I think Assisi is better
Sep 15, 11.46 Caroline: why can’t we do both?
Sep 15, 11.46 Chloe: not enough time
Sep 15, 11.46 Bianca: let’s just go to Assisi and then go to Rome from there
Sep 15, 11.47 Chloe: yeah…a bit sorry about not going to Orvieto though
Sep 15, 11.47 Bianca: we can’t visit every single city in Umbria—we must make choices
Sep 15, 11.47 Bianca: It’s going to be good, don’t worry about it
The last five minutes of the discussion revolved around scheduling a face-to-face meeting for the following week. All the three students left the room simultaneously.

**Discussion of synchronous chat**

The findings of the content analysis show that the synchronous chat facility was the least used of all the communication tools provided to the students. A total of three synchronous chat sessions were organised by two of the nine collaborative groups over the course of the two iterations. Students from the Victoria group participated in one 40-minute session during the first iteration, whereas students in the group Lazio–Umbria participated in two sessions which lasted approximately 60 minutes and 80 minutes respectively during the second iteration.

Only four of the 16 participating students took advantage of the opportunity to interact through the synchronous chat. Two of these students participated in all of the three scheduled sessions. One student took part only in the first session and one student participated in both the second and third sessions.

The online interaction occurred almost exclusively in Italian and the messages were generally written using grammatically correct and appropriate language. Three of the
four participating students had a reasonably high level of language proficiency and were able to compose their messages quickly as well as convey their ideas clearly and effectively.

An analysis of students’ synchronous online discussion threads shows that during all of the three scheduled chat sessions, students discussed mostly content and process-related issues. All of the three sessions had a strong task focus and social-oriented messages were kept to a minimum, often limited to the initial or final part of the chat sessions.

**Discussion**

The objective of the content analysis was to examine the nature and extent of the participants’ contributions to the different computer-mediated communication tools provided to facilitate collaboration and interaction within the online community over the course of the two iterations.

The content analysis of the participants’ contributions to the two class discussion forums revealed that there was a significant development in the way students used the class threads over the course of the semester. The first forum was used by all the participants mostly in the first two weeks of the iteration to contribute preliminary messages aimed at introducing themselves and getting to know the other community members. Students contributed a lower proportion of content-oriented messages to this first class forum, which mainly involved simple questions or requests for information related to the logistics of the task, and a slightly higher proportion of social-oriented messages, equivalent to approximately one quarter of the total number of messages contributed to the forum.

While the number of introductory messages contributed to the second forum was similar to the number posted to the first forum, their content was quite different in that they did not include simply personal information about the participants but also significant information and comments related to the content of the task. Another interesting finding was that students posted a substantially higher proportion of content-related messages to this second class forum compared to the first forum. The presence of these messages, which were still relatively simple and unsophisticated in their structure, is an indication that the students felt increasingly more confident about presenting their ideas and comments about the task to all the other community participants, including those who belonged to other groups. The more content-oriented focus of the introductory messages
and the greater number of content-oriented contributions, together with the substantially lower proportion of social-oriented messages posted to this second class forum, is a clear reflection of the stronger task focus of the second iteration compared to the first, and of the positive shift in the students’ level of confidence in communicating to a large group of participants. The low proportion of social messages is also an indication of the students’ decreased need to use the class forum for the purpose of social interaction as they got to know the other participants and started to interact more regularly with them in person both in class and outside of class time.

The content analysis of the participants’ contributions to their individual group discussion threads illustrates that there were some common trends but also substantial differences in the way students from the different groups used their group forum to communicate and collaborate with the other members of their group during the two iterations of the project. Students from all but one of the collaborative groups used their group forum predominantly to contribute messages related to the content of the tasks. During the first iteration, these content-related messages accounted on average for approximately half the total number of messages posted to each individual group forum. During the second iteration the proportion of content-oriented messages increased substantially, accounting, in four out of five discussion threads, for the great majority of the total number of messages contributed to the individual group threads. With the exception of one group which did not post any procedural messages, all the groups contributed process-related messages to their individual group forum during both iterations. Although there were significant variations in the proportion of procedural messages posted across the different group discussion threads, these messages in all but one group were present in a lower proportion compared to the content-related messages, an indication that the participants were generally more interested in using their individual group forum to discuss content-related issues than to negotiate the procedural aspects of the tasks.

Social-oriented messages were present as the third most numerous category in all of the nine group discussion threads. As was the case with the class discussion threads, there was a substantial decrease in the presence and proportion of social messages from the first to the second iteration, an indication of the fact that, as time progressed and students got to know their group members, they relied less on the individual threads and more on face-to-face communication for their social-oriented interaction. Only a minimal proportion of technical-related messages was contributed to the individual
discussion threads, a reflection of the fact that the participants did not encounter significant technical difficulties with using the online tools provided.

Students from three of the four collaborative groups communicated via email during the first iteration and students from four of the five collaborative groups used email communication during the second iteration. Email was the preferred communication tool for discussing the process-related aspects of the tasks, during both the first and second iterations. Students from only three collaborative groups posted emails that dealt with the content of the tasks, mostly during the first iteration. There was, overall, a small decrease in the total number of emails posted by the students and a shift in the purpose and focus of email communication from the first to the second iteration, an indication that there was a change in students’ reliance on email as a means of communication and that over time, email contributions began to involve almost exclusively the discussion of process-oriented issues rather than the discussion of content-related issues.

The synchronous chat facility was the least used of all the communication tools provided in the course website. Only two of the nine collaborative groups used this tool to communicate with their group members over the course of the two iterations and participated in a total of three sessions. During all three sessions students discussed mostly content and process-related issues and exchanged only a small proportion of social messages in the initial or final part of the sessions. It is interesting to note that the duration of the sessions increased from 40 minutes during the first iteration to 60 minutes and then 80 minutes during the second iteration, an indication that, over time, the participating students felt increasingly more comfortable about communicating synchronously with their group members and became progressively more interested in discussing a broader variety of issues.

**Students’ feedback on their online contributions**

Students’ comments and feedback during the focus group and individual interviews shed light on the reasons for their preferred choices of online communication and confirmed some of the findings of the content analysis.

Students commented very positively on the value of the class and individual group discussion threads as online spaces where all community members could come together and contribute their ideas and comments related to the content and process of the tasks.
or post messages of a social or technical nature both to the whole community and to their group members and designated facilitator. Students particularly welcomed the opportunity to get to know the other community members in a semi-anonymous way through the initial introductory messages posted to the class discussion threads at the beginning of the project and to communicate and collaborate with the other members of their individual groups through a smaller and more private forum.

When asked to comment about their contributions to both the class and individual group discussion threads during the two iterations, several students confirmed that they contributed a higher number of messages to their individual group forum compared to the class discussion threads because they felt less anxious about engaging in discussion and dialogue with a smaller group of three or four other students and one facilitator with whom they were able to establish a relationship or a friendship, as opposed to communicating with a larger and more diverse group of participants. Some students admitted that they did not feel comfortable about posting messages to the class threads because they were worried about having their language skills scrutinised by all members of the community and therefore preferred to keep their class discussion contributions to a minimum.

A number of students who did not contribute to the class discussion threads pointed out that, after having determined the composition of the groups at the start of each collaborative task, and after having posted their initial introduction to each class forum, they felt that they were able to carry out their work on their section of the task both independently and within their own group without having to engage in online discussion with the rest of the class. Other students mentioned that they often did not feel the need to engage in online discussion through the class forum because they had the opportunity to meet the other students in class each week and were able to use part of the allocated class time to update the others on their group work as well as answer any questions and address any issues or problems related to the tasks.

Students generally commented positively about the opportunity to communicate via email with other students from their group particularly when they needed to post a message directly to a specific participant and when they had difficulties posting documents or photos through the course website. Students confirmed that their email contributions involved mostly the discussion and negotiation of practical issues related
to the tasks rather than the discussion of content-related issues, which they preferred to discuss through their individual group threads or face-to-face.

When asked to comment about the opportunity to take part in a synchronous online discussion while working on the collaborative tasks, all of the four participating students spoke very positively about their experience with the chat sessions and about the opportunity to practise their reading and writing skills and to address some of the issues that arose during the collaboration through an alternative medium. Some of the students who did not use the chat facility discussed the difficulties of synchronising online meetings with others due to differing study and work commitments. Other students commented that they did not feel the need to communicate simultaneously with their group members because they were already meeting them regularly in class and outside of class time. A small number of students with less developed language skills admitted that they felt anxious about interacting and composing messages in real time as they did not feel confident about their language skills.

**Design principles**

Table 7.13 presents a series of recommendations to guide students’ contributions to the different CMC features provided in the course website. It also presents (in Column 3) a series of design principles to address the needs of the language instructor who may wish to integrate internet-based tools to enable and support student interaction and collaboration in an online community of learners.
<table>
<thead>
<tr>
<th>Element of technology</th>
<th>Recommendations for student contributions</th>
<th>Design principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Class discussion forum</td>
<td>• post a personal introduction of yourself in the target language and read all the other participants’ introductions</td>
<td>• post an introductory message in the target language at the beginning of each iteration to welcome participants to the online learning community</td>
</tr>
<tr>
<td></td>
<td>• post an introductory message in the target language at the beginning of each iteration to welcome participants to the online learning community</td>
<td>• have students post a personal introduction of themselves in the target language at the beginning of each iteration</td>
</tr>
<tr>
<td></td>
<td>• access the class discussion forum regularly and read all the other participants’ contributions</td>
<td>• encourage all students to access the class discussion forum regularly and contribute clear and simple messages that can be understood by all community members</td>
</tr>
<tr>
<td></td>
<td>• contribute clear messages to the class discussion</td>
<td>• monitor all messages and encourage students to read all the other participants’ contributions</td>
</tr>
<tr>
<td></td>
<td>• focus on the content of your contributions rather than on grammatical correctness</td>
<td>• be aware that some students might experience anxiety about communicating with a large and more diverse group of participants</td>
</tr>
<tr>
<td></td>
<td>• avoid judging or criticising other students’ contributions</td>
<td>• use a friendly and encouraging tone that is not too formal or didactic</td>
</tr>
<tr>
<td></td>
<td>• contribute social messages to the class forum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• contribute social messages to the class forum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• post and encourage students to contribute some personal off-task messages to promote social engagement and create a sense of a vibrant community</td>
<td></td>
</tr>
<tr>
<td>Element of technology</td>
<td>Recommendations for student contributions</td>
<td>Design principles</td>
</tr>
<tr>
<td>-----------------------</td>
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</tr>
</tbody>
</table>
| 2. Group discussion forum | • access the individual forums and contribute regularly to the group discussion  
• avoid criticising other students’ contributions  
• offer positive and constructive feedback and suggestions | • monitor all messages and encourage students to read all the other participants’ contributions  
• encourage all participants to regularly access the individual forums and contribute to the discussion  
• provide individual groups with ongoing encouragement and support as needed  
• be respectful of students’ input and avoid criticising students’ contributions  
• offer positive and constructive feedback and suggestions on students’ contributions and ideas  
• ask questions that require further clarification of content to encourage students’ reflection and a deeper level of discussion with others  
• tailor contributions to the different linguistic levels and needs of the students in the individual groups  
• be aware of the fact that participants also collaborate in face-to-face mode and might not always post messages to their individual group forum  
• use a friendly and encouraging tone  
• be active in assisting other students solve process-oriented issues | |
| | • contribute social messages to the group discussion forum | • guide learners in the process of negotiating responsibilities if needed  
• allow the groups to solve process-oriented issues independently but provide assistance on procedural matters as needed  
• post some personal off-task messages to individual groups if the levels of social engagement are low | |
| 3. Asynchronous email | • use email communication for one-to-one interactions | • offer the option of email communication for one-to-one interaction between students  
• be aware of the fact that participants might use email communication instead of the forums for more private one-to-one interaction  
• respond promptly to students’ emails |
<table>
<thead>
<tr>
<th>Element of technology</th>
<th>Recommendations for student contributions</th>
<th>Design principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Synchronous chat</td>
<td>• use the chat option as an alternative to face-to-face meetings or to meet with the facilitators</td>
<td>• organise a brief chat session with individual groups to demonstrate the use of tools—this could be done during class time when synchronising participation is not an issue&lt;br&gt;• encourage individual groups to use the chat facility as an alternative to face-to-face meetings&lt;br&gt;• familiarise students with message-style abbreviations in the target language&lt;br&gt;• be aware of the fact that participants might experience some anxiety about composing messages in real time if they have a low level of linguistic competence and/or are not quick typist&lt;br&gt;• be aware of the difficulties of synchronising online meetings</td>
</tr>
</tbody>
</table>

This chapter has provided an analysis and discussion of the nature and extent of students’ contributions to the CMC tools and resources provided to support interaction and collaboration in the online community of learners. The following chapter investigates the role of the native speaker facilitators in supporting students in the process of completing two authentic collaborative tasks in the online learning community.
Chapter 7 provided an analysis and discussion of the nature and extent of students’ contributions to the CMC tools and resources provided to support interaction and collaboration in the online learning community. This chapter describes the findings of an investigation into how native speaker facilitators support students in the process of completing authentic collaborative tasks in an online community of learners.

Research question 4

How do native speaker facilitators support students in the process of completing authentic collaborative tasks in an online community of learners?

Framework and method of analysis

In order to answer this research question, the transcripts of the facilitators’ contributions to the two class discussion forums and to the individual group discussion forums were analysed with the use of a classification scheme. Techniques of qualitative analysis recommended by Marshall and Rossman (2014); McCracken and Morgan (2009), Miles, Huberman and Saldaña (2013) and Patton (2015) were also used to analyse the data collected from the focus group and individual interviews with students and from the individual interviews with the native speaker facilitators and the teacher’s observations and notes.

The framework for analysis and the classification scheme were developed from the data collected during the two iterations and from the classification scheme described in Chapter 7. This classification scheme had been based largely on the content analysis model of Henri (1992) and used a framework of five categories to analyse the content of all the messages contributed by the participants to the online threaded discussion forums: Introductory, Content-oriented, Procedural, Social and Technical.
This classification scheme was used as a starting point for analysing the specific type of assistance provided by the facilitators to the class and to the individual collaborative groups during the two iterations. The qualitative approach of this model and its focus on the content of the participants’ contributions to the online discussion forums made it a useful organising framework for the classification scheme used to answer research question 3. However, due to the different forms of support provided by the facilitators within each individual message, this classification scheme was modified and adapted to reflect and accommodate the data collected.

In order to classify the facilitators’ support and assistance to the class and the collaborative groups, five distinct categories were developed: Content-oriented, Procedural, Social, Linguistic and Motivational. The categories Content-oriented, Procedural and Social are based on the classification scheme described in Chapter 7, and were used to classify the facilitators’ support and assistance in matters related to the content and process of completing the tasks and the types of support that were social in nature. The categories Linguistic and Motivational were created as new categories to reflect the instances of linguistic and motivational support provided to the students by their facilitators. The category Introductory, which had been created in the first classification scheme as an a priori category to classify all the introductory messages posted to the two class discussion threads, was not included in this revised classification scheme as it did not reflect a specific type of support provided to the participating students. The category Technical, which had been created in the first classification scheme to classify the contributions that discussed technical issues or difficulties related to the use of the online communication tools, was also not included in this revised classification scheme as there were no instances of technical support or assistance in the facilitators’ contributions.

These categories are defined in Table 8.1, together with an example of each type of comment or statement.
Table 8.1
Categories for analysing the support and scaffolding provided by facilitators

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content-oriented</td>
<td>Support which focuses on issues related to the content the task</td>
<td>&quot;There is a bus that takes you from Pompei to the crater of the Vesuvio. The walk to the top is very short (about 7 minutes) and the view is breathtaking. Strongly recommended!&quot;</td>
</tr>
<tr>
<td>Linguistic</td>
<td>Support which focuses on matters relating to students’ use of the target language</td>
<td>&quot;Remember that the subjunctive is used in subordinate clauses with verbs which express wishes, thoughts, beliefs, worries, doubts, etc. In your text it would be more appropriate to use the present indicative because you are expressing facts&quot;</td>
</tr>
<tr>
<td>Procedural</td>
<td>Support which focuses on how the task should be completed and on the steps to follow in order to do it</td>
<td>&quot;Your PowerPoint is excellent (I love the photos and the short video!). You could probably add a few maps to show where things are located and give a clearer idea of the distances&quot;</td>
</tr>
<tr>
<td>Motivational</td>
<td>Support which focuses on providing motivation and encouragement to students</td>
<td>&quot;Excellent work…! Keep going with this and your presentation will be the best one&quot;</td>
</tr>
<tr>
<td>Social</td>
<td>Support that is social in nature</td>
<td>&quot;I just got back from a hike and it was snowing on the mountain tops. It’s getting pretty cold here! What a contrast to the lovely temperatures in Sydney! Anyone interested in a swap?&quot;</td>
</tr>
</tbody>
</table>

The process of coding and analysing the data was carried out by considering each instance of support and assistance that appeared in all the messages contributed by the facilitators as a unit for classification and by assigning each instance to a separate category. This approach was chosen because, although each message posted by the facilitators focused predominantly on one specific theme and generally remained within a single category, there were instances in which the facilitators’ contributions used more than one type of category within a single message. This method enabled the detection and mapping of the different types of support that appeared in all the messages contributed by the facilitators over the course of the two iterations. It was therefore considered appropriate for analysing the data collected in this study.

**Analysis of facilitators’ support and scaffolding**

In order to analyse the facilitators’ support and scaffolding, the researcher reviewed and coded all the online transcripts of their contributions to the class discussion threads and the individual group discussion threads. Each instance of support and assistance that appeared in the messages contributed by the facilitators was considered as a unit for classification and was coded according to five categories: Content-oriented,
Procedural, Social, Linguistic and Motivational. A similar method of colour coding as described in Chapter 7 was used for coding the instances of support and scaffolding related to each of these categories.

After marking all the instances of support and scaffolding with different colours and assigning each instance to a different category, separate tables were created to represent the different types of assistance provided by the facilitators to the class and their individual groups. Detailed descriptions of the specific types of support present within each category were drawn to enable an evaluation of the facilitators’ role during the two iterations.

Observations about the meaning of the data were then made and the conclusions were written up in order to be included in the thesis. The comments made by the students and the facilitators in the focus group and individual interviews and the researcher’s field notes and observations in relation to the facilitators’ presence and role were also analysed and incorporated in the conclusions.

The process of coding the data is summarised in Table 8.2.

Table 8.2
Stages of analysis of data

<table>
<thead>
<tr>
<th>Stages of analysis of data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary organisation of data</td>
<td>Contributions to the class discussion threads and the individual group discussion threads are investigated separately</td>
</tr>
<tr>
<td>Coding</td>
<td>Different types of support and scaffolding are coded according to categories which emerged from the data</td>
</tr>
<tr>
<td>Ordering and displaying</td>
<td>Individual instances are assigned to a specific category. Detailed descriptions of the categories are drawn and data is organised into displays</td>
</tr>
<tr>
<td>Observation</td>
<td>Observations are developed in relation to the data analysed</td>
</tr>
<tr>
<td>Conclusion drawing</td>
<td>Conclusions about the meaning of data are made and written up for inclusion in the thesis</td>
</tr>
<tr>
<td>Verifying</td>
<td>Conclusions are verified by reference back to original data, the participants’ focus group and individual interviews and the researcher’s notes and observations</td>
</tr>
</tbody>
</table>

In order to verify coding reliability and ensure that the representation of the data relating to the facilitators’ role was accurate, the transcripts of the facilitators’ contributions to the class and group discussion forums were check-coded by two of the native speaker facilitators, as described in Chapter 7.

Table 8.3 shows the reliability figures obtained in the first and second round of coding for each of the online tools available.
As the coding consistency between the researcher and the two coders was higher than 90%, the coding process was deemed to be sufficiently trustworthy.

**Scaffolding role of the facilitators**

As described in Chapter 2, the Vygotskian concept of zone of proximal development supports the idea of providing scaffolded support and assistance to the learners by assisting them to develop the skills, tools and strategies that they need in order to be able to solve a problem or complete a task independently (Moll, 1990; Vygotsky, 1978). During the process of scaffolding, the teacher or more expert members of a learning community can assist learners not only to appropriate these skills, tools and strategies and develop the ability to work independently (Greenfield, 1984; Wood, Bruner & Ross, 1976) but also to build a common understanding (and advance in their ZPD) through interaction and collaborative dialogue (Stone, 1998; Wells, 1999). In the specific context of this project, scaffolding and expert assistance was provided by seven native speaker facilitators who had been recruited by the class teacher to support and assist students as they completed their work on the two assigned tasks in a technology-enhanced learning environment (McLoughlin, 2002; Salmon, 2011).

The facilitators had been briefed on the aims and objectives of the tasks and on the requirements of the scaffolding role prior to the beginning of the project (see Appendix 5). One facilitator was assigned to each group on the basis of his or her knowledge and familiarity with the specific areas of Australia and Italy that the group decided to research. The facilitators supported the collaborative groups by participating in the class threaded discussion forums and in the individual discussion forum of their allocated group. The facilitators were allocated to the groups as shown in the following tables:

<table>
<thead>
<tr>
<th>Groups</th>
<th>New South Wales</th>
<th>Queensland</th>
<th>Northern Territory</th>
<th>Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitators</td>
<td>Sabrina</td>
<td>Carla</td>
<td>Davide</td>
<td>Simon</td>
</tr>
</tbody>
</table>

Table 8.4
Allocation of facilitators to groups during the first iteration

| Table 8.3  
Reliability of coding |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coder 1</td>
<td>Coder 2</td>
<td></td>
</tr>
<tr>
<td>Round 1</td>
<td>88%</td>
<td>80%</td>
</tr>
<tr>
<td>Round 2</td>
<td>98%</td>
<td>89%</td>
</tr>
</tbody>
</table>
Table 8.5
Allocation of facilitators to groups during the second iteration

<table>
<thead>
<tr>
<th>Groups</th>
<th>Lombardia–Veneto</th>
<th>Toscana</th>
<th>Lazio–Umbria</th>
<th>Campania</th>
<th>Sicilia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitators</td>
<td>Chris</td>
<td>Simon</td>
<td>Davide</td>
<td>Anna</td>
<td>Linda</td>
</tr>
</tbody>
</table>

As can be seen from these tables, the two native speaker facilitators who supported the Northern Territory group and the Victoria group during the first iteration were each also assigned to one collaborative group during the second iteration. The other five facilitators supported only one group during either the first or the second iteration.

Table 8.6 provides a summary of the specific support and scaffolding provided by the facilitators to each of the collaborative groups, as it emerged from the transcripts of the class and group online threaded discussions and the interviews with students and facilitators. This support is categorised under the headings: Content-oriented, Procedural, Linguistic, Motivational and Social.

Table 8.6
Type of support and scaffolding provided by facilitators to the collaborative groups: Iteration 1

<table>
<thead>
<tr>
<th></th>
<th>Group 1: NSW</th>
<th>Group 2: QLD</th>
<th>Group 3: NT</th>
<th>Group 4: VIC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content-oriented</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing content information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Directing students to the appropriate resources</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Assisting with development and organisation of content</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Providing feedback on the content of students’ work</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Responding to students’ questions on content</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Linguistic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modelling correct and authentic language use</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Providing target language practice opportunities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Providing linguistic feedback</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Directing students to relevant linguistic resources</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Procedural</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advising on development of final presentation</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Facilitating collaborative work</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Motivational</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging students to get started with the task</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging online participation</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Providing ongoing encouragement</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joining in social exchanges</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Table 8.7
Type of support and scaffolding provided by facilitators to the collaborative groups: Iteration 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Content-oriented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing content information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Directing students to the appropriate resources</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Assisting with development and organisation of content</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Providing feedback on content of students’ work</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Responding to students’ questions on content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linguistic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modelling correct and authentic language use</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Providing target language practice opportunities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Providing linguistic feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directing students to relevant linguistic resources</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advising on development of the final presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitating collaborative work</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging students to get started with the task</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging online participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing ongoing encouragement</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joining in social exchanges</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

As can be seen from Tables 8.6 and 8.7, the majority of the support provided by the facilitators related to content, even though all five categories were represented. The type of support related to each of the five categories varied in relation to the specific needs and issues of the individual groups and is described in detail below.

**Content-oriented support**

The majority of the support provided by the native speaker facilitators during both the first and second iterations involved assisting students with matters related to the content of the assigned tasks. This type of content-oriented support included providing information, directing students to relevant resources that could be used to develop the tasks, assisting with the development and organisation of content, providing feedback and responding to students’ questions.
Providing content information

All of the native speaker facilitators supported students by providing them with both general and specific content information on the geographical areas that they chose to explore. The type of information provided was very diverse, ranging from aspects related to the historical and cultural significance of a particular area, to details specifically related to the organisation of travel, such as distances, transport and accommodation. One of the facilitators described how she assisted students by providing them with the information that they needed in order to complete the second task:

At the beginning I spoke a little bit about the diversity and significance of the Campania region and I gave them some general information about interesting places where they could go. Then, after they had made some decisions on where to go, I gave them more specific information on what to see and what to do in the particular places that they chose to visit. And then, once they had prepared a more detailed itinerary, I gave them more specific information about the possibility of going to a particular place with a special means of transportation and about various accommodation options that they could consider. (Interview with Anna)

Another facilitator explained that he offered to his group of students information that was not easily accessible on the internet and that complemented the type of information that they were able to access independently:

I gave them information that they couldn’t find on the net…things that we know about here but that they could not access over there…and things to add to what they could find by themselves. (Interview with Chris)

Students generally commented very positively on the value of both the general and specific content information offered to them by the facilitators and appreciated the opportunity to access information that that was not otherwise accessible. The following comment by one of the students attests to her appreciation of the support offered by the facilitators:

They gave us a lot of information that we didn’t find in our research, they told us a lot of specific things that they knew about and that we couldn’t find on the net or in any other way, and that was really good. (Interview with Caroline)
Another student praised the facilitators’ knowledge of the geographical areas to be explored during the task and valued the opportunity to access information that was specifically targeted to her individual group:

The best thing was that she’s from Napoli and she’s been living there all her life, so she knew the Campania region in and out and she could give a lot of specific information that we could use for our own itinerary. (Interview with Josie)

**Directing students to the appropriate resources**

With the exception of one of the four facilitators recruited during the first iteration, all the facilitators supported their assigned group of students by directing them to a number of relevant resources that could be consulted as a starting point to develop the content of their itinerary. By providing this type of assistance in the initial phases of the project, the facilitators helped students narrow the focus of their research and optimise their use of the time allocated:

They pointed us in the right direction by giving us some useful websites to look at, and because of that, we were able to use our time to actually develop the task rather than spending weeks getting lost sorting out one thousand websites…from this point of view they really helped us use the time more productively. (Interview with Nicholas)

In the latter stages of the project, after students had developed the main outline of the itinerary, some of the facilitators directed students to more specific or alternative resources, as they deemed appropriate. This type of assistance had the advantage of helping students further refine the focus of the tasks and of encouraging them to learn about aspects of the tasks that they had not initially considered:

We posted a message to tell her about our visit to Naples and she suggested to have a look at a website about Monte Vesuvio as well. So we looked into it and we ended up finding a lot of interesting information about the history of the eruptions and so on, which was fascinating stuff. It wasn’t something we were thinking of doing but it certainly added something to our trip. (Interview with Julie)
Assisting with development and organisation of content

Apart from the facilitator assigned to the Queensland group, all the facilitators supported their individual group of students by providing guidance and advice on how to develop and organise the content of the tasks. In the initial planning phases of the activities, they provided ideas on how to plan and organise the various sections of the itinerary and how to develop the travel guide. In the later stages of the tasks, the facilitators’ support was directed mostly towards helping students bring the different parts of their itinerary together and make it a cohesive and coherent whole. One student made the following comment in relation to the assistance offered by the facilitators:

“They helped with the planning and organisation of the itineraries when it was needed, and gave us ideas on how to bring it all together so that it didn’t look like a random collection of different bits and pieces. (Interview with Julie)

Another student commented positively on the value of the facilitators’ ideas and suggestions and on their support with the planning and presentation of the relevant content information:

“They were great in that they put forward a lot of good ideas and gave us suggestions on what to include in our itineraries and how to plan and structure them…they never pushed us to do things in a certain way but helped us organise all the important information and display it as clearly as possible. (Interview with Chloe)

These comments are significant of the important role that the facilitators had in providing ideas and assisting the process of developing and organising the content of the assigned tasks. Students appreciated the fact that the facilitators provided this type of content-related assistance without imposing their own views but allowing them the freedom to make independent choices based on their suggestions and advice.

Providing feedback on the content of students’ work

All the facilitators assisted students by providing them with both general and specific comments on the content of the tasks and by providing advice and suggestions on ways to develop their ideas and build on what they had done. The facilitators’ feedback was generally aimed at emphasising the positive aspects of students’ work and at offering concrete suggestions on the steps to take to improve it. In the following excerpt, one of the facilitators described the process of providing feedback to his group of students and
noted the importance of approaching this task in a friendly and encouraging way, without being overly critical or forcefully imposing his point of view:

I started off with some positive comments to let them know that I liked what they had done, that I was impressed by the originality of their ideas and so on, then I gave them some suggestions on how to improve the parts which were not that great, trying to develop on what they had already been thinking rather than telling them ‘this is bad, you need to re-write the whole thing’...I said things like ‘this is a good starting point, perhaps you could think about such and such’ and I tried to do it in a friendly way, always trying to encourage them, without being too critical, and without being bossy or pushy. (Interview with Simon)

Another facilitator made a similar comment and spoke about how she provided positive and constructive feedback to her group of students and how she encouraged them to reflect on some of their choices in relation to the tasks:

I made sure I always focused on the positive aspects of their work and praised their efforts…and I gave them concrete suggestions on ways to develop their ideas and build on them…I tried to encourage them to think about some of the choices they had made and on ways they could explain things more clearly or more effectively. (Interview with Linda)

The value of being provided with this type of constructive feedback on the content of their work was recognised by several students who commented about the positive effect that their facilitators’ feedback had on their motivation to develop their ideas and improve their work. This was exemplified in the following comment by one of the students:

I liked how Simon pointed out the positives of our planning and how he made suggestions about different things to do to improve what we had. He made us go back to our itinerary and think a bit more carefully about what we were doing…he motivated us to discuss our ideas and try and find a better way to do certain things. (Interview with Nicholas)

The importance of providing students with positive and constructive feedback has been highlighted by a number of researchers (Boud & Molloy, 2013; Evans, 2013; Gibbs & Simpson, 2004; Li & De Luca, 2014; Nicol & Macfarlane-Dick, 2006; Nicol, Thomson & Breslin, 2014; Weaver, 2006). According to these researchers, in order to have a
positive impact on students’ self-esteem and on their motivation to carry out a project, constructive feedback should first emphasise the positive aspects of students’ work. The more critical comments, which also need to be included in the feedback if appropriate, should be provided in the form of concrete and useful suggestions on ways in which students’ work could be improved and developed.

In the context of this project, the assistance offered by the facilitators in the form of positive feedback and concrete suggestions on ways to develop the content of the tasks proved to be valuable to the students because it helped them to reflect critically on the content of their work and appreciate what they had done well, whilst encouraging them to discuss and develop their ideas and improve certain aspects of their work.

**Responding to students’ questions on content**

During the first iteration, three of the four participating facilitators assisted students by responding to their questions in relation to the content of the tasks. During the second iteration this type of assistance was provided to the groups by three of the five facilitators. One of the facilitators explained how he assisted his group of students by promptly responding to their questions on the content of their task:

> I was asked a few specific questions in the beginning of the project and I made sure I replied as soon as possible. I tried to be as specific as I could to help them get clear on their preferred destinations and on the content of their itinerary. (Interview with Simon)

Another facilitator made a similar comment and pointed out that she assisted her students by answering their questions and providing clear and direct answers:

> They asked me a couple of questions which needed a direct reply and I gave them clear and straightforward answers. (Interview with Linda)

According to the students who accessed this type of support, the facilitators’ responses to their questions were very helpful. This was reflected in the following comment:

> At one point we got stuck trying to look up information about a medieval festival in this little village in Umbria…the website of the local tourist office was under construction for ages and we couldn’t find anything useful anywhere, so we asked him how to go about finding out and he answered pretty
much straight away with very helpful information…we were very thankful.
(Interview with Chloe)

Despite acknowledging the importance of being able to rely on the facilitators to respond their questions, several students admitted that they preferred to try to find the answers by themselves or with the help of the other students. This was reflected in the following comment by one of the students who explained that she did not want to bother her facilitators with questions that could have been answered by her group members:

I didn’t want to bother them with my questions unless it was absolutely necessary, particularly when other students could help me out, so I just didn’t, I tried to work things out on my own or with the other students in my group.
(Interview with Yuki)

This comment was validated by some of the facilitators’ reflections about their role in responding to students’ questions. For example, Anna noted that she was not asked any direct questions and that her group of students mostly carried out their work independently, knowing that she was available if needed:

They didn’t ask me any questions but they figured things out by themselves and worked more or less on their own. It was good in that they were able to do their work by themselves knowing that I was there to answer their questions if there was something they needed to know. (Interview with Anna)

These comments by both students and facilitators are revealing of students’ perception of their facilitator’s role as that of a support person who was available to respond to their questions if and when required but who did not need to be consulted if students were able to work independently or with the assistance of other students.

Linguistic support

An important aspect of the facilitators’ role during both the first and second iterations was to provide language-related support to the individual collaborative groups. This type of support involved modelling correct and authentic language use, providing students with the opportunity to practise the target language by communicating with them on a regular basis, providing specific linguistic feedback on students’ writing and directing them to relevant online linguistic resources.
Modelling correct and authentic language use

During both the first and the second iteration, all the native speaker facilitators supported students’ target language development by modelling correct and authentic language use. The fact that the facilitators were contributing to the discussion forums exclusively in the target language provided students with the opportunity to observe and examine the facilitators’ written contributions and to incorporate into their own writing some of the grammatical structures and expressions that the facilitators used. This was reflected in the following comment by one of the students who described the important role of the facilitators in the online forum:

We could see from the way they wrote and structured their messages how sentences should be constructed and how we should write correctly. I think my reading and writing skills improved a lot just by reading their messages and trying to use their structures and expressions in my own writing. (Interview with Diana)

This comment attests to the fact that the linguistic model provided by the native speaker facilitators greatly assisted learners’ linguistic development as it encouraged them to extend their language skills beyond their regular level of competence and therefore progress through their zone of proximal development.

Providing target language practice opportunities

The fact that the facilitators were Italian native speakers and regularly contributed their messages to the forum in Italian provided students with the opportunity to practise their target language reading and writing skills. Students acknowledged that the facilitators’ presence in the forum encouraged them to develop their reading comprehension skills and to write as clearly and correctly as possible in Italian rather than resorting to English. This is exemplified in the following comment:

It was good to have someone who was writing Italian all the time, because it put some pressure on us to try and understand what they said and to make an effort to write clearly and correctly in Italian even when it was difficult to do it, instead of getting around just saying something in English...they didn’t need to do much, just to be writing every now and then and then and reading our messages. (Interview with Nicholas)
Providing feedback on students' writing

During both the first and second iterations two native speaker facilitators provided their groups of students with relevant feedback on their writing. In these cases the type of linguistic feedback provided did not involve explicit correction of students’ grammatical mistakes or re-writing their work, but was aimed at offering learners sufficient advice and guidance—the scaffolding—to enable them to make the appropriate corrections by themselves. This was reflected in the following comment by one of the facilitators who described how she assisted her group of students to make changes and improvements to their writings independently, on the basis of her suggestions:

More than correcting their writing I gave them some indications for correcting it themselves. I wrote things like “have a look at how you’re using the prepositions in this sentence” and “remember that the verb piacere has an inverted construction and the subject comes at the end of the sentence” and “make sure your adjectives agree with the noun they refer to” and other similar things. I just gave them some hints really, which most of the time they were able to pick up themselves. (Interview with Anna)

Several students spoke about the important role that their facilitators played in providing them with this type of practical advice and in offering suggestions on how to improve their writing, and acknowledged that such feedback promoted critical thinking and encouraged them to become independent learners. This was exemplified in the following comment by one of the students:

Anna was really helpful because when I posted my thing she replied with some practical advice on how to write it better. She didn’t just correct it, she made comments like “that word is not used in that context, perhaps you need to express this idea in a different way”, which I thought was very helpful because it was something I wouldn’t have known otherwise. I think this type of assistance is very effective because it makes you think about how you write and helps you find a better way to say what you want to say. (Interview with Julie)

Another student made a similar comment and spoke about the value of being encouraged to self-correct his own writing:

When Simon went through our itinerary he gave us a few points to look up and suggested to think about using some different words or expressions…he didn’t
make any changes to what we had, but kind of prompted us to make those changes ourselves, which was definitely more challenging but also a lot more useful than being spoon-fed the right version of the whole thing. (Interview with Nicholas)

These comments appear to support the view that, in order to be effective, linguistic feedback does not necessarily need to take the form of explicit linguistic corrections of students’ writing. Current research into feedback and second language acquisition processes (Bitchener, 2012; Bitchener & Knoch, 2009; Bitchener & Storch, 2016; Ellis, 2009; Lightbrown & Spada, 2013; Van Beuningen, De Jong & Kuiken, 2012) shows that constructive linguistic feedback that is provided in the form of metalinguistic comments and focused suggestions has the potential to offer language students greater opportunities for learning because it encourages them to think critically about their own linguistic production and to become independent learners by taking on the responsibility of making the necessary corrections and improvements independently on the basis of the comments received.

**Directing students to relevant linguistic resources**

In a small number of instances, the facilitators directed students to a number of relevant online resources that could be consulted to assist them with their spelling and with the translation of unfamiliar words or expressions. Those resources included a comprehensive Italian spell check website and the WordReference website that students could use to correct their own spelling mistakes and to understand the meaning of unknown words independently. Rather than offering the appropriate word or the correct grammatical form that could be applied without conscious effort by the students, the facilitators provided constructive scaffolding and encouraged students to become independent and autonomous learners.

**Procedural support**

In a small number of instances the native speaker facilitators provided students with procedural support. This type of support, which involved providing advice on the development of the tasks and of the final presentation, and on collaborative work, is described below.
Advising on development of the final presentation

During both the first and the second iteration, two of the participating facilitators provided their allocated groups of students with advice on how to develop the final presentation. In the first iteration, the advice related to structuring the PowerPoint presentation and the preparation of other supporting material such as videos and maps. In the second iteration, the facilitators supported their groups by offering suggestions on the effective use of maps and other visual cues to help visualise the location of the various areas of interest.

Facilitating collaborative work

During both iterations two of the participating facilitators supported students by assisting and facilitating the collaborative process. In two instances the facilitators invited the students in their group to clarify their responsibilities and the division of the collaborative work. The following message posted by one of the facilitators is an example of this type of support:

It looks like Lara is putting together a well-designed plan. Are you girls going to find some additional information to go with the itinerary? Have you decided who is going to write up the guide? (Message posted to the New South Wales group discussion forum, Sabrina)

In two other instances the facilitators assumed the role of mediators and assisted some of the students in the process of communicating more openly and effectively with their other group members. This was reflected in the following comment:

He had the role of mediator in our group and helped us communicate with each other more openly and clearly. (Interview with Caroline)

Although the procedural support provided by the facilitators to the collaborative groups was limited to a small number of instances, it was nevertheless greatly valued by some of the students. This was noted in the following comment:

It was good that she asked us questions about how we were going to collaborate. She noticed that we were struggling a bit and her questions forced us to explain how we were going to divide things up and who was going to do what. (Interview with Elise)
Another student acknowledged the important contribution of her group’s facilitator in assisting her to better explain her message to other group members who had not been receptive to her ideas:

I liked how the facilitator helped me get my message across to the rest of the group. I felt that he could understand what I wanted to do more than some of the other students in the group and I really appreciated it. (Interview with Chloe)

As can be inferred from these comments, the procedural support provided to the groups supported students’ collaboration by encouraging them to reflect on and articulate their decisions about the division of their responsibilities within the groups and by assisting them to communicate their ideas to others more effectively.

**Motivational support**

An important aspect of the facilitators’ role was to provide students with motivational support depending on the specific needs and issues of the individual groups. This type of support, which involved prompting students to get started with the tasks, encouraging online participation and providing ongoing encouragement is described in detail below.

**Encouraging students to get started with their work on the tasks**

During the first iteration, two of the four native speaker facilitators encouraged students to get started with their work on the collaborative tasks. As it became clear that some of the students were reluctant to begin the initial planning phase of the tasks, their facilitators prompted them to post to the forum a preliminary outline of their itinerary and to present their ideas about a possible division of the work within their group. One student described how her assigned facilitator encouraged her group to start working on the task:

She sent a message to the group forum asking us to send her an outline of the itinerary and to post our ideas about who was going to do what in the project… and so we got together and prepared a plan and then we sent it to her. After that she wrote back with some comments, and things just kept going from there. It was good that she forced us to put something into writing. If it wasn’t for that we’d probably still be here thinking about it… (Interview with Elise)
The fact that this group’s facilitator asked students to post their ideas to the group discussion forum had the positive effect of prompting them to put their thoughts into writing and initiate a dialogue within their group. As the students made a start on the collaborative tasks, the facilitators were generally able to withdraw this type of motivational support and focus on assisting students in different ways. During the second iteration none of the facilitators needed to provide this type of support to their groups of students.

**Encouraging online participation**

During the first iteration, three of the four facilitators prompted students to contribute to the online discussion and encouraged them to communicate amongst each other through the resources provided in the course website when they seemed to be reluctant to engage in online communication. This type of encouragement was described in the following facilitator comment:

> Sometimes there’d be someone missing from the forum so I’d be asking “Hey, where are you? What about letting these other people know what you think about this?” I would just try to encourage them to be online regularly and to throw themselves into this type of communication when they were a bit hesitant to do it. (Interview with Sabrina)

Another facilitator spoke about how he encouraged his group of students to make use of one of the online communication tools that they had not used until that time:

> I noticed that none of the students in my group had attempted to use the [chat], even though they all knew that they could use it if they wanted to, so I decided to make a time for all of us to be online simultaneously. One of the students didn’t show up, but the other two logged on and we started chatting…I initiated the conversation but then as they got into it a bit more I moved away a bit and let them continue with it…it was great, I think we all had a bit of fun with it. (Interview with Simon)

These comments are revealing of the active role that the facilitators had in encouraging students to make full use of the online tools and resources provided in the course website while working on the first task. During the second iteration none of the facilitators offered this type of motivational support.
Providing ongoing encouragement

A significant aspect of the facilitators’ role was to provide students with ongoing encouragement. Comments like: “you are on the right track”, “keep going with this” or “excellent work” were a constant feature of the facilitators’ messages to their group discussion forums.

Students generally seemed to appreciate the ongoing and positive encouragement provided by their facilitators, and commented that it motivated them to continue with their work, knowing that they were moving in the right direction and that someone was “keeping an eye” on them. The following comment by one of the students attests to the positive impact that the ongoing encouragement of the facilitators had on students’ confidence in their abilities to complete the tasks and to arrive at a positive outcome:

They motivated us to keep going and gave us a bit of confidence in our abilities to complete the project. (Nicholas)

Social support

During both the first and the second iteration, several facilitators contributed social-oriented messages to their individual group discussion forum. The content of these messages varied significantly, depending on the interests and personality of the individual facilitators and on the nature of the relationship they established with the students over the duration of the specific iteration in which they participated.

During the first iteration, two of the four participating facilitators posted social off-task messages to their collaborative group discussion forums. These messages consisted of comments about students’ interests or about events that had taken place and invited students to join in social exchanges. During the second iteration, four of the five facilitators contributed social-oriented messages to their group discussion forums. These messages included comments about their personal experience of travelling or living in the areas explored by the groups and invited students to write about their own experiences or their various extra-curricular activities.

Although these social off-task messages did not directly contribute to the completion of the collaborative tasks, they played an important role in the development of a positive relationship between the individual groups and their assigned facilitators. Through these
social contributions, the facilitators presented themselves as friendly and personable and encouraged students to participate in more a spontaneous and informal type of dialogue.

**Discussion**

The findings of the content analysis of the facilitators’ contributions show that the majority of the support provided by the facilitators to the collaborative groups during both the first and second iterations related to the content of the tasks. All of the seven participating facilitators assisted students by providing them with at least three of the five categories of content-oriented support identified from the data. The most represented categories of content-oriented support were providing relevant content information and feedback on students’ work, with all of the participating facilitators supporting their groups in each of these two categories during both iterations. The least represented category of content-oriented support was responding to students’ questions. The three facilitators who did not provide this type of assistance to their groups were not asked any explicit questions because students preferred to work independently or seek assistance and advice from their other group members or from the class teacher. The other four facilitators who, on the other hand, were asked specific question and information on content, did not respond to students by providing direct answers but asked clarifying questions to encourage students’ reflection and metacognitive development.

The second most significant aspect of the facilitators’ role involved providing linguistic support to their allocated collaborative groups. By regularly contributing to their individual group forum and the class discussion forum, all the facilitators provided students with the first two of the four categories of linguistic support identified from the data. These two categories involved modelling correct and authentic language use and providing students with the opportunity to use their target language communication skills by interacting with them on a regular basis. The least represented categories of linguistic support involved offering students explicit linguistic feedback on their writing and directing them to relevant linguistic resources. During both the first and the second iteration, two facilitators provided their allocated groups with linguistic feedback on their writing and only one facilitator assisted students by directing them to relevant linguistic resources.
A third aspect of the facilitators’ role involved providing procedural support to the collaborative groups. This type of support, which involved assisting students with the development of the tasks and final presentations, and facilitating collaborative work, was limited to a small number of instances and was provided by two of the participating facilitators in each of the two iterations. Interestingly, most of the instances of process-oriented support encountered in the data were provided by Simon and Davide, the two facilitators who assisted students during both the first and the second iteration.

A fourth aspect of the facilitators’ role was the provision of motivational support to the collaborative groups. The most represented category of motivational support involved providing ongoing encouragement, with all the participating facilitators offering this type of support to students during both iterations. The least represented categories of motivational support were prompting students to get started with the task and encouraging online participation. These categories of support were provided during the first iteration by two and three of the four participating facilitators respectively. However, no instances of these two categories of support were present in the data collected during the second iteration, a clear indication that, as time progressed and the students no longer needed to be prompted to start working on the task and to participate in the online discussions, the facilitators were able to reduce this type of motivational assistance and focus on offering alternative types of support.

A final aspect of the facilitators’ role was the contribution of messages of a social nature and joining in social exchanges with the students of their assigned collaborative groups. These types of social-oriented messages, which included comments about the students’ interests and extra-curricular activities or about the facilitator’s personal experience of travelling and living in the areas explored by the groups, were contributed by two facilitators during the first iteration and by four facilitators during the second iteration. Through these messages, the facilitators invited students to join in social exchanges that had a more informal and spontaneous nature and to contribute their own personal experiences to the individual discussion forums.

The feedback and comments collected from the focus group and individual interviews with the students and the individual interviews with the facilitators shed light on the participants’ experience and perception of the facilitators’ role over the course of the two iterations, and led to the design principles developed at the conclusion of this
chapter to guide native speaker facilitators in the task of supporting students’ collaboration in an online community of practice.

Students commented very positively on the scaffolding role of the facilitators as they worked towards completing the collaborative tasks. In particular, they valued the content-oriented assistance and the linguistic support that they provided and clearly linked their constant presence in the online forums to the successful outcome of the tasks and their target language skills development.

When discussing the content-oriented support provided by the facilitators, students appreciated the breadth of information provided by the facilitators, their knowledge and first-hand experience of the geographical areas researched by the collaborative groups. They also appreciated the fact that the facilitators always offered positive and constructive feedback on their work and encouraged them to reflect and elaborate on their ideas critically and take responsibility for their own decisions and their own learning.

With regard to the linguistic support provided by the facilitators, all of the students valued the opportunity to communicate with competent native speakers in the target language on a regular basis and to be guided in the process of improving their writing skills without being corrected explicitly. Students pointed out that the linguistic model provided by the facilitators had a positive impact on the development of their own reading and writing skills because it encouraged them to incorporate the facilitators’ linguistic structures and expressions into their own contributions. Students appreciated the fact that the facilitators rarely provided them with explicit corrections of their grammar errors but guided them in the process of making the necessary corrections and improvements to their writing independently on the basis of their comments and suggestions. They explained that, by providing this type of less explicit linguistic feedback, the facilitators encouraged them to think critically about their own linguistic production and take the responsibility for their own learning.

Some students acknowledged the role that the facilitators had in providing them with process-oriented and motivational support while they were working on the collaborative tasks. With regard to procedural support, students mostly valued the assistance provided to the collaborative groups when they had difficulties negotiating the development of the tasks or communicating with others effectively. In terms of the motivational support provided, all the students valued the encouragement offered by the facilitators in the
early phases of the first iteration and their ongoing support throughout the duration of the project.

Finally, the majority of the students valued the opportunity to develop a personal relationship with their facilitators by engaging in exchanges that had a social off-task focus. These students commented very positively about the social presence of the facilitators in the group discussion forums and explained that it helped counteract the issue of not being able to meet them face-to-face while they were collaborating on the tasks. These students pointed out that that the facilitators’ social contributions and their friendly and approachable tone contributed to creating a less formal environment and encouraged them to communicate more freely and spontaneously in their group discussion forum.

The comments made by the students were reinforced by some of the facilitators’ reflections about their role and their experience of supporting the collaborative groups. Among the crucial requirements of their role, all of the facilitators mentioned the importance of being familiar with the subject of the students’ research and of being able to provide them with up-to-date content information and ideas that would motivate them and inspire them to develop the tasks creatively and independently. They also spoke about the importance of providing clear and constructive feedback that would encourage critical thinking and self-regulated learning. According to the facilitators, such feedback would need to emphasise the positive aspects of students’ work and to provide clear and well-defined guidelines to assist them in the task of reviewing and improving their contributions. The importance of providing positive and constructive feedback and of encouraging critical reflection on students’ work is in line with the recommendations set out in the model proposed by Nicol and Macfarlane-Dick (2006) of good feedback practice, which emphasises the value of formative assessment and self-regulated learning and the development of students’ critical thinking practices.

All of the facilitators highlighted the importance of encouraging the development of students’ communicative competence and writing skills by modelling appropriate language use in authentic situations rather than focusing exclusively on grammatical and stylistic correctness, and of encouraging students to engage in more frequent and spontaneous interaction with others. The importance of assessing the level of linguistic competency achieved by particular learners or groups of students and of providing them with a level of support that was responsive to their needs and to their linguistic abilities
was also highlighted by the facilitators, who spoke about how they adjusted their scaffolding according to students’ linguistic skills. Generally, the students with higher linguistic competency benefited from being exposed to more complex language structures and a wider lexical range that would challenge their reading comprehension skills and support the development of more advanced written language skills. The students with lower linguistic competency benefited from being introduced to new structures more gradually and needed more explicit assistance and feedback on their own linguistic production.

Some of the facilitators reflected on their role in providing process-oriented and motivational support to the collaborative groups. They pointed out that the level of procedural assistance provided to the individual groups depended on the type of difficulties that the students encountered in the process of developing the final presentation or while collaborating with their group members. In a significant number of cases, the facilitators did not need to provide this type of support because students were able to develop their final presentation independently and to collaborate successfully within their group without requiring any type of external mediation.

Similarly, the motivational support provided to the collaborative groups was not fixed but depended on students’ level of motivation and engagement with the tasks. The facilitators explained that, while they continued to provide ongoing encouragement and support to the collaborative groups for the entire duration of the two iterations, they needed to offer more specific motivational support to only some of the students during the first of the two iterations when those students seemed reluctant to start working on the tasks and to participate in the online discussions.

Finally, several facilitators emphasised the importance of contributing genuine social-oriented messages to their assigned group discussion forum to encourage the development of a positive personal relationship with the students and to help build familiarity and trust. In order to help build a friendly, non-hierarchical rapport with the students, it was also very important for the facilitators to frame their messages in a way that was not perceived as too formal or didactic but that encouraged open and spontaneous dialogue.

An analysis of the researchers’ notes and observations on the scaffolding role of the facilitators confirmed that the working relationship between the facilitators and their assigned groups was extremely successful, as all of the facilitators were able to provide
the five different categories of support identified from the data, depending on the specific needs of the individual students and on the challenges encountered by the groups while completing on the tasks. As noted in the researchers’ reflections and in the interviews with the facilitators, providing these types of support proved to be a relatively simple process for the facilitators recruited for this study, as they were all Italian native speakers with extensive language teaching experience, and were also very familiar with the subject of students’ research. Five of the nine participating facilitators also had prior experience of facilitating student online discussion forums and had developed some of the skills needed to support and encourage online interaction and participation.

It is interesting to note, however, that although the personal relationship between the facilitators and their individual groups was generally very positive, one aspect of the facilitators’ presence and contributions that could potentially have hindered the establishment of a friendly and open rapport with the students related to the level of formality of the language used by the facilitators in their messages. Two of the facilitators who supported students’ collaboration during the two iterations tended to frame their messages in a way that could have been perceived as overly formal and didactic compared to the more informal and spontaneous style of communication adopted by the other participating facilitators and the class teacher. The higher level of formality and the teacher-like nature of these facilitators’ contributions could have conveyed the impression that they were not particularly friendly and personable and could potentially have jeopardised the establishment of a good working relationship with their groups.

Analysis of the researcher’s notes and reflections also points to the fact that, in a number of cases, the students from the collaborative groups preferred to seek assistance from the class teacher rather than discussing their issues and problems with their assigned facilitators. This was due to the fact that the majority of the students already had a well-established working relationship with their teacher and were able to consult her easily both in and outside of class or via email communication. Some of the students commented that they felt more comfortable communicating with their teacher than writing to their facilitators because they had known her for longer and were familiar with her friendly manner and approachability.
The higher level of formality of some of the facilitators’ contributions and the fact that some of the students preferred to seek assistance from their teacher, rather than relying on their facilitators, did not seem to affect negatively the relationship between the facilitators and the students. Nevertheless, due to the online nature of the collaboration and to the fact that students would only be able to construct their facilitators’ personalities by reading their contributions, it proved crucial for the facilitators to endeavour to frame their messages in a way that would not be perceived as overly formal or didactic but that would favour the development of a personable and non-hierarchical relationship with the students.

**Design principles**

Table 8.8 presents a series of recommendations to support the role of native speaker facilitators recruited to assist students’ collaboration in an online community of learners and a series of design principles to guide language teachers in the process of selecting suitable facilitators and mentors.

<table>
<thead>
<tr>
<th>Element of scaffolding</th>
<th>Recommendations for effective scaffolding</th>
<th>Design principles</th>
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</thead>
<tbody>
<tr>
<td>1. Content-oriented</td>
<td>Advice for facilitators:</td>
<td>Recruit facilitators who:</td>
</tr>
<tr>
<td></td>
<td>• be knowledgeable about the content and subject of students’ research</td>
<td>• have first-hand experience of the subject of students’ research</td>
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<td></td>
<td>• offer a wide range of up-to-date information and ideas</td>
<td>• are familiar with the principles of good feedback practice</td>
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<td></td>
<td>• offer positive and constructive feedback and suggestions on ways to improve the content of the tasks</td>
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<td></td>
<td>• be respectful of students’ input and avoid casting judgements or criticising students’ decisions</td>
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<td></td>
<td>• encourage students to explore their own ideas and reflect critically</td>
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<td></td>
<td>• have students review their ideas and elaborate independently on the feedback received and take the responsibility for their own decisions</td>
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<td></td>
<td>• encourage discussion that leads to development and knowledge construction</td>
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<tr>
<td>Element of scaffolding</td>
<td>Recommendations for effective scaffolding</td>
<td>Design principles</td>
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<tr>
<td>2. Linguistic</td>
<td>Advice for facilitators:</td>
<td>Recruit facilitators who:</td>
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<td></td>
<td>• be active and contribute regularly to the online discussion</td>
<td>• are native speakers or very competent speakers of the target language</td>
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<td></td>
<td>• do not explicitly correct students’ writing but provide feedback and suggestions to guide learners in the process of self-correcting their own writing</td>
<td>• are able to adjust and modify their linguistic scaffolding depending on students’ level of competency</td>
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<td></td>
<td>• encourage students to use more advanced language structures and expand their vocabulary knowledge</td>
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<td></td>
<td>• encourage students to develop higher order thinking skills in the target language such as offering an opinion and analysing a problem</td>
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<tr>
<td>3. Process-oriented</td>
<td>Advice for facilitators:</td>
<td>Recruit facilitators who:</td>
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<td></td>
<td>• offer process-oriented advice and support on developing the different sections of the tasks</td>
<td>• are able to provide process-oriented advice and support</td>
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<td></td>
<td>• be available to mediate if the group has difficulties collaborating</td>
<td>• are familiar with the basic elements of collaborative work</td>
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<td>• encourage students to see other points of view</td>
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<td>4. Motivational</td>
<td>Advice for facilitators:</td>
<td>Recruit facilitators who:</td>
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<td></td>
<td>• prompt students to start working on the tasks early</td>
<td>• are encouraging and supportive</td>
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<td></td>
<td>• encourage online participation</td>
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<td></td>
<td>• provide ongoing encouragement</td>
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<tr>
<td>5. Social</td>
<td>Advice for facilitators:</td>
<td>Recruit facilitators who:</td>
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<td></td>
<td>• include personal off-task messages</td>
<td>• are able to develop and facilitate positive interpersonal relationships and are friendly and personable</td>
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<td></td>
<td>• encourage positive online working relationships with other participants</td>
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<td>• be aware that the way messages are framed affects students’ perception of the facilitator’s personality and the student’s inclination to communicate</td>
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<td>• use a friendly tone</td>
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<td></td>
<td>• avoid being too formal or didactic</td>
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<tr>
<td></td>
<td>• encourage the development of a non-hierarchical rapport</td>
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This chapter has investigated the role of the native speaker facilitators in supporting students in the process of completing authentic collaborative tasks in an online community of learners. The following chapter summarises the research study and findings and discusses its limitations, while proposing recommendations for further research.
Conclusion

This chapter presents a summary of the research study and findings, together with discussion of the limitations of the research and recommendations for further research. The thesis describes the conduct and findings of a study which used a design-based research approach to develop and implement an online community of learners within the context of an Italian as a second language university course. The iterative nature of the design-based research approach enabled the researcher to progressively test and refine the learning environment developed through two successive implementations. The findings of the first iterative cycle of the study informed the development of the second iteration. The overall findings enabled the researcher to offer a set of design principles that could guide the development and implementation of similar learning environments, and to further advance theory associated with the approach.

Summary of the study

The research was conducted according to four interrelated phases of the design-based research model proposed by Reeves (2006). During the first phase of the research the practical problem of limited authentic exposure to the target language through authentic and meaningful interaction with native speakers was identified and analysed in the context of an Italian as a second language university course in Australia. During this phase, the views of 10 lecturers and tutors in Australian universities were sought and considered in order to explore the nature, extent and parameters of the problem area in practice and to identify practical solutions and specific pedagogical strategies that could be used to attempt to solve them.

In the second phase of the study an online learning environment was designed and developed according to the critical elements and design principles identified from an in-depth literature review and the consultations with the practitioners. These principles
were derived from: Vygotsky’s sociocultural theory applied to second language learning; situated learning theory and a pedagogical model for the design and development of authentic e-learning contexts and authentic tasks; and the critical elements that guide the development of successful online communities of practice and communities of learners. During this phase, a learning management system was integrated into the design of a second and third year Italian language class to enable students to interact and collaborate with each other and with a group of selected native speaker participants through online asynchronous and synchronous communication tools and resources. Two authentic tasks, which incorporated the defining characteristics of authentic tasks outlined in the relevant literature, were designed and a group of native speaker participants was selected and invited to take part in the study to provide students with additional opportunities for target language use and to support and assist the collaborative completion of the tasks.

In the third phase of the research, two iterative cycles of testing and refinement of the solutions proposed in the second phase of the study were implemented within the tutorial component of an intermediate and advanced level Italian language university classroom. In each iterative cycle students were presented with an authentic scenario and were required to develop a final product which was the result of the collaboration within individual groups and with the whole class. The first iteration was conducted during the first six weeks of the university semester to determine the effectiveness of the online learning environment developed and to identify any issues or problems related to the design of the first authentic task, the collaborative work among community members, the technology used to support interaction and collaboration, and the role of the four native speaker facilitators who assisted students’ collaboration. The findings of the first iterative cycle also enabled the refinement of the second cycle of the study, which was conducted during the last six weeks of the same semester. During the second iterative cycle, data were collected which enabled investigation of the way the critical elements of authentic tasks provided opportunities for students’ learning, how students collaborated and used Computer Mediated Communication (CMC) features and resources as they worked on the tasks, and of the way the native speaker facilitators assisted students complete the authentic tasks.

During the fourth and final phase of the research, the findings of Phase 3 were documented and reflected upon in order to produce a new set of design principles and guidelines that could guide the development and implementation of similar learning
environments and could be referred to and followed by other language teachers interested in achieving similar objectives within their specific educational context.

**Findings of the study**

**Research question 1**

The first research question: *What elements of authentic tasks provide opportunities for students learning in an online community of learners?* investigated students’ views and opinions about the impact of each of these elements on their learning.

The findings suggest that the *real-world relevance* of the tasks motivated students to engage fully with the context of the activities, which was perceived and accepted as realistic and was relevant to their personal interests and experiences, and to integrate and transfer their current and past knowledge and experiences into the new scenarios. This process of integration and transfer supported the development of a range of practical, transferable skills and enabled students to construct new ideas and new knowledge. The real-world nature of the tasks also enabled students to be exposed to and gain an understanding of the target language as it is used in real-life situations and to apply the language structures and expressions learned in class or from the textbook and other resources, to a wide range of authentic communicative situations.

The *ill-defined* and *complex* nature of the tasks and the fact that they had to be investigated over a sustained period of time encouraged learners to explore complex and multifaceted scenarios and to identify and respond to the type of challenges likely to be encountered in real-world situations. By identifying the problems related to the tasks and by developing appropriate solutions and strategies to solve them, learners developed relevant problem-solving skills as well as time management and organisational skills.

The findings suggest that exposure to the *multiple perspectives* of other participants and access to *multiple resources* encouraged learners to widen and deepen their own individual views and perspectives and to develop a broader knowledge and understanding of a particular domain or situation. Importantly, access to multiple perspectives and multiple resources enabled learners to develop their target language comprehension skills and to be exposed to a broader variety of linguistic registers and communicative conventions.
Similarly, the findings on collaboration suggest that the collaborative nature of the tasks enabled students to engage in a process of collaborative dialogue and discussion which had a significant impact on the development of their target language communication skills and teamwork skills. In particular, the opportunity to collaborate with peers who had a higher level of linguistic proficiency, were more competent in the use of technology, or had developed effective organisational and time management skills enabled students to extend their skills beyond their regular level and progress through their zone of proximal development (ZPD).

The findings on reflection suggest that opportunity provided by the tasks to make choices had a positive impact on learners’ motivation and level of engagement with the tasks, as students felt that they had the freedom to pursue their own interests and select the most relevant and meaningful options and alternatives. The opportunity to reflect, both individually and collectively, through focus group and individual interviews and through reflective portfolio writing, impacted positively on students’ confidence in the value of their own ideas and in their ability to express them, and led them to a deeper level of self-awareness and self-understanding (critical awareness) of their own approaches and styles and of their own attitudes in relation to those of others.

The findings show that the element of integration and application across different subject areas enabled students to broaden their knowledge of different disciplines and to establish a connection between their previously acquired knowledge and the new learning.

The integration with assessment encouraged the development of skills and abilities that connected and transferred to the world beyond the context of the classroom and that could be used and applied in the future.

The fact that the tasks encouraged the development of polished products that were tangible and could be applied practically in context had a positive impact on students’ motivation to engage fully with the tasks and complete them.

The findings on competing solutions and diversity of outcome show that the openness of the tasks to multiple interpretations and diversity of outcomes encouraged learners to learn from the unique ideas and interpretations of others and to express themselves creatively.
Generally, all 10 critical elements of authentic tasks used to design and develop the two tasks presented in this study appear to have provided valuable opportunities for students’ learning.

This study supports the idea that each of the critical elements of authentic tasks can be used effectively as a framework for the development of an authentic learning environment which supports student learning through participation in collaborative, goal-oriented and realistic activities. When developed according to the defining characteristics of authentic tasks derived from the literature, the learning environment appears to support successfully the development of learners’ target language skills and the integration and transfer of a range of practical skills that connect and are transferable to the world beyond the classroom, such as problem solving, teamwork, time management and organisational skills. The authentic tasks also had a positive impact on learners’ motivation and encouraged them to express themselves creatively and broaden their knowledge and understanding of the discipline area while developing a deeper level of self-awareness and understanding.

Research question 2

The second research question: How do students collaborate and solve problems in an online community of learners? investigated the process that students followed to collaborate on the assigned tasks and the strategies that they used to solve the problems that arose during the collaboration.

The findings suggest that the collaborative groups approached the tasks systematically and appeared to follow a sequence of seven collaborative phases both during the first and second iterations: brainstorming ideas, forming groups, planning individual itineraries, negotiating roles and responsibilities, working independently, negotiating ideas and providing assistance and feedback, and developing the final product. The first three phases of the collaborative process were common to all of the collaborative groups. The fourth phase, which involved the negotiation of roles and responsibilities, was carried out using two different processes. The majority of the collaborative groups opted for an equal distribution of the work among the group members. Three of the nine collaborative groups preferred to allocate different tasks to individual group members according to their skills and abilities. The collaborative process of the final three phases did not vary significantly between individual groups.
The findings suggest that the most significant issues encountered by the collaborative groups occurred during the first iteration. These issues, which were present in three of the four collaborative groups, involved the unequal contribution of individual group members to the task, difficulties communicating in the target language and disagreement among students who held opposing views about the development of the task. The strategies that the collaborative groups employed to solve these issues included re-negotiating students’ roles and responsibilities within the individual groups to reflect their skills and abilities, facilitating communication within the groups through discussion and mediation among group members and, in some cases, allowing for the communication to take place in English as well as in Italian to facilitate the discussion.

When asked to reflect and comment on their collaborative experience of completing the first tasks during the focus group interviews, students identified some key lessons and derived some general principles to be followed during the collaborative work on the second task. These included forming smaller collaborative groups and allocating sufficient time to collaborative work, identifying compatible group members and endeavouring to develop positive interpersonal relationships within the group, accepting that each group member has different skills and abilities and can bring a unique contribution to the task, keeping an open mind about other participants’ opinions and ideas and a flexible approach to the development of the task.

The findings suggest that the collaborative process was generally more successful during the second iteration, as students had the opportunity to implement the strategies and principles derived from their reflections on the issues and challenges encountered during the collaboration on the first task, and were able to benefit from their prior experience. The findings also show that the three initial phases of the collaboration described earlier—brainstorming ideas, forming groups and planning individual itineraries—were completed by the collaborative groups considerably more quickly and more efficiently during the collaborative work on the second task. Students displayed a higher level of confidence, a markedly lower level of frustration in dealing with disagreement and an increased use of the target language when collaborating on the second task. They were also generally able to establish a more positive interpersonal rapport with the other members of their individual groups, which facilitated the collaborative process and assisted the groups to complete the task successfully.
Research question 3

In order to answer the third research question: *What was the nature and extent of students’ contributions to the Computer Mediated Communication features and resources provided to support interaction and collaboration in the online learning community?* it was necessary to carry out a content analysis of the participants’ contributions to the different CMC features and resources with the use of a classification scheme based on the content analysis model proposed by Henri (1992).

The findings of the content analysis suggest that there was considerable development and progress in the way students used the class discussion forums over the course of the two iterations. The first class discussion forum was used mostly to contribute preliminary introductory messages, in which students introduced themselves to the class. Students contributed a relatively low number of content-oriented messages with simple questions or requests for information, and a slightly higher number of social-oriented messages. The second class forum was used mostly to post content-oriented messages and introductory messages with a clear content-oriented focus, reflecting the stronger task focus of the second iteration and a positive shift in students’ level of confidence about presenting their ideas about the task to all the other community participants. The proportion of social-oriented messages was much lower, indicating students’ decreased need to use the class forum for social interaction.

The findings suggest that students’ preferred communication tool was the individual group discussion forum, which was used extensively by all collaborative groups particularly to contribute content and process-related messages. Social-oriented messages were present as the third most numerous category in all of the nine group discussion threads. As was the case with the class discussion threads, there was a substantial decrease in the presence and proportion of social messages from the first to the second iteration, a clear indication of the fact that, as time progressed and students grew to know their group members, they relied less on the individual threads and more on face-to-face communication for their social-oriented interaction with the other students. Students contributed only a small number of technical-related messages to their individual discussion threads, a reflection of the fact that they did not encounter many obstacles and technical difficulties in using the online features and resources to interact and collaborate in the online community.
The findings on students’ use of email communication show that email was the preferred communication tool for discussing the process-related aspects of the tasks, particularly during the first of the two iterations.

The findings of the content analysis show that the synchronous chat facility was the least used of all the communication tools provided to the students, due to the difficulties of synchronising online meetings with others across different time zones and to students’ anxieties about composing messages in real time in the target language. During these online sessions, students mostly discussed content and process-related issues and exchanged only a small proportion of social messages in the initial or final part of the sessions. The findings also show that the duration of the sessions increased substantially over the course of the two iterations, an indication that, as time progressed, the participating students felt increasingly more comfortable about communicating synchronously with their group members and became more interested in discussing a broader variety of issues or a particular issue at greater length and depth.

**Research question 4**

In order to answer the fourth research question: *How do native speaker facilitators support students in the process of completing authentic collaborative tasks in an online community of learners?* it was necessary to carry out a content analysis of the facilitators’ contributions to the class and the individual group discussion forums, and to develop a classifications scheme based on the content analysis model proposed by Henri (1992), similar to the model used to explore research question 3.

The findings of the content analysis of the facilitators’ contributions show that the majority of the support provided to the collaborative groups by the native speaker facilitators related to the content of the tasks. This support included providing relevant content information and feedback on students’ work, directing students to appropriate resources and assisting with the development and organisation of content. The second most significant aspect of the facilitators’ role involved providing linguistic support to their allocated groups by modelling correct and appropriate language use and providing regular opportunities for target language communication and interaction. In a small number of instances, the facilitators offered specific linguistic feedback and directed students to relevant linguistic resources. Another significant aspect of the facilitators’ role related to providing motivational support to the collaborative groups by prompting students to get started with the tasks and encouraging online participation. These
findings indicate that, as time progressed, the facilitators were able to reduce this type of motivational assistance and focus on offering alternative types of support. Procedural support, which involved assisting students with the development of the tasks and final presentations and facilitating collaborative work, was limited to a small number of instances, and messages of a social nature were exchanged mostly during the second iteration.

The feedback and comments collected from the students and the facilitators shed light on their experience and perception of the facilitators’ role over the course of the two iterations. Students commented very positively on the content-oriented and linguistic support provided by the facilitators and linked their assistance to the successful outcome of the tasks and their target language skills development. In particular, students appreciated the breadth of information provided by the facilitators, their knowledge and first-hand experience of the areas researched by the collaborative groups, and their ability to provide positive and constructive feedback. Students also valued the opportunity to communicate with competent native speakers in the target language and to be guided in the process of improving their writing skills without being explicitly corrected. A number of students also valued the assistance provided to the collaborative groups when students had difficulties negotiating the development of the tasks or communicating with others effectively, and all valued their encouragement and ongoing support throughout the duration of the project. Finally, the majority of the students commented positively about the social presence of the facilitators in the group forums and their friendly approach.

The facilitators’ reflections and comments about their role and experience of supporting the collaborative groups reinforced students’ comments. Among the crucial requirements of their role, they mentioned the importance of being familiar with the subject of students’ research and of being able to provide them with up-to-date content information and ideas that would motivate and inspire them to develop the tasks creatively and independently. They spoke about the importance of providing clear and constructive feedback and of encouraging critical thinking and self-regulated learning. All the facilitators highlighted the importance of encouraging the development of students’ communicative competence rather than focusing on grammatical correctness and of encouraging students to engage in more frequent and spontaneous interaction with others. Another crucial aspect highlighted in the facilitators’ role was to be able to assess students’ level of linguistic competence and to adjust their support to the specific
needs of individual students. Similarly, they indicated that the procedural assistance and motivational support provided should not be fixed, but needs to be adjusted depending on the types of difficulties and specific needs of the individual groups. Finally, several facilitators emphasised the importance of contributing genuine social-oriented messages to their assigned group forums to encourage the development of a positive personal relationship with the students and to help build familiarity and trust. In order to help build a friendly, non-hierarchical rapport with the students, it was also found to be very important for the facilitators to frame their messages in a way that is not perceived as too formal or didactic but that encourages open and spontaneous dialogue.

All of the native speaker facilitators supported students in the process of completing the authentic collaborative tasks, mostly by providing content-related assistance and by modelling correct and appropriate use of the target language rather than providing direct answers to students’ questions or specific linguistic corrections to their grammar. The majority of the facilitators also provided ongoing motivational support and encouraged online participation, particularly during the first iterative cycle of the study, but were able to reduce this type of assistance during the second iteration. Most facilitators contributed messages of a social nature to increase their social presence and encourage the development of positive personal relationships with the students. The least significant type of support was procedural in nature.

**Design principles for developing an online community of language learners**

The table that follows summarises the design principles and guidelines derived and refined from the findings of this study as presented in Chapters 5-8 and summarised above. These guiding principles are a theoretical and practical outcome of the present research and could be used and referred to by other language teachers interested in developing and implementing a similar online learning environment to facilitate second language development within their specific educational context.
Table 9.1  
*Design principles for developing an online community of language learners*

<table>
<thead>
<tr>
<th>Element of learning environment</th>
<th>Design principles</th>
<th>Guidelines for teachers</th>
</tr>
</thead>
</table>
| Real-world relevance, ill-defined nature, complexity, multiple resources and integration across different areas, competing solutions and diversity of outcomes | Design complex, ill-defined tasks which have real-world relevance and require students to use and transfer prior knowledge and experience to the new scenarios | • present complex, open-ended tasks in the form of scenarios  
• do not provide step-by-step instructions  
• allow students to encounter problems and find solutions  
• encourage students to select and use relevant information and authentic resources |
| Multiple perspectives, collaboration and reflection | Design tasks which require students to collaborate with peers and native speakers of the target language and to contribute and integrate different perspectives and points of view | • have students work in collaborative groups to enable the expression and sharing of different perspectives and points of view  
• encourage the interaction and active participation of all students  
• organise discussions with the collaborative groups to enable collective reflection on lessons learned and future strategies  
• highlight the importance of good time management and encourage students to set deadlines and be accountable for them  
• encourage students to be proactive in assisting others and to provide positive and constructive feedback |
| Integration with assessment and development of polished products | Design tasks which require authentic assessment of learning within the tasks and require students to create a finished product | • integrate the assessment with the tasks and require students to develop a final product that is shared and is relevant |
| Technology and use of CMC features | Integrate a LMS which provides a combination of CMC features such as email lists, web-based asynchronous threaded discussion forums and synchronous text communication via instant messaging and chat spaces to enable interactivity and collaboration within the online community of learners | • monitor all participants’ contributions and encourage students to regularly access the online resources and contribute to the discussion  
• post and encourage participants to contribute some personal off-task messages to promote social engagement and create the sense of a vibrant community  
• encourage students to focus on the content of their contributions rather than on grammatical correctness and avoid explicit corrections of students’ target language use |
| Scaffolding role of native speaker participants (in online learning environments) | Invite native speaker participants into the learning community to enable collaboration and social interaction with competent target language speakers and to support the development of students’ linguistic skills | • recruit facilitators who are native speakers or very competent speakers of the target language and have first-hand experience of the subject of students’ research  
• encourage facilitators to adjust and modify their linguistic scaffolding depending on students’ level of competency  
• encourage facilitators to offer positive and constructive feedback and suggestions on students’ contributions and ideas  
• recruit facilitators who are friendly and personable as well as encouraging and supportive |
Limitations of the study

The findings of this research support the design and implementation of a model which used a design-based research approach to develop and implement an online community of learners within the context of an Italian as a second language university course. However, three aspects of the study may have influenced the research findings.

A first limitation of the study is that, due to the timeframe of the project, it was possible only to test and refine the learning environment in two successive implementations. A third, and ideally a fourth implementation would have enabled the researcher to refine the learning environment further by assisting students in the process of developing effective collaborative strategies and by encouraging participants to make full use of all the CMC features and resources provided to facilitate interaction and collaboration. This is an important consideration when using a design-based research approach, as arguably many iterations and refinements are required to create robust conclusions. Nevertheless, the findings of the two iterations are worthwhile, and further implementations can be conducted beyond the conduct and scope of this doctoral study (cf. Herrington, McKenney, Reeves & Oliver, 2007).

A second limitation relates to the fact that in a study such as this, qualitative data gathering including interviews can lead to consolidation of knowledge through reflection and articulation of understanding. The specific interview questions may have facilitated students’ reflection on specific aspects of their learning and may have encouraged students to understand and appreciate the value of each element in a way that would have not normally occurred. This effect may have been amplified by the fact that student reflection was encouraged through a portfolio writing task.

A third limitation is that the native speaker facilitators recruited to support students’ collaboration were not provided with specific guidelines on how to assist students and facilitate participation in the authentic tasks. More clearly defined guidelines and instructions would have enabled a more valid evaluation of the facilitators’ role by narrowing the focus of the content analysis and by reducing the impact of the facilitators’ style and personality on the type and extent of the support provided to the students.

Conversely, limitations that impacted on the current study also reveal areas for further research, and these are outlined in the next section.
Recommendations for future research

The present research provided the opportunity to study in-depth a group of second language students as they interacted and collaborated in an online learning environment in order to complete two authentic tasks with the support of selected native speaker facilitators. The findings presented in this thesis suggest the following potential areas of further investigation:

- How the 10 defining elements of authentic tasks determined from the literature could be used as a frame of reference for the design of other language-based authentic tasks to provide increased opportunities for interaction and collaboration in the target language.

- How specific guidelines and strategies to support student collaborative processes might impact on the quality and quantity of interaction in an online community of learners.

- How advanced CMC features could be integrated into the learning environment to support collaboration and interaction in the target language.

- How language teachers could better support the scaffolding role of the native speaker facilitators in an online community of second language learners.

Concluding remarks

The present research is indicative of the potential of using design-based research to develop and implement an online community of second language learners that enables interaction and collaboration with native speakers of the target language through participation in technology-supported authentic and meaningful tasks. The findings presented in this chapter suggest that incorporating the 10 critical elements of authentic tasks into the online learning environment of this study supports student learning in many different ways, particularly in relation to the development of learners’ target language skills and the integration and transfer of practical skills such as problem solving, teamwork, time management and organisational skills, as well as having a positive impact on learners’ motivation and commitment to completing the tasks. The findings also show that there was considerable development in students’ collaborative processes over the course of the two iterative cycles of the study, this being a positive result of their ability to implement the strategies derived from the individual and
collective reflective processes and to establish an increasingly more positive interpersonal working rapport with other group members. Finally, the findings of the content analysis of the participants’ contributions to the online features and tools provided shed light on the potential of integrating CMC features to enable interaction and collaboration in an online learning environment and on the crucial role played by the native speaker facilitators in supporting students’ collaboration in an online community of practice. The major implication of this research is that a learning environment which supports the development of an online community of learners through participation in authentic tasks in collaboration with other learners and native speakers of the target language can be designed and implemented effectively by second language educators to facilitate second language development.
References


300


Rovai, A. P. (2003). In search of higher persistence rates in distance education online programs. The Internet and Higher Education, 6(1), 1-16.


Appendices
Guidelines for student participants

Guidelines for students

Introduction

As part of the assessment component for this course you will be required to complete two authentic tasks in collaboration with your classmates and with a group of Italian native speakers. The two tasks will need to be carried out entirely in Italian and will represent an opportunity for you to use the language in an authentic context, but also to communicate with Italian native speakers and enhance your language learning experience. The first task will be presented to you in Week 2 of the semester and the second task in Week 8.

Getting started

In order to complete the tasks, you will need to communicate and collaborate with the other students and with the native speakers using the online tools and resources of the learning management system Janison. This system will allow you to post messages to a class discussion forum and to individual group discussion forums, exchange emails and chat with the other community members. You will need to access the Janison website via the Faculty of Education Homepage. You can log on with your student username and your password.

University homepage ➔ Faculties ➔ Faculty of Education ➔ Janison logon

Please refer to the Janison Student QuickStart document and follow the instructions on how to log on and use the online resources available.

First introductory message

In Week 2 you will need to post an introduction of yourself in ITALIAN to the class discussion forum. This first message will need to be about a page long and will need to include some information about yourself and some ideas on how you might want to approach the assigned task. You need to post this message before the end of Week 2. The idea is that each student gets to know the other community participants and that you start negotiating your ideas on how to complete the task in collaboration with others.
Collaborative group work

In Week 2 you will also need to divide yourself into small groups of 3 or 4 students and decide what each group needs to do in order to complete the assigned task. Once the collaborative groups will be established, each group will be assigned a facilitator to assist with the collaborative completion of the activities. You will be able to communicate and collaborate with the members of your group and your allocated facilitator through your individual group discussion forum and with the rest of the class through the class discussion forum.

Composing your messages

When you write your messages in Italian it is important to use a language that you are familiar and comfortable with. Rather than trying to compose grammatically perfect messages, aim at writing something that is stylistically Italian. Keep the language simple and clear and try to explain things in a direct, straightforward manner. Remember that your messages will need to form a coherent text that is understood by others. It is also important to respond logically to questions posed by others.

What is expected? How will the collaborative work be marked?

The most important aspects of this exercise are communication and active participation in the collaborative tasks and the development of a final product that will be the result of your collaborative work and efforts. A group mark for your final presentation will be assigned by your teacher and by the students from the other collaborative groups using the following criteria:

1. Clarity and correctness of expression
2. Logical, coherent development and organisation of the itinerary planned
3. Depth and scope of presentation
4. Pronunciation and fluency
5. Range of vocabulary and expressions
6. Spontaneity (i.e. the speaker only referred briefly to notes)

You will also need to keep a reflective portfolio of your learning experiences of participating in community activities both online and face-to face. You will need to submit your portfolio with your reflections on your learning and on your contribution to the collaborative activities in Week 7 and in Week 13 of the course. Please refer to the reflective portfolio document for more information.
APPENDIX 2

Information on the reflective portfolio

The reflective portfolio

What is the purpose of writing a portfolio?

• Tool for assessment of your progress
• Reflection on learning experience
• Reflection on group work and on interaction with others
• Promote critical thinking
• Promote a deep approach to learning
• Develop writing skills in Italian
• Responses to the course and the assigned tasks

These are only some of the possible benefits of keeping a portfolio.

A few important points:

• Portfolios are a common form of assessment in many fields and not just with humanities
• It can take a while to become comfortable with keeping a portfolio
• It is better to write frequently and a little at a time, than force yourself to write an a long entry at a given moment
• Keeping a portfolio is totally different to taking notes in lectures and writing essays
• The writing style should be casual and in the first person
• Good portfolios can be long or short and so can poor portfolios
• I will not assess grammar or spelling in the portfolios
• You can write in English or in Italian or both – whichever you prefer.
What will I be looking for?

- **Quality** not quantity
- **Width** – refers to the breadth of topics that you cover
- **Depth** – this means a more thorough and comprehensive approach which tries to make connections in other areas of learning and experience

When should you write your portfolio?

- Ideally you should to write your portfolio every time you work on the collaborative tasks and you interact with other students or facilitators both online and face-to-face. However, if this is not possible, you can compress several days into one entry but it would be helpful to put the day and date above each one to give me an accurate idea of when each entry was written.

What should you write in your portfolio?

- You can write an account of your experience of collaborating with other learners and the facilitators to complete the tasks and comment on the difficulties you are encountering and on your progress with the tasks.
- You can reflect on any aspect which you think might be significant and/or interesting about the way you and your group have approached the tasks and about the experience of interacting with other students and the Italian native speakers both online and face-to-face.
- You can comment on your own experience of using the target language: the difficulties you are encountering, problems of finding the right expression in different situations, embarrassing breakdowns in communication, feelings of satisfaction at your own progress, the new words and expressions which you have learned.
- You might also want to add drafts from your correspondence with other group members, information on useful websites that you have come across, anything which has struck you as interesting and important either in researching information for completing the tasks or in discussing your findings with others.
- You can include a log of your participation and interaction with other members of the online community and comment on it.
How will the portfolios be marked?

I will be collecting your portfolios in Weeks 7 and 13 of the semester and I will assess them using the following criteria:

1. Content
2. Depth
3. Ability to reflect on your learning
4. Ability to reflect and comment on your interactions and collaboration with others

I will not assess grammatical correctness and spelling errors, however your message must be clear and readable.
APPENDIX 3

**Australian participant information letter**

**Investigating an online community of second language learners using design-based research**

Dear Participant,

This letter is to inform you of the nature and purpose of the research being completed at the University of [...]. The study is entitled: *Investigating an online community of second language learners using design-based research*. Mariolina Pais Marden is conducting this study as part of her PhD research, which aims to design and implement an online community of learners within the context of an Italian as a second language university classroom, according to the principles that guide community development and authentic learning.

The research will endeavour to produce a model for the development and implementation of an online community of second language learners, which combines a community of practice approach with the use of authentic tasks, and to develop guidelines to be followed by other language teachers interested in implementing a similar community within their educational contexts. This will be done through an in-depth literature review, and through interviews and observation of class discussions, and through an analysis of online interactions and students’ work. You have been selected for the study because the level of your linguistic skills would enable you to become an effective member of the online community and to complete an authentic activity in collaboration with Italian native speakers.

As part of the assessment component for this course, you will be required to participate in the activities of the online community of second language learners and interact with a number of Italian native speakers, using a variety of web-based tools and resources. You will be required to complete two authentic activities in collaboration with other community members, which will involve planning and organising a trip to Australia and a trip to Italy, and developing a comprehensive travel guide.
If you agree to take part in the study you will be interviewed and recorded on digital audio recorder in order to analyse your comments and observations. The interview will take about 20-30 minutes. You will be observed during the class discussions and recorded on digital audio recorder in order to understand what are the best conditions for enabling collaboration and interaction in an online learning environment. Online interactions with other community members and your written work will also be analysed to help establish patterns of participation in community activities. Data will be collected using qualitative research techniques and will be stored securely at the […]

It is unlikely that there will be any discomfort to you, or any risks. Confidentiality is assured, and you will not be identified in any part of the research without your permission. You may enjoy the experience of becoming a member of an online community and interacting with Italian native speakers in the language you have been learning, and of knowing that your participation in the activities and your work are contributing to the development of this research approach.

You need to be assured that you are free to withdraw from the study at any time if you are concerned about any aspects of its conduct, any data contributed to that point may also be withdrawn. If you do not wish your written work and interactions to be analysed as part of the research you are free to choose so. Your decision will not affect your marks for the course in any way.

If you have any inquiries, you can direct them to me, Mariolina Pais Marden, […], or to my supervisor, Associate Professor Jan Herrington, […]. If you have any problems associated with the conduct of this project, please contact the Ethics Officer of the Human Research Ethics Committee.

If you agree to take part in the research, please sign the consent form attached.

Mariolina Pais Marden
APPENDIX 4

Australian participant consent form

Investigating an online community of second language learners using design-based research

Australian Participant Consent Form

I have been given information about Investigating an online community of second language learners using design-based research and discussed the research project with Mariolina Pais Marden who is conducting this study as part of her PhD research, which aims to design and implement an online community of learners within the context of an Italian as a second language university classroom.

I understand that, if I consent to participate in this project, I will be asked to take part in an interview that is expected to last about 20-30 minutes. I will also be observed during the class discussions and recorded on digital audio recorder. I understand that my written work and the online interactions will also be analysed by the researcher.

The data gathered by the researcher will only be used for the purpose of the research and will be remain confidential. I will not be named in any publication or website.

I have been advised of the potential risks and benefits associated with this research, and have had an opportunity to ask the researcher any questions I may have about the research and my participation.

I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdrawal of consent will not affect my marks for the course or the viability of the research.

If I have any enquiries about the research, I can contact Mariolina Pais Marden or Associate Professor Jan Herrington. If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer of the Human Research Ethics Committee.
By signing below I am indicating my consent to participate in the research entitled
**Investigating an online community of second language learners using design-based research** conducted by Mariolina Pais Marden as it has been described to me in the information sheet and in discussion with the researcher. I understand that the data collected from my participation will be used for data analysis, and publication of findings in journals and conference proceedings, and I consent for it to be used in that manner.

Signed...........................................................................

Date..............................................................................

Name (please print)..............................................................................
Guidelines for facilitators: Task 1

As part of the assessment component for this course students are required to complete an authentic task in collaboration with their classmates. The task requires students to plan and organise a four-week exchange trip to Australia for a group of 15 Italian university students and to develop an itinerary and a comprehensive travel guide in the target language. Your role as a native speaker participant will be to support one of the collaborative groups of students in the process of completing the assigned task.

Getting started

In order to assist your allocated collaborative group, you will need to communicate with the students using the online tools and resources of the learning management system Janison. This system will allow you to post messages to a class discussion forum and to your individual group discussion forum, exchange emails and chat with the other students in your group and with the other community members. To access the Janison website click on the link:

http://www.uow.edu.au/educ/janison/

You can then log on using the following username and password:

username: …
password: …

Please refer to the Janison Student QuickStart document for more information on how to log on, change your password and use the online resources available. Once you have logged on, you will be able to start contributing your messages to the discussion forums. Please post a first introductory message of yourself to the class discussion forum before the end of Week 2 of the course.
Guidelines for supporting students’ collaboration

1. Be familiar with the online features and resources available in the course website.
2. Visit the course website daily and be available to students at all times.
3. Respond promptly to students’ requests for assistance.
4. Initiate assistance by asking students if they need any help but do not impose.
5. Provide assistance and gentle guidance to help students complete the task but do not supply students with solutions or impose ideas.
6. Ask questions and request clarification as needed.
7. Ensure that all students in the group are contributing to the online discussions.
8. Provide feedback on students’ language use but do not provide explicit corrections of grammar errors.
9. Ask questions to encourage students to explain or clarify their contributions if they are not clear or coherent.
10. If a problem emerges, do not single out individual students but give advice to the whole group.
11. Provide positive feedback and ongoing encouragement.

Guidelines for facilitators: Task 2

As part of the assessment component for this course students are required to complete an authentic task in collaboration with their classmates. The task requires students to plan and organise a four-week exchange trip to Italy for all the students in the class and to develop an itinerary and a comprehensive travel guide in the target language. Your role as a native speaker participant will be to support one of the collaborative groups of students in the process of completing the assigned task.

Getting started

In order to assist your allocated collaborative group, you will need to communicate with the students using the online tools and resources of the learning management system Janison. This system will allow you to post messages to a class discussion forum and to your individual group discussion forum, exchange emails and chat with the other students in your group and with the other community members. To access the Janison website click on the link:
http://www.uow.edu.au/educ/janison/

You can then log on using the following username and password:
username: … password: …

Please refer to the Janison Student QuickStart document for more information on how to log on, change your password and use the online resources available. Once you have logged on, you will be able to start contributing your messages to the discussion forums. Please post a first introductory message of yourself to the class discussion forum before the end of Week 8 of the course.

**Guidelines for supporting students’ collaboration**

1. Be familiar with the online features and resources available in the course website.
2. Visit the course website daily and be available to students at all times.
3. Respond promptly to students’ requests for assistance.
4. Initiate assistance by asking students if they need any help but do not impose.
5. Provide assistance and gentle guidance to help students complete the task but do not supply students with solutions or impose ideas.
6. Ask questions and request clarification as needed.
7. Ensure that all students in the group are contributing to the online discussions.
8. Provide feedback on students’ language use but do not provide explicit corrections of grammar errors.
9. Ask questions to encourage students to explain or clarify their contributions if they are not clear or coherent.
10. If a problem emerges, do not single out individual students but give advice to the whole group.
11. Provide positive feedback and ongoing encouragement.
APPENDIX 6

Information letter for the facilitators

Investigating an online community of second language learners using design-based research

Information Letter for the Facilitators

Dear Participant,

This letter is to inform you of the nature and purpose of the research being completed at the University of …. The study is entitled: *Investigating an online community of second language learners using design-based research*. Mariolina Pais Marden is conducting this study as part of her PhD research, which aims to design and implement an online community of learners within the context of an Italian as a foreign language university classroom, according to the principles that guide community development and authentic learning.

The research will endeavour to produce a model for the development and implementation of an online community of second language learners, which combines a community of practice approach with the use of authentic tasks, and to develop guidelines to be followed by other language instructors interested in implementing a similar community within their educational contexts. This will be done through an in-depth literature review, and through interviews, questionnaires and observation of class discussions, and through an analysis of online interactions and students’ work. You have been selected for the study because, being a native speaker of Italian, you would be able to assist a group of students of Italian in the task of completing an authentic task in collaboration with other students as well as facilitate their learning experience.
As part of the assessment component for this course, students will be required to and participate in the activities of the online community of learners and interact with other students and with a native speaker facilitator, using a variety of web-based tools and resources. Learners will need to organise themselves into small groups and define the tasks required to complete two authentic activities in collaboration with other community members. The activities will involve planning and organising a trip to Australia and a trip to Italy, and developing an itinerary and a comprehensive travel guide.

As facilitator of a small group of students, you will be asked to assist learners complete the authentic task as well as support and encourage their interactions and participation in community activities. Depending on how students decide to approach the activity, you could help them define the tasks and sub-tasks required to complete the project by asking them questions that will encourage them to investigate different aspects of the problem and explore various resources as well as clarify their ideas. You could also provide students with feedback on their work and with suggestions on how to overcome some of the difficulties that they might encounter.

If you agree to take part in the study, you will need to liaise with the researcher for the duration of the research. You will also be interviewed and recorded on digital audio recorder in order to analyse your comments and observations on the teaching and learning experience. The interview will take about 20-30 minutes. Your contributions to the group forums and the online interactions with the students will also be analysed to help establish patterns of students’ participation in community activities and to understand what are the best conditions for enabling collaboration and interaction in an online environment. Data will be collected using qualitative research techniques and will be stored securely at the University of […].

It is unlikely that there will be any discomfort to you, or any risks. Confidentiality is assured, and you will not be identified in any part of the research without your permission. You may enjoy the experience of becoming a member of an online community of learners of Italian and assisting students to learn through participation in collaborative activities and interaction in the target language, and also of knowing that your participation and assistance are contributing to the development of this research approach.

You need to be assured that you are free to withdraw from the study at any time if you are concerned about any aspects of its conduct, any data contributed to that point may also be withdrawn. If you do not wish your online contributions and interactions with the students to be analysed as part of the research you are free to choose so.
If you have any inquiries, you can direct them to me, Mariolina Pais Marden, or to my supervisor, Associate Professor Jan Herrington. If you have any problems associated with the conduct of this project, please contact the Ethics Officer of the Human Research Ethics Committee.

If you agree to take part in the research, please sign the consent form attached.

Mariolina Pais Marden
APPENDIX 7

Consent form for the facilitators

Investigating an online community of second language learners using design-based research

Consent Form for the Facilitators

I have been given information about *Investigating an online community of second language learners using design-based research* and discussed the research project with Mariolina Pais Marden who is conducting this study as part of her PhD research, which aims to design and implement an online community of learners within the context of an Italian as a second language university classroom.

I understand that, if I consent to participate in this project, I will assist learners complete an authentic task as well as support and encourage their interactions and participation in the activities of an online community of learners. I will also be asked to take part in an interview that is expected to last about 20-30 minutes. I understand that my contributions to the group forums and the online interactions with the students will also be analysed by the researcher.

The data gathered by the researcher will only be used for the purpose of the research and will remain confidential. I will not be named in any publication or website.

I have been advised of the potential risks and benefits associated with this research, and have had an opportunity to ask the researcher any questions I may have about the research and my participation.

I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdrawal of consent will not affect the viability of the research.

327
If I have any enquiries about the research, I can contact Mariolina Pais Marden or Associate Professor Jan Herrington. If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer of the Human Research Ethics Committee.

By signing below I am indicating my consent to participate in the research entitled *Investigating an online community of second language learners using design-based research* conducted by Mariolina Pais Marden as it has been described to me in the information sheet and in discussion with the researcher. I understand that the data collected from my participation will be used for data analysis, and publication of findings in journals and conference proceedings, and I consent for it to be used in that manner.

Signed

Date

Name (please print)
### Schedule, classification and rationale of focus group interview questions

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background information</strong></td>
<td>The purpose of this focus group interview is to gather some information that will assist me and other language teachers to develop and implement an online community of second language learners and to plan and structure an authentic activity to be completed collaboratively. As students who have participated in this study during the first part of the semester, you are in a good position to describe your experience and reflect on it. Explain that the interview will be audio recorded and that participants have the right to withdraw at any time if they wish to do so.</td>
</tr>
<tr>
<td><strong>Background information to identify the collaborative group</strong></td>
<td>Ask name, name of collaborative group and name of facilitator</td>
</tr>
<tr>
<td><strong>Authentic activity</strong></td>
<td>What did you think of the activity that you were asked to complete?</td>
</tr>
<tr>
<td>Open-ended opinion question on the activity</td>
<td>What did you like about it? What did you dislike about it?</td>
</tr>
<tr>
<td>Feeling questions aimed at finding out the group’s emotional response to the activity.</td>
<td>How did you go about completing the task? What stages were involved in completing it?</td>
</tr>
<tr>
<td>Experience questions aimed at eliciting information on how the task was completed and on the strategies the students may have used in completing it</td>
<td>Was the time allocated to complete the activity adequate? Was it too long? Was it too short?</td>
</tr>
<tr>
<td>Questions to find out whether the time allocated to complete the activity was adequate</td>
<td>If you could change some aspects of the authentic task what would you make different?</td>
</tr>
<tr>
<td>Opinion question which seeks recommendations for change or improvements to the authentic task</td>
<td>During the last six weeks you have worked together in order to complete the authentic activity. How have you felt about this collaboration?</td>
</tr>
<tr>
<td>Feeling question to find out whether learners enjoyed working as part of a team</td>
<td>What were the advantages of working in a group? What were the disadvantages?</td>
</tr>
<tr>
<td>Presupposition questions to elicit students’ opinion on working in a collaborative group</td>
<td>How did you go about negotiating your roles and responsibilities within the group?</td>
</tr>
<tr>
<td>Question aimed at eliciting information on how roles and responsibilities were negotiated among group members</td>
<td>What kinds of problems or difficulties did you have during the collaboration?</td>
</tr>
<tr>
<td>Experience question to elicit information on problems or difficulties of the collaboration within the group</td>
<td></td>
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<tr>
<td>Rationale</td>
<td>Question</td>
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<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Experience question to elicit information on the strategies the students may have used to solve the problems and difficulties of collaborating in the group</td>
<td>What types of strategies did you employ/develop in order to solve those issues/problems?</td>
</tr>
<tr>
<td>Opinion question which seeks recommendations for change or improvements to the group work</td>
<td>If you could change some aspects of the group work, what would you change?</td>
</tr>
</tbody>
</table>

**Technology**

| Feeling question to find out how learners felt about using the online resources of the course website | During the last six weeks you have communicated with other students and with your facilitator using the communication tools and resources of the course website. How have you felt about using these online resources? |
| Questions to elicit information on the group’s use of the communication tools and resources provided in the course website | How did you use the communication tools and resources provided in the course website? Which tools and resources did you find more useful? Why? |
| Experience question to elicit information on problems and difficulties of using the online resources | What kinds of problems or difficulties did you have using the online resources provided? |
| Opinion question which seeks recommendations for change or improvements to the technology used | If you could change some aspects of the technology used, what would you make different? |

**Scaffolding**

| Open-ended opinion question to find out whether the group valued having access to a facilitator in the online environment | What did you think of having a native speaker facilitator available to assist you as you worked on completing the collaborative activity? |
| Feeling questions aimed at finding out the group’s emotional response to the presence of the facilitators in the online community | What did you like about the presence of the facilitator in the group forum? What did you dislike? |
| Experience questions to elicit information on the types of support provided by the facilitators to the groups | What types of support or assistance did your group’s facilitator provide as you worked on completing the task? Can you provide some examples? |
| Question aimed at finding out the respondents’ opinion on the effectiveness of the facilitators’ support | How effective was the assistance provided by your facilitator? |
| Experience question to elicit information on problems and difficulties of collaborating with the facilitators | What kinds of problems or difficulties did you have in working with your group’s facilitator? |
| Opinion question to elicit the respondents’ advice for future facilitators | What advice would you offer to facilitators who might support the collaborative groups in the second activity? |

**Closing comments**

| Final open-ended question to obtain any further comments | You have been very helpful. Do you have any other thoughts or feelings associated with this project? |
| Closing remarks and thanks | Thank you for your time |
## Schedule, classification and rationale of student interview questions

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td></td>
</tr>
<tr>
<td>Introduction and explanation of the purpose of the interview</td>
<td>The purpose of this interview is to gather some information that will assist me and other language teachers to develop and implement an online community of second language learners and to plan and structure an authentic activity within their specific educational context. As a student who has participated in this study during the course of the semester, you are in a good position to describe your experience and reflect on it. Explain that the interview will be audio recorded and that participants have the right to withdraw at any time if they wish to do so.</td>
</tr>
<tr>
<td><strong>Background information to identify the participant</strong></td>
<td>Ask name, name of collaborative groups and name of facilitators</td>
</tr>
<tr>
<td><strong>Authentic activity</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question on the activities</td>
<td>What did you think of the activities that you were asked to complete?</td>
</tr>
<tr>
<td>Feeling questions aimed at finding out the respondent's emotional response to the two authentic activities.</td>
<td>What did you like about them? What did you dislike?</td>
</tr>
<tr>
<td>Transition statement to move into the discussion of the specific characteristics of authentic activities</td>
<td>I would like now to ask you your opinion on some of the specific characteristics of authentic activities</td>
</tr>
<tr>
<td><strong>1. Real-world relevance</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the real-world relevance of the tasks</td>
<td>The activities that you were asked to complete had real-world relevance and mirrored real-life tasks. What did you think of completing these types of real-life activities?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the differences between real-world tasks and traditional textbook-type tasks</td>
<td>How was working on these tasks different from completing textbook-type exercises?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of the real-world relevance of the tasks on learning</td>
<td>How did the real-world relevance of the tasks impact on your learning?</td>
</tr>
<tr>
<td>Rationale</td>
<td>Question</td>
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<tr>
<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>2. Ill-defined nature of the activities</strong></td>
<td></td>
</tr>
<tr>
<td>Feeling question aimed at finding out the respondent’s emotional response to the unstructured nature of the tasks</td>
<td>The two activities were ill-defined and unstructured and required you to define the tasks and sub-tasks needed to complete them. How did you feel about the fact that the tasks were ill-defined and unstructured? Did you also feel the same way at the end?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of the ill-defined and unstructured nature of the tasks on learning</td>
<td>How did this aspect of the tasks impact on your learning?</td>
</tr>
<tr>
<td><strong>3. Complexity and sustained effort</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the complexity and sustained effort required to complete the tasks</td>
<td>The two activities were complex enough to be investigated over a sustained period of time. What did you think of having to complete each activity over a period of time of five weeks?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of complexity and sustained effort on learning</td>
<td>How did this aspect of the tasks impact on your learning?</td>
</tr>
<tr>
<td><strong>4. Multiple perspectives and resources</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values having access to the perspectives of others</td>
<td>The two activities gave you the opportunity to examine the tasks from different perspectives. What did you think of having access to the different perspectives of the other participants?</td>
</tr>
<tr>
<td>Feeling question aimed at finding out the respondent’s emotional response to the opportunity to contribute her/his own perspective</td>
<td>How did you feel about being able to contribute your own perspectives to the development of the tasks?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of multiple perspectives on learning</td>
<td>How did these aspects of the tasks impact on your learning?</td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the opportunity to access and use a variety of resources</td>
<td>The two activities provided you with the opportunity to access and use a variety of resources rather than being limited to pre-selected references. What did you think of using a variety of resources in order to complete the tasks?</td>
</tr>
<tr>
<td>Questions to ascertain the impact of accessing multiple resources on learning</td>
<td>Did you feel that this aspect of the tasks has enhanced your learning experience? In what ways?</td>
</tr>
<tr>
<td><strong>5. Collaboration</strong></td>
<td></td>
</tr>
<tr>
<td>Background questions to ascertain the respondent’s level of experience of collaborative work</td>
<td>In order to complete the tasks you worked collaboratively with other students in the class and with a native speaker facilitator. Have you ever worked collaboratively before? If so, in what contexts? Can you please describe your experiences?</td>
</tr>
<tr>
<td>Feeling question to find out whether the respondent enjoyed working collaboratively</td>
<td>How have you felt about the opportunity to collaborate with other students in the class while working on the tasks?</td>
</tr>
<tr>
<td>Presupposition questions to elicit the respondent’s opinion on working in collaborative groups</td>
<td>What were the advantages of working in groups? What were the disadvantages?</td>
</tr>
<tr>
<td>Questions to ascertain the impact of the opportunity to collaborate on learning</td>
<td>Did you feel that the collaboration has enhanced your learning? In what ways?</td>
</tr>
<tr>
<td>Rationale</td>
<td>Question</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td><strong>6. Reflection</strong></td>
<td></td>
</tr>
<tr>
<td>Feeling question aimed at finding out the respondent's emotional response to the opportunity to make choices</td>
<td>The activities were designed to enable you to actively make choices both individually and collectively. How have you felt about the opportunity to make choices in order to complete the tasks?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of making choices on learning</td>
<td>How did the opportunity to make choices impact on your learning?</td>
</tr>
<tr>
<td>Feeling question aimed at finding out the respondent's emotional response to the opportunity to reflect</td>
<td>The activities were designed to enable you to reflect on your learning experience. How have you felt about the opportunity to reflect on your learning as you worked towards completing the tasks?</td>
</tr>
<tr>
<td>Questions to elicit information on the aspects of the task which encouraged students’ reflection</td>
<td>Which aspects of the tasks encouraged you to reflect on your learning? Can you provide some examples?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of reflection on learning</td>
<td>How did the opportunity to reflect impact on your learning?</td>
</tr>
<tr>
<td><strong>7. Integration and application across different subject areas</strong></td>
<td></td>
</tr>
<tr>
<td>Feeling question aimed at finding out the respondent's emotional response to the opportunity to integrate and apply knowledge across different subject areas</td>
<td>The two activities were not confined to a single subject area but could be integrated and applied across different disciplines. Did you feel that working on the two activities encouraged you to apply knowledge from other subject areas? Can you provide some examples?</td>
</tr>
<tr>
<td>Feeling question aimed at finding out the respondent's emotional response to the opportunity to learn across different subject areas</td>
<td>Did you feel that working on these tasks encouraged you to learn in other subject areas? Can you provide some examples?</td>
</tr>
<tr>
<td><strong>8. Integration with assessment</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the fact that assessment was integrated with the tasks to reflect real-life assessment</td>
<td>What did you think of the fact that assessment was integrated with the tasks to reflect real-life assessment?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the differences between integrated assessment tasks and traditional assessment tasks</td>
<td>How was this different from sitting an exam or taking a test?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of the integration of assessment on learning</td>
<td>How did this aspect of the task impact on your learning?</td>
</tr>
<tr>
<td><strong>9. Development of polished products</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values having to develop a finished product</td>
<td>What did you think of the fact that you were required to develop a final product that was valuable and complete in its own right?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the importance of having a final product to develop</td>
<td>How important do you think it was to have a final product to develop as a result of the online collaboration?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of the development of finished products on learning</td>
<td>How did this aspect of the task impact on your learning?</td>
</tr>
<tr>
<td>Rationale</td>
<td>Question</td>
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<tr>
<td><strong>10. Competing solutions and diversity of outcome</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the fact that the work on the activities was open to different interpretations and solutions</td>
<td>What did you think of the fact that your work on the activities was open to different interpretations and solutions and that there was not a single correct response but a number of possible outcomes?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of competing solutions and diversity of outcome on learning</td>
<td>How did this aspect of the tasks impact on your learning?</td>
</tr>
<tr>
<td><strong>Collaboration</strong></td>
<td></td>
</tr>
<tr>
<td>Question aimed at eliciting information on how students collaborated and on the stages of collaboration</td>
<td>How did you go about collaborating with other students in order to complete the assigned tasks? What stages were there?</td>
</tr>
<tr>
<td>Question aimed at eliciting information on how roles and responsibilities were negotiated among group members</td>
<td>How did you go about negotiating your roles and responsibilities within the group?</td>
</tr>
<tr>
<td>Experience question to elicit information about the respondent’s role in the collaborative groups</td>
<td>What role did you have in the collaborative groups?</td>
</tr>
<tr>
<td>Experience question to elicit information on problems or difficulties of the collaboration within the groups</td>
<td>What kinds of problems or difficulties did you have during your collaboration?</td>
</tr>
<tr>
<td>Experience question to elicit information on the strategies the students may have used to solve the problems and difficulties of collaborating in the group</td>
<td>What types of strategies did you employ/develop in order to solve those issues/problems?</td>
</tr>
<tr>
<td>Opinion question which seeks recommendations for change or improvements to the group work</td>
<td>If you could change some aspects of the group work what would you change?</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
</tr>
<tr>
<td>Background questions to ascertain the respondent’s prior experience of CMC tools use</td>
<td>Have you ever used computer-mediated communication tools in an academic context? Can you please describe your experiences?</td>
</tr>
<tr>
<td>Feeling question to find out how the respondent felt about using the online resources of the course website</td>
<td>During the course of the semester you have communicated with other students and with your facilitator using the communication tools and resources of the course website. How have you felt about using these online resources?</td>
</tr>
<tr>
<td>Question aimed at eliciting the respondent’s opinion on the value of using the communication tools provided to collaborate with others</td>
<td>How valuable was it to be able to use the web-based resources provided to collaborate with others?</td>
</tr>
<tr>
<td>Experience question to elicit information on problems and difficulties of using the online resources</td>
<td>What problems or difficulties did you have in using the online resources during your participation in the online activities?</td>
</tr>
<tr>
<td>Opinion question which seeks recommendations for change or improvements to the technology used</td>
<td>If you could change some aspects of the technology used, what would you make different?</td>
</tr>
<tr>
<td>Rationale</td>
<td>Question</td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Scaffolding</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to find out whether the group valued having access to a facilitator in the online environment</td>
<td>What did you think of having a native speaker facilitator to assist you as you were completing the collaborative activities?</td>
</tr>
<tr>
<td>Feeling questions aimed at finding out the respondent's emotional response to the presence of the facilitators</td>
<td>What did you like about the presence of the facilitators in the group forums? What did you dislike about it?</td>
</tr>
<tr>
<td>Experience questions to elicit information on the types of support provided by the facilitators to the groups</td>
<td>What types of support or assistance did your group’s facilitator provide as you worked on completing the task? Can you provide some examples?</td>
</tr>
<tr>
<td>Question aimed at eliciting the respondents’ opinion on the value of the facilitators’ assistance</td>
<td>How valuable was the assistance provided by your facilitator?</td>
</tr>
<tr>
<td>Experience question to elicit information on problems and difficulties of communicating with the facilitators</td>
<td>What problems or difficulties did you have in communicating with the facilitator?</td>
</tr>
<tr>
<td>Opinion question to elicit the respondent’s advice for future facilitators</td>
<td>What advice would you offer to a facilitator who might be recruited to support students’ collaboration in the future?</td>
</tr>
<tr>
<td><strong>Closing comments</strong></td>
<td></td>
</tr>
<tr>
<td>Final open-ended question to obtain any further comments</td>
<td>You have been very helpful. Do you have any other thoughts or feelings associated with this project?</td>
</tr>
<tr>
<td>Closing remarks and thanks</td>
<td>Thank you for your time</td>
</tr>
</tbody>
</table>
Schedule, classification and rationale of interview questions with facilitators

### Introduction

**Rationale:**

The purpose of this interview is to gather some information that will assist other language teachers to develop and implement a virtual community of foreign language learners and to plan and structure an authentic activity within their specific educational context. As an Italian native speaker who has provided students with assistance and support as they worked on the collaborative tasks, you are in a good position to describe your experience and reflect on it.

**Question:**

Explain that the interview will be audio recorded and that participants have the right to withdraw at any time if they wish to do so.

### Background information to identify the participant

**Rationale:**

Ask name, nationality, occupation and name/s of collaborative groups

**Question:**

### Authentic activity

**Rationale:**

Open-ended opinion question on the activities

**Question:**

What did you think of the activities that students were asked to complete?

**Rationale:**

Feeling questions aimed at finding out the respondent’s emotional response to the two authentic activities.

**Question:**

What did you like about them? What did you dislike?

**Rationale:**

Transition statement to move into the discussion of the specific characteristics of authentic activities

**Question:**

I would like now to ask you your opinion on some of the specific characteristics of authentic activities

### 1. Real-world relevance

**Rationale:**

Open-ended opinion question to elicit information on whether the respondent values the real-world relevance of the tasks

**Question:**

The activities that students were asked to complete had real-world relevance and mirrored real-life tasks. What did you think of asking students to complete these types of real-life activities?

**Rationale:**

Questions to encourage the respondent to reflect on the impact of the real-world relevance of the tasks on students’ learning

**Question:**

Do you think that the real-world relevance of the tasks has impacted on students’ learning? How?
<table>
<thead>
<tr>
<th>Rationale</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Ill-defined nature of the activities</strong></td>
<td>The two activities were ill-defined and unstructured and required students to define the tasks and sub-tasks needed to complete them. What did you think about the fact that the tasks were ill-defined and unstructured?</td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the unstructured nature of the tasks</td>
<td>Do you think that this aspect of the tasks has affected students' learning? How?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of the ill-defined and unstructured nature of the tasks on students' learning</td>
<td></td>
</tr>
<tr>
<td><strong>3. Complexity and sustained effort</strong></td>
<td>The two activities were complex enough to be investigated over a sustained period of time. What did you think of asking students to complete each activity over a period of time of five weeks?</td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the complexity and sustained effort required to complete the tasks</td>
<td>How do you think this aspect of the tasks has affected students’ learning?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of complexity and sustained effort on students' learning</td>
<td></td>
</tr>
<tr>
<td><strong>4. Multiple perspectives and resources</strong></td>
<td>The two activities gave students the opportunity to examine the tasks from different perspectives. What did you think of providing students with the opportunity to access the different perspectives of the other participants?</td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values providing students with the opportunity to access the perspectives of others</td>
<td>How do you think this aspect of the tasks has impacted on students' learning?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of multiple perspectives on students' learning</td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values providing students with the opportunity to access and use a variety of resources</td>
<td>The two activities provided students with the opportunity to access and use a variety of resources rather than being limited to pre-selected references. What did you think of this aspect of the task?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of accessing multiple resources on students' learning</td>
<td>How do you think this aspect of the tasks has enhanced students' learning experience?</td>
</tr>
<tr>
<td><strong>5. Collaboration</strong></td>
<td>In order to complete the tasks students worked collaboratively with other students in the class. What did you think of providing students with the opportunity to collaborate with others?</td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the collaboration among students</td>
<td>Did you feel that the collaboration has enhanced students’ learning? In what ways?</td>
</tr>
<tr>
<td>Questions to encourage the respondent to reflect on the impact of the opportunity to collaborate on students’ learning</td>
<td></td>
</tr>
<tr>
<td>6. Reflection</td>
<td>Question</td>
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<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values providing students with the opportunity to make choices</td>
<td>The activities were designed to enable students to actively make choices both individually and collectively. What did you think about enabling students to make choices in order to complete the tasks?</td>
</tr>
<tr>
<td>Experience question to encourage the respondent to reflect on the impact of making choices on students’ learning</td>
<td>How do you think the opportunity to make choices has impacted on students’ learning?</td>
</tr>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values providing students with the opportunity to reflect</td>
<td>The activities were designed to enable students to reflect on their learning experience. What did you think about this aspect of the tasks?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of reflection on students’ learning</td>
<td>How did the opportunity to reflect impact on students’ learning?</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>7. Integration and application across different subject areas</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-ended opinion question aimed at finding out the respondent’s opinion about the integration and application of knowledge across different subject areas and to learn across different subject areas</td>
<td>The two activities were not confined to a single subject area but could be integrated and applied across different disciplines. What did you think of this aspect of the task?</td>
</tr>
<tr>
<td>Questions to encourage the respondent to reflect on the impact of the integration and application of the tasks across different subject areas on students’ learning</td>
<td>Do you think that this aspect of the tasks has enhanced student learning? How?</td>
</tr>
</tbody>
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<thead>
<tr>
<th>8. Integration with assessment</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the integration with assessment</td>
<td>What did you think of the fact that assessment was integrated with the tasks to reflect real-life assessment?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of the integration of assessment on students’ learning</td>
<td>How do you think this aspect of the task has impacted on students’ learning?</td>
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<thead>
<tr>
<th>9. Development of polished products</th>
<th>Question</th>
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<tbody>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values enabling students to develop a finished product</td>
<td>What did you think of the fact that students were required to develop a final product that was valuable and complete in its own right?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of the development of finished products on students’ learning</td>
<td>How do you think this aspect of the task has impacted on students’ learning?</td>
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<thead>
<tr>
<th>10. Competing solutions and diversity of outcome</th>
<th>Question</th>
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<tbody>
<tr>
<td>Open-ended opinion question to elicit information on whether the respondent values the fact that the collaborative work was open to different interpretations and solutions</td>
<td>What did you think of the fact that students’ work on the activities was open to different interpretations and solutions?</td>
</tr>
<tr>
<td>Question to encourage the respondent to reflect on the impact of competing solutions and diversity of outcome on students’ learning</td>
<td>How do you think this aspect of the tasks has impacted on students’ learning?</td>
</tr>
<tr>
<td>Rationale</td>
<td>Question</td>
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<tr>
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<tr>
<td><strong>Collaboration</strong></td>
<td></td>
</tr>
<tr>
<td>Question aimed at eliciting information on how students collaborated and on the stages of collaboration</td>
<td>How did students go about collaborating within their group in order to complete the assigned tasks? What stages were there?</td>
</tr>
<tr>
<td>Experience question to elicit information on how roles and responsibilities were negotiated among group members</td>
<td>How did students go about negotiating their roles and responsibilities within the group?</td>
</tr>
<tr>
<td>Experience question to elicit information on problems or difficulties of the collaboration within the groups</td>
<td>What kinds of problems or difficulties did students have during their collaboration?</td>
</tr>
<tr>
<td>Experience question to elicit information on the strategies the students may have used to solve the problems and difficulties of collaborating in the group</td>
<td>What types of strategies did students employ/develop in order to solve those issues/problems?</td>
</tr>
<tr>
<td>Open-ended question to elicit the respondents' advice for students involved in collaborative work</td>
<td>What advice would you offer to students who are collaborating with others in an online learning environment?</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to find out how the respondent felt about using the online resources of the course website</td>
<td>During the course of this study you have assisted students in the task of completing the assigned activity/activities using the communication tools and resources provided in the course website. What did you think of using these online resources?</td>
</tr>
<tr>
<td>Question aimed at eliciting the respondent's opinion on the value of using the communication tools provided to assist students</td>
<td>How valuable was it to be able to assist the students complete the tasks using the web-based resources provided?</td>
</tr>
<tr>
<td>Experience question to elicit information on problems and difficulties of using the online resources</td>
<td>What problems or difficulties did you have in using the online resources during your participation in the online activities?</td>
</tr>
<tr>
<td>Opinion question which seeks recommendations for change or improvements to the technology used</td>
<td>If you could change some aspects of the technology used, what would you make different?</td>
</tr>
<tr>
<td><strong>Scaffolding</strong></td>
<td></td>
</tr>
<tr>
<td>Open-ended opinion question to elicit the respondent's emotional response to their involvement and participation in students' activities</td>
<td>What did you think of being involved as a facilitator in the activities of the online community?</td>
</tr>
<tr>
<td>Feeling questions aimed at finding out the respondent's emotional response to assisting the students</td>
<td>What did you like about assisting and supporting students in the online learning environment? What did you dislike about it?</td>
</tr>
<tr>
<td>Experience questions to elicit information on the types of support provided by the facilitators to the groups</td>
<td>What types of support or assistance did you provide to the students in the collaborative group/groups as they worked on completing the task/tasks? Can you provide some examples?</td>
</tr>
<tr>
<td>Experience question aimed at eliciting information on how the respondent assisted students complete the activities</td>
<td>How did you go about assisting the collaborative group/groups complete the assigned activity/activities?</td>
</tr>
<tr>
<td>Experience question to elicit information on problems and difficulties of assisting the students</td>
<td>What problems or difficulties did you have in supporting the students’ within their collaborative group/groups?</td>
</tr>
<tr>
<td>Rationale</td>
<td>Question</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td>Experience question to elicit information on the strategies the facilitators may have used to solve the problems and difficulties of supporting the collaborative groups</td>
<td>What types of strategies did you employ/develop in order to solve those issues/problems?</td>
</tr>
<tr>
<td>Opinion questions to elicit the respondent’s opinion on their involvement and participation in community activities</td>
<td>In your opinion is it necessary or desirable to involve a native speaker of the target language in the activities of the online community of second language learners? Why?</td>
</tr>
<tr>
<td>Opinion question to elicit the respondent’s advice for future facilitators</td>
<td>What advice would you offer to other facilitators who might be recruited to support students’ collaboration in the future?</td>
</tr>
<tr>
<td><strong>Closing comments</strong></td>
<td></td>
</tr>
<tr>
<td>Final open-ended question to obtain any further comments</td>
<td>You have been very helpful. Do you have any other thoughts or feelings associated with this project?</td>
</tr>
<tr>
<td>Closing remarks and thanks</td>
<td>Thank you for your time</td>
</tr>
</tbody>
</table>