The Development of Collaborative Learning Practices in an Online Language Course

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ABSTRACT

The success or failure of a course is, to a great extent, dependent on the level of motivation and commitment of the learners. Such motivation and commitment are, however, difficult to establish and maintain, especially in an on-line course. Social relations within a class, and the willingness of learners to collaborate with each other, have an important role to play, but the constraints of time and distance are obstacles to fostering such social relations among students enrolled in on-line courses. It is not easy to encourage students to be collaborative when they are accessing the course at different times, from different locations. This thesis, however, seeks to demonstrate that the variety and complexity of the technologies used to deliver an on-line learning experience can help to overcome these challenges. When introduced and used in appropriate ways, the software, internet tools, even the data collection program used for statistical analysis can actually encourage and enhance participants' motivation to interact and learn in collaborative ways.

This thesis is concerned with an on-line course created and delivered by the researcher, the aim of which was to foster a collaborative learning environment in which participants felt confident enough to share their work with others, and to offer and receive comments on their assignments. The primary aim was therefore not the direct teaching and learning of language, but the fostering of an environment in which the students felt comfortable working with the technology and with each other, as a pre-requisite for the acquisition of language through content-based activities. The study did not dwell on the effects of collaboration on language development but focused, rather, on how individual students collaborate in an online, e-learning course, what forms this collaboration takes, and how the pattern of collaboration changes as the course progresses. This focus allowed the researcher to look at ways collaboration affected the persistence and retention challenges of on-line learning experience.

The course was designed for students learning EFL at a university in Korea. It lasts one semester, and is delivered using a virtual learning environment (VLE) program developed by the university. The course consists of 15 units to be completed at the rate of one a week. Each unit focuses on a different topic and consists of a reading passage and a listening exercise. This is followed by some writing activities, including a weekly written report, and recording assignments. The researcher was the instructor for this course, and made special interventions using appropriate technology (sometimes e-mail, other times Skype to make it more personal) to encourage students to work in pairs, and in group discussions, and to post their work in the VLE so that others could read and comment on it.

The current study reports on the experience of running the course with one group of 47 Korean university students. Data was gathered from the learners' journals, their assignments, feedback and comments posted on the web board, and emails to the instructor. The VLE also recorded statistics showing the students' usage of the different components of the course, and how their use of these components changed and fluctuated as the course progressed.

The results showed that in the process of completing the course the majority of the learners reported a strong sense of "belonging" to a learning community, developing a close rapport with other learners by sharing their work, exchanging comments and taking part in discussions. Students felt proud of their work as well as of the process of working together with other learners. In particular, the results suggest that opportunities for social interaction and feedback play a crucial role in developing the emotional connection which helps to create a collaborative learning environment and support an effective learning community.

The evidence suggests that the appropriate use of technology when delivering an on-line course may, in fact, encourage collaboration because of two phenomena that are not always evident in

a traditional, place-based classroom. These are anonymity and reciprocity. Anonymity makes it easier for students to share their work and ideas because, if a contribution is embarrassing, it may have less negative effect than in a face-to-face exchange. Reciprocity refers to the natural inclination of a student, having learned from others in the VLE, to give something back to the community.

DEDICATION

This thesis is dedicated to my parents.

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LIST OF ABBREVIATIONS

ACMC	Asynchronous Computer Mediated Communication
CALL	Computer Assistant Language Learning
CBI	Content-Based Instruction
CMC	Computer Mediated Communication
EFL	English as a Foreign Language
ESL	English as a Second Language
ICT	Information and Communication Technology
L2	Second Language
LMS	Learning Management System
SLA	Second Language Acquisition
VLE(s)	Virtual Learning Environment(s)
WBPT	Web-Based Pedagogical Tools
ZPD	Zone of Proximal Development

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I. INTRODUCTION

1.1 Background

Any discussion of an online learning or a virtual learning environment (VLE) evokes immediate associations with autonomous, independent, or self-directed learning. Vygotsky's socio-constructivist perspective (Vygotsky, 1978; Vygotsky and Cole, 1978; 1962)laid the groundwork illustrating "the role of social interaction in creating an environment to learn language, learn about language, and learn "through" language (Warschauer, 1997)". Vygotsky (1978) suggested that isolated learning might not necessarily lead to cognitive development. In language learning, he posited, the exchanges encouraged within social settings led to the more capable or proficient students providing peers with new information and ways of thinking. This, in turn, allowed all student participants to co-construct new means of understanding. These new ways of thinking, resulting from dynamic exchanges between all online participants, are referred to by socio-constructivist researchers as *scaffolding*. This term refers to the forms of support provided by the teacher, or in some circumstances another student, to help students to bridge the gap between their current abilities and the intended goal (Rosenshine and Meister, 1994). This mutually beneficial social interaction works both ways, allowing the more experienced students to discover missing information from the questions of the less-experienced language learners, gain new insights into the positive aspects of collaborative learning, and develop an appreciation of this qualitatively different way of understanding.

Much research has been done to support the idea that collaborative learning facilitates language learning in traditional learning environments. In the 1990s, Nunan (1992a) tells us, one of the important factors in moving forward the curriculum of language learning is the introduction of collaborative practices. Since then, researchers have continued to add empirical evidence to the benefits of creating an active learning environment.

There is a strong movement in education today away from a predominantly didactic model of instruction and toward a learner-centered model where the learning activities involve students in inquiry and problem solving, typically in a collaborative framework (Duffy et al., 1998:51).

The old-school teaching approach, resting on the catch phrase 'sage on the stage,' has long since been modified to 'guide on the side,' to fit today's current learner-centred, collaborative classroom practices. The evidence supporting this learner-centred, collaborative approach, is so well researched and documented, that there seems little need for further examination in this section, though remarks are made, later, in the literature review chapter.

A more recent, and more fertile, area of research into collaborative learning methodology delves into the relationship of technology and collaboration. Some extremely important work along these lines of research has been done in relation to Computer-Assisted Language Learning studies (Ducate and Lomicka, 2008; Hsu et al., 2008; AbuSeileek, 2007; Schmidt et al., 2007; Hoven, 2006; Irons et al., 2004; Smith, 2000).

Furstenberg (1997:22) highlights how technology provides "an extraordinary context of authentic cultural background and historical information" as well as allowing "the opportunity to become an active participant in language learning." She explains that technology addresses the interactive, collaborative and process-oriented features of language learning in an intuitive and natural manner. This led to others experimenting and introducing varied forms of technology which further encouraged and enhanced collaboration. Email and synchronous chat (Belz and Müller–Hartmann, 2003), electronic conferencing (Truscott and Morley, 2001) and the internet as a source of information (Son, 2008; Herron et al., 2002; Gruber-Miller and Benton, 2001) are examples of these new 'ways of communication' lending themselves to the encouragement and enhancement of collaboration in online learning environments.

Online collaboration, and the technology used to encourage and enhance these collaborative exchanges in such environments, is a focus of and is emphasized in this study. If educators and course designers are to understand virtual learning environments, a learning theory that includes the technology –e-mail, shared discussion boards, Skype, Messenger, and emoticons– must be fashioned. The enhancing effects of the technological opportunities, in particular, must be considered. Earlier research studies were quantitatively oriented, and emphasized how much collaboration took place. This study's orientation and emphasis is on the nature of the collaboration. Another difference between previous studies and this one is that previous studies examined, principally, written documents when statistically determining collaboration (Lee, 2008; Liang and Creasy, 2004; Jiang and Ting, 2000; Vrasidas and McIsaac, 1999; Bullen, 1998; Ross, 1996).This research includes the written documents as data, but also looked at collaboration in terms of how the technology was used and how it, in turn, influenced the amount and nature of that collaboration.

Scaffolding provides platforms which help and encourage students to comment on and exchange information, to collaborate in order to learn. As mentioned by Azevedo *et al*. (2005), in an e-learning environment, scaffolds may be tools, strategies, and innovative technologies to support students in their learning. According to Gracsser *et al*. (2000) and Reiser (2002), scaffolds can be provided by direct human guidance, computer assisted tutoring, teachers, or peers in order to help students develop an understanding beyond their immediate grasp. The current study followed the lead of Lajoie (2005) who noted the movement toward including more affective and motivational scaffolding to enhance learning.

The assumption underlying this current study is that collaborative learning theory and practice can be applied and used to support the creation of successful online learning environments (VLE). What previously worked to encourage collaborative learning in the place-

based classroom, can be successfully adapted, and further enhanced by the technology, in virtual learning environments. This thesis seeks to show that the variety and complexity of the technologies inherent in an online learning experience (VLE), when introduced and used in appropriate ways, can actually encourage and enhance participants' motivation to interact and learn in collaborative ways. To further study if this were true, this researcher developed, with technical assistance, both content and delivery methods for an online course. Learning management system (LMS) software allowed the delivery of the course materials, but also provided the means of recording data from collaborative exchanges, including, for instance the use of emoticons, which could later be analysed both qualitatively and quantitatively. LMS also allowed the researcher to analyse, both quantitatively and qualitatively, the nature of the participants' (or students') collaborative exchanges (see section 4.3).

This study does not dwell on the effects of collaboration on language development. It focuses, rather, on how individual students collaborate in an online, e-learning course, what forms this collaboration takes, and how the pattern of collaboration changes as the course progresses. This focus addresses the persistence and retention challenges of online learning, i.e. whether or not the learners continue to participate in, or drop out from, the course.

1.2 Purpose of Study

This study attempts to fill a number of the gaps left by previous research. For instance, earlier studies provided evidence that group-supported environments are conducive to effective adult learning (Foley, 1995) by providing a setting for students to interact and exchange ideas, thereby constructing their own knowledge base and filtering this knowledge through the community construct. Such studies, however, were concerned with place-based environments, while the current study focuses on interaction in virtual, online, environments, and investigates the positive effects of having individual learners interact and learn how to use VLE technology

to support one another and create a group-supported environment, a genuine, collaborative learning community. In addition, while previous work focused on the effects of collaboration and how it led to the improvement of, for example, intermediate level, language learners' writing abilities (Eastmond, 1994; Hiltz, 1988), the current work looks directly at the collaborative process itself, how it surfaces, develops, and changes over time.

The study, too, looks at the practical challenges inherent in the increasing use of VLE(s) and LMS(s). How can developers use the technology involved in these virtual settings to encourage collaboration and the creation of learning communities among students who access online courses from such very diverse time zones, and from such extremely diverse geographical locations? What does collaboration look like in these virtual environments, where participants, often, will never meet face-to-face? This study examines the process of collaboration (surfacing, developing, adapting over time) amongst students in an online language course, where the main aim was to develop a learning community in which participants felt confident enough to share their work with others, and to offer and receive comments on their assignments. The primary aim was, therefore, not the direct teaching and learning of language, but the fostering of an environment in which the students felt comfortable working with the technology and with each other, as a pre-requisite for the acquisition of language through content-based activities.

By focusing directly on the collaborative process, this study attempted to fill in previous research gaps by exploring questions such as: How did collaboration itself affect individual students' motivation and attitude toward learning English? How did their motivation and attitude change as the course progressed? This focus allowed the researcher to take a fresh look at some of the previous research findings and results of language learning research, work

that was done within the context of the traditional classroom, and to apply those findings to the more complex and much less studied virtual environment.

Previous research had looked at the phenomena of collaboration in the context of content-based instruction (CBI), within a place-based environment. This study acknowledges the positive influences of that previous research, and attempts to apply those place-based findings to the challenging, and often ever-changing virtual, or online environment.

1.3 Research Questions

This research study aims to examine whether and how individual students collaborate in an online e-learning course, what forms their collaboration takes, and how the pattern of collaboration changes as the course progresses. An attempt will be made to understand the implications this has for course design and management.

The main research question is:

What opportunities does an e-learning environment provide for collaborative learning and what effect does this have on the learners as the course progresses?

This main question gives rise to the following 'sub-questions':

1.   Do learners work collaboratively? If so, how do they collaborate? Does this change as the course progresses?

2.   What motivation and attitude do learners have toward the course? Do they change as the course progresses?

3.   Do learners orient towards language or content? How?

1.4 Significance of the Study

This study will serve the purposes of filling in some of the research gaps in previous work (mostly done in place-based environments and focusing on learners' writing), and will look at two new components - anonymity and reciprocity and their relationship to the enhancement of online collaboration. These two phenomena, though mentioned in passing in some previous research, have not been given the importance this researcher believes they deserve.

Considerable research in CALL has looked at the effects of collaboration on the learning experience. This study attempts to focus on the effects of that collaboration on all the learning components, the reading, the social interactions, exchanges of feedback as well as the writing component.

This study is wide-ranging, looking not simply at the results of collaboration, but, at the phenomenon of collaboration itself, attempting to understand and articulate the forms that such collaboration takes and the social and affective scaffolding phenomena that enable it, and investigating how collaboration changes during the creation and delivery of an online language experience (in this case, Koreans learning English).

The main methodological approaches that are used are grounded theory and action research. Altrichter and Posch (1989) suggest the importance of these two approaches, one being inductive (grounded theory), and the other being deductive (action research) to support research findings. The grounded theory approach was used to look at students' journal entries to identify common themes. Nvivo software took these themes and systematized them into groups, categories, and subcategories allowing the researcher to examine the amount and nature of students' collaboration; the findings resulting from the application of grounded research suggested appropriate ways of using an action research approach. For example, interventions and curricular changes were introduced along a time line as students progressed

and became more familiar with course materials and working with one another. These two approaches had to be adapted to the real-time nature of a VLE, where the recording and interpreting of students' collaborative learning behaviour, and the introduction of interventions, was a continuous process. Data arrived in a continuous stream, and had to be captured and interpreted rapidly, in comprehensive, meaningful ways. It is hoped that the findings of this study will make a serious contribution to the current literature, and have a positive and realistic impact on future, virtual learning environment research.

1.5 Profile of Chapters

This thesis contains six chapters, including this introduction in Chapter I, and the conclusion in Chapter VI.

Chapter II, *Literature Review*, is devoted to the current literature that provides the conceptual and theoretical framework that guided this study. The first part reviews constructivism, socio-constructivism as the theoretical foundations of collaborative learning. The second part introduces how collaborative learning is employed in an e-learning environment. The third part, content based instruction, consists of three parts: definition, foundation and connection with learning. The last part, the fourth, looks at motivation and attitude. Finally it will lead to three proposed research questions.

Chapter III, *Methodology*, starts with two research methodology approaches; grounded theory and action research. The context of this study is provided, with a description of the online course, of the preliminary study and the main study and of the data collection methods that were used. Issues of validity, reliability and ethics are also discussed.

Chapter IV, *Data Presentation and Analysis*, presents the data that were gathered during the study, describes the procedures that were adopted for analysing the data, such as the process of generating themes, and presents the results of the analysis.

Chapter V, *Discussion*, focuses on the answers to each research question. The first and second sections describe three forms of collaboration and their development. The third section discusses how technology lends itself to creating a community in a VLE. The fourth section discusses the effect of content based instruction. The last part of the chapter identifies two factors that appear to have particular influence on learners' motivation and changes in attitude.

Chapter VI, *Conclusion*, provides an overview of the research, its pedagogical implications, and what questions remain outstanding for future research.

II. LITERATURE REVIEW

2.1 Introduction

The research for this thesis is confined within the boundaries of currently emerging trends in applied linguistics, as they are applied within virtual learning environments. The literature reviewed for this thesis supports the belief that learning in an e-learning environment is, fundamentally, a social activity, a shared community of learning, as opposed to an individualized, isolated way of learning. Being focused on the forms and nature of collaboration, this study does not concern itself directly with language acquisition. However, it should be noted that the literature reviewed lends support to the view that a virtual learning (an e-learning) environment successfully facilitates an individual's language acquisition. This chapter provides a brief overview of past research of virtual learning environments, and explores the relevance of that research to current e-learning environments. Much research has been carried out to investigate collaboration in traditional learning environments, but the advent of the internet and the development of web-based communication tools have opened up new opportunities for collaboration within new and potentially very different learning communities. The literature review for this research study will therefore focus firstly on the theoretical foundations of collaborative learning, and then on collaborative learning in an e-learning environment. Content-based instruction and motivation will be included. How the current research fits in with and relates to previous work done in this area will also be explored.

2.2 Theoretical Foundation of Collaborative Learning

Work done by Vygotsky and Cole (1978) and Wenger (1999) shows the influence of social perspectives on language learning. One of the underlying assumptions in this type of research approach is that language learning and social interaction, particularly with more advanced

learners, cannot be separated; the one, social interaction, supports and enhances the other, language learning. Before further discussion of how collaborative learning actually works within a virtual learning environment, it will be useful to review the theory on which collaborative learning is based.

2.2.1 Constructivism

Constructivism describes the development of knowledge through learning as a process of active construction of meanings in relation to the context and environment in which learning takes place. A learner's understanding of content is embedded in the experience of that individual (Brown and Collins, 1989). In the 19th century, objectivists believed in the existence of reliable knowledge about the world (Jonassen, 1991) which was received by learners passively from authoritative sources, lectures or in written format from text books. In such a model, learning took place in classrooms and the primary concern of educational institutions consisted in transferring knowledge as an integral, self-sufficient substance, comprising abstract, decontextualised, formal concepts (Brown and Collins, 1989). By the turn of the century, Piaget had begun to centre constructivism research on a developmental model, mapping how individuals at different ages, developed cognitive abilities. Knowledge about the environment, about the external world, is organized into mental frameworks or Schemata by the learner. For instance, children develop frameworks (schemata) as they organize their knowledge into increasingly complex cognitive structures. Children actively seek out information and adapt it to the knowledge and conceptions of the world that they already have. Thus, children construct their understanding of reality from their own experience.

Piaget focused primarily on the individual child's development. As Oxford (1997b:39) points out, "Piaget recognized that all this happens within a social context, but he was not

particularly concerned about the social aspect." It remained for the socio-constructivists to research and clarify the ways in which individual development are connected to social development, and how the one affects the other.

2.2.2 Socio-Constructivism

The socio-constructivist perspective, derived in part from the concepts of Vygotsky (1962, 1978), illustrates "the role of social interaction in creating an environment to learn language, learn about language, and learn "through" language (Warschauer, 1997)." Vygotsky (1978) emphasized that isolated learning cannot lead to cognitive development. He firmly maintained that social interaction is a prerequisite to learning and cognitive development; these could only occur when learning involves more than one person. Furthermore, one of those persons must provide new information through scaffolding within the zone of proximal development (ZPD). These two concepts, scaffolding and ZPD are essential concepts in socio-constructivist theory.

A definition of scaffolding, as found in the Cambridge Advanced Learner's Dictionary explains that scaffolding in the real world of engineering and construction is a structure of metal poles and wooden boards put against a building for workers to stand on when they want to reach the higher parts of the building. When the work is done, the scaffolding is taken away. In an educational context, it would be assumed that scaffolding is also a temporary framework to support learners when assistance is needed and is removed when no longer needed. The more capable partner or instructors provide this supportive, scaffolding structure.

The term scaffolding was used by Bruner (Wood et al., 1976) to describe the process in which a child or novice could be assisted to achieve a task that they may not be able to achieve if unassisted. When they are able to perform the task on their own, the scaffolding is no longer necessary. This definition is related to Vygotsky's (1978:86) conception of the zone of

proximal development (ZPD) which 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."

In language learning, within the ZPD, more capable or proficient students can provide peers with new information and ways of thinking so that students can co-construct new means of understanding. This mutually beneficial social process can also lead more experienced students to discover missing information, gain new insights in collaborations, and develop a qualitatively different way of understanding.

The ZPD comprises the range of activities from what we can do alone to what we can do with the assistance of an instructor or more capable peer learner. This concept is further clarified by Lantolf (1994) and van Lier (1996) who state that things a person can do confidently on his or her own are located in the area of "self-regulation." Beyond that area, they emphasize, there is a range of knowledge and skills which the person can only access with someone's assistance (other-regulation).

However, he cautions that simply providing students with a problem and some guidance in the form of peer interaction or expert assistance does not mean that one is working in the ZPD, and it is no guarantee at all that any progress will be achieved. In addition to help and guidance from teachers or more able peers, productive work in the ZPD can be accomplished by learners using a variety of different resources including the following:

    a.   assistance from more capable peers or adults
    b.   interaction with equal peers
    c.   interaction with less capable peers
    d.   inner resources (their knowledge or expertise). (*ibid*:193)

These various resources for construction in the ZPD are illustrated in Figure 2.1:

Figure 2.1 Multiple zones of proximal development (*ibid*:194)

Assistance from more capable peers or adults

Interaction with equal peers

Self-regulation

Inner resources: knowledge, experience, memory, strength

Interaction with less capable peers
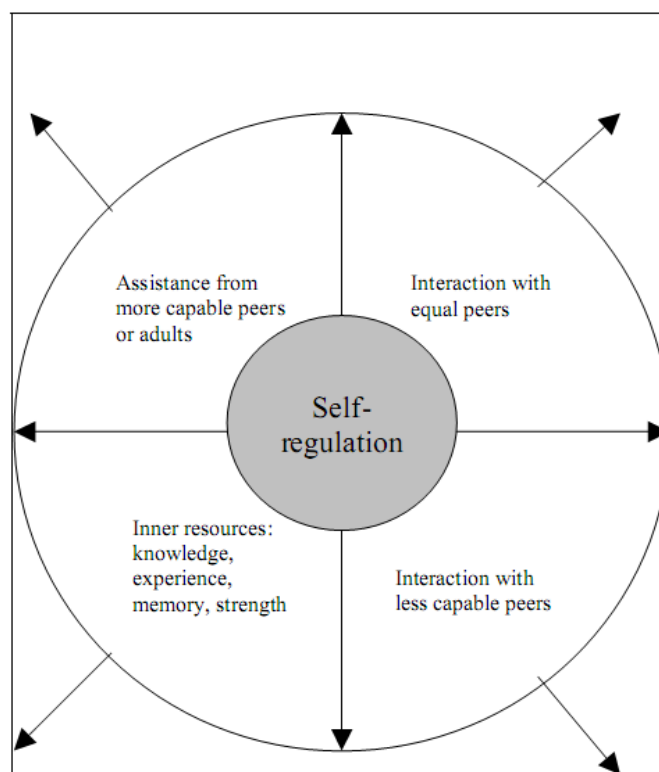
It is expected that help from others, peers or adults, more knowledgeable than themselves is valuable to learners. Van Lier (1996) showed in his ZPD learning model (Figure 2.1 above), that when advanced learners exchanged information or knowledge with less advanced language learners, everyone benefited, including the advanced learners.

Lantolf (2000:17) emphasizes that "the ZPD is not a physical place situated in time and space; rather it is a metaphor for observing and understanding how mediation means are appropriated and internalized." Wertsch and Bivens (1992) suggest two interpretation of how students reach the zone of proximal development: a) a modelling interpretation and b) a text mediational interpretation.

In the modelling interpretation, the teacher models an approach to the learning, for example, by posing questions (Palinscar and Brown, 1984). The text-meditational

interpretation assumes that students use language cognitively to make connections between what they already know and new concepts (Bayer, 1996). The fundamental idea is that learners become meaningfully engaged in a variety of learning activities. Bayer's (1990) model of collaborative-apprenticeship learning, for example, emphasizes the use of expressive speech and writing, peer collaboration, and engaging in meaningful problem-solving tasks. The teacher assists, not as a model but rather as a facilitator, while students collaborate to "make connections between new ideas… and prior knowledge," "use language as a tool for learning," and develop "language and thinking competencies" (p7). Thus, the text-mediational view links the concepts of participation, interaction, reflection, problem-solving, critical thinking, and literacy with the various uses of feedback, text, inquiry, and collaboration in the classroom.

Examining the role of scaffolds in facilitating students' learning is a critical issue in an e-learning environment. In an e-learning environment, scaffolds may be tools, strategies, and innovative technologies to support students in their learning (Azevedo et al., 2005). Scaffolds can be provided by either human (teachers, peers) or computer tutors during learning to enable students to support understanding beyond their immediate grasp (Reiser, 2002; Graesser et al., 2000). There are several types of scaffold proposed to foster students' learning: implicit and explicit scaffolds (Hadwin and Winne, 2001), conceptual, metacognitive, procedural, and strategic scaffolds (White et al., 2000; Hannafin et al., 1999; Vye et al., 1998), hard and soft scaffolds (Brush and Saye, 2002) and fixed and adaptive scaffolds (Azevedo et al., 2004). Implicit and explicit scaffolds, as used by Hadwin and Winne, are provided by a software tool (i.e. CoNotes which is an electronic notebook) that is intended to cue students to help their studying. The specific directions or instructions of such activities determine whether they are implicit or explicit (Hadwin and Winne, 2001). According to Hannafin *et al*. (1999), conceptual scaffolds include hints and prompts that are designed to provide guidance about

what knowledge to consider during problem solving. Metacognitive scaffolds, likewise, also include human or computer tutors to help students with a specific task. Procedural scaffolds assist learners with learning how to use resources or how to perform certain tasks, and strategic scaffolds make learners aware of different techniques for solving problems and expose students to the solution paths followed by other peers or experts. Azevedo *et al*. (2004) define fixed scaffolds as static and not adaptable to meeting individual student's learning needs, as they have been formulated to give an overall learning goal and a list of specific questions to guide students toward understanding the content of the lesson. Adaptive scaffolding is constructed by a human or computerized tutor to help plan learning through activation of prior knowledge, and monitoring emerging understanding. The difference between hard and soft scaffolds suggested by Brush and Saye (2002)is that hard scaffolds are presumed to support common learning needs (e.g. typical student difficulties with a task) that apply to all students, freeing the instructor to provide soft scaffolds, which are adaptable, on-demand, and contextually sensitive support based on emergent, individual needs.

The types of scaffolding used in this study are adapted from Azevedo *et al.* (2004) concepts of fixed scaffolding and adaptive scaffolding. Fixed scaffolding includes the use of technology and computer assisted learning. Adaptive scaffolding involves direct, human assistance, which could be either among students or between students and a teacher. Both types of scaffolding are fundamental to helping each student advance through his or her own zone of proximal development (ZPD).

Recently, Lajoie's work has introduced two further models of scaffolding, affective and motivational (Lajoie, 2005). These models were instrumental in examining the findings of this current research thesis into online collaboration phenomena.

2.2.3 Collaborative Learning

The literature review discussing collaborative learning often references the precepts of social constructivism. Dillenbourg (1999:1) broadly defines collaborative learning as "a *situation* in which *two or more* people *learn* or attempt to learn something *together*":

- "two or more" may be interpreted as a pair, a small group (3-5 subjects), a class (20-30 subjects), a community (a few hundreds or thousands of people), a society (several thousands or millions of people) … and all intermediate levels:

- "learn something" may be interpreted as "follow a course", "study course material", "perform learning activities such as problem solving", "learning from lifelong work practice", etc.;

- "together" may be interpreted as different forms of interaction: face-to-face or computer-mediated, synchronous or not, frequent in time or not, whether it is a truly joint effort or whether the labour is divided in a systematic way (p.1-2).

In addition, he refers to the variety of meanings of collaboration. The word collaborative concerns four aspects of learning.

1) A *situation* can be characterized as more or less collaborative (e.g. collaboration is more likely to occur between people of a similar status than between a boss and his/her employee, or between a teacher and a pupil).

   : A situation is termed 'collaborative' if peers are (i) more or less at the same level and can perform the same actions, (ii) have a common goal, and (iii) work together. … A slight knowledge asymmetry among peers is generally considered as suitable, because it supposedly leads to conflicting interactions.

2) The *interactions* that do take place between the group members can be more or less collaborative (e.g. negotiation has a stronger collaborative flavor than giving instructions).

   :interactivity, synchronicity and "negotiability."… The degree of interactivity among peers is not defined by the frequency of interactions, but by the extent to which these interactions influence the peers' cognitive processes.

3) Some learning *mechanisms* are more intrinsically collaborative (e.g. grounding has a stronger collaborative flavor than induction), even if, at a very fine level of analysis, learning mechanisms must be similar to those triggered in individual learning.

4) The fourth element concerns the effects of collaborative learning, not because this element is used to define collaboration itself, but because the divergent views concerning how to measure the effects of collaborative learning participate in the terminological wilderness of this field.

These four aspects of learning relate reciprocally. The situation generates patterns of interaction; these interactions activate cognitive mechanisms, which successively cause cognitive effect. He emphasizes that "collaborative learning is not one single mechanism… (p.6)" and "…not a method because of the low predictability of specific types of interactions (p.7)." Thus, he defines collaborative learning as "a *situation* in which particular forms of interaction among people are expected to occur, which would trigger learning mechanisms, but there is no guarantee that the expected interactions will actually occur (p.7)." In this study, the definition of collaborative learning is that learners participate to achieve learning so that they make progress or improve.

Oxford (1997a) focuses on collaborative learning in which the learner engages with "more capable others" such as teachers or advanced learners who provide assistance and guidance. Advanced learners, like teachers, can act as facilitators or guides and provide assistance to help students develop their language skills. The assistance might include a hint or clue, a word of praise, a suggestion, a learning strategy, a grammar reminder, or an intensive review, even translation – anything that the learner needs at a given stage. As the learner requires less help, the teacher or advanced learner slowly steps back as the scaffolding is no longer necessary, now that the learner is becoming more self-directed and autonomous.

Swain (2000:102) found that second language (L2) learners were capable of providing guidance to their peers and mediating their own learning through "collaborative dialogue" which "mediates joint problem solving and knowledge building." Weller (2002) adds collaboration in the second language learning promotes the development of communication skills, reflection, active learning and a deeper understanding, broader scope and exposure to different ideas through peer learning. Morita (2004) supports this finding with evidence that

some of the participants in her study made use of their peers as a major source of support and guidance for their linguistic development, completion of assignments, and participation in classroom activities. Mesh's (2010:167) findings on collaboration in second language learning are summarized as follows:

> Learners feel supported by each other, which in turn produces the conditions for taking risks in the learning process. If learners have the opportunity to develop trust in each other, then challenges will become part of the culture of the group. They can share ideas and comment on peer's work in an environment of trust, empathy, collaboration and enjoyment. Learning is more meaningful when it is fun.

In general, this researcher found that much of the empirical research on the effectiveness of collaborative learning has been on a small scale, involving intermediate or advanced level learners. Typically, the studies involve small number of intermediate level participants collaborating by using synchronous tools such as chat boards. When there are time intervals between lessons, participants will communicate with asynchronous tools such as email or discussion forums.

Hiltz (1988:283) reported that, in collaborative group learning, "knowledge is not something that is 'delivered' to students…but something that emerges from active dialogue among those who understand and apply concepts and techniques." Even those not actively engaged in the dialogue (lurkers), by listening and processing the information, are applying it to their knowledge construction.

Vonderwell and Zachariah (2005) indicate that lurkers can learn through vicarious interaction that occurs "when a learner absorbs and processes an observed interaction between others (Sutton, 2001:227)." Williams (2004:1), rather than using the term "lurker," which tends to imply passivity, or lack of participation, used a neutral term, Read Only Participants (ROPs),

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for those "who appear to contribute little to group discussions but who consider that they are actively following the course and learning."

2.3 Collaborative Learning in an E-Learning Environment

Technology, and its role in language education, has become the focus of much research in the past few years. Such research provides fertile ground for researchers who are particularly concerned with the potential contribution of internet and virtual technologies to the development and delivery of the curriculum. The following is a brief summary of such e-learning environments.

2.3.1 E-learning Historical Note

Distance education, until the advent of the Internet, consisted of correspondence learning, perhaps supported by telephone follow-up. This learning was a form of self-instruction or independent learning.

In the 1990s, the rapid expansion of the web led to the development of integrated online learning environment shells known as virtual learning environments (VLEs), in which made it possible to link learners at multiple places in cyberspace (McPherson and Nunes, 2004; Kargidis et al., 2003; McPherson and Nunes, 2002; Piccoli et al., 2001). The definition of virtual learning environments (VLEs) is "computer-based environments that are relatively open systems, allowing interactions and encounters with other participants" and providing access to a wide range of resources (Wilson, 1996:8 cited by Piccoli et al. 2001:402-3). A variety of terms for e-learning are used interchangeably, including open learning, network-based learning, distance learning, online learning, and virtual learning. Keller (2005) adds that many researchers use the term 'learning management system (LMS)', in which the VLE connects to other administrative systems within the university, as a synonym for VLE. The core

characteristic of all these terms is the utilization of information and communication technologies (ICT) as a delivery vehicle with ICT-supported environments. These environments are conducive to interactive learning and the data which can be recorded showing the usage of interactive tools in VLEs allow administrators of such learning environments to correlate and cross reference much of the activity. Such environments allow for the provision of lots of exercises and reading materials, links to internet examples and samples. Participants, then, depending on course design decisions, can be encouraged to follow personal learning preferences. Such environments also allow for a variety of information sharing, interaction and collaboration.

As a number of authors such as Kargidis *et al.*(2003), Stamatis *et al.*(1999), and Nunes and Fowell (1996) suggest, these virtual environments, because of the array of opportunities to interact and collaborate, are potentially beneficial for both teachers and learners. Their findings summarized by McPherson and Nunes (2004:19) the ways in which VLE technology provided opportunities for interactions and collaborations:

- electronic distribution of course material;
- flexibility for students – when to study, at what pace – supporting different learning styles;
- accommodation of different ability levels;
- establishment of communication between students and teachers, and between students;
- greater access to information;
- greater flexibility in maintaining and updating course documentation.

According to McPherson and Nunes (2004), there are three main categories in these environments: the workstation (for learners and teachers this usually means a multimedia PC equipped with a web browser), the communication technologies that enable widespread learner networking and access to the web, and the software tools that enable educators to author and deliver online learning.

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Dabbagh and Kitsantas (2005:514) classify web-based pedagogical tools (WBPT) as: 1) collaborative and communicative tools (e.g., e-mail, discussion forums, and chat tools); 2) content creation and delivery tools (e.g., tools for instructors to upload course syllabus, course content, and assignments; and tools for students to access course resources and readings); 3) administrative tools (e.g., tools to manage general course information and functions; and student information, interactions and contributions); and 4) assessment tools (e.g., tools to post grades and track student progress).

Although there is no doubt about the potential roles of technologies in an e-learning environment, Lajoie (2005) emphasizes that an educator should keep in mind that it is the instructors' use of the tools that is pedagogical rather than the tool itself. That is, available tools alone are not enough as they need to be embedded in the instructor's pedagogical goals. White (2003, 2006) notes that the range of studies have been shifted from a concern with structural and technological issues to focus on transactional issues (teaching and learning) as a pedagogical perspective, for example, how learners establish their learning environment, and negotiate meaning, and come to new understanding in the distance context.

Researchers (Devlin, 2006; Gilead, 2006; Brandl, 2005; Dabbagh, 2004; Olson, 2001; Carey, 1999) explore how the current generation of technologies used in VLEs (e.g. WebCT, Moodle, Blackboard, Luvit, First Class, etc.,) provides features that allow educators to adopt more socio-constructivist designs in accordance with learning outcomes and the three essential types of communication and interaction: student with learning materials; student with teachers; student with other students. Additionally VLEs provide a set of online management tools that assist teachers in designing courses as well as keeping track of student activity and progress, monitoring factors such as: student visits to the learning environment; student participation in online activities; student feedback about the learning experience; student support and

scaffolding; student attitudes about learning through distance education; overall student satisfaction towards distance learning; and student outcomes such as grades and test scores (Swan, 2004; Gunn, 2001).

These VLEs can be used to create entire online courses, or simply be used to publish materials that supplement existing courses.

In many universities, virtual learning environments (VLEs) such as Blackboard or WebCT are already part of daily learning and teaching practice, being used to support the face-to-face delivery of classes, as well as delivering classes in an entirely virtual mode. However, the role of online learning is still, in these early stages of development, restricted to the set of lecture notes online or lists of resources available on the web or audio/video streaming of lectures which reflect the classical tradition of transferring a fixed body of knowledge to the learner which is in the form of unchangeable and authoritarian concepts or definitions (McPherson and Nunes, 2004; Bonk and Cunningham, 1998).This classic configuration of the lecture consists of an academic addressing a passive classroom of learners following the well-known 'sage on the stage' paradigm. McPherson and Nunes (2004) explain that educational designers call on their prior perceptions of knowledge acquisition as well as their prior educational experiences when developing structures, content and pedagogical strategies. In fact, most online learning developers reproduce in their applications– deliberately or unconsciously – teaching modelled on the traditional classroom approach as they had experienced it. This is often based on the behaviourist model that characterized developers' own education. In the earliest attempts at computer-based instruction, designers treated knowledge as a 'fluid', which was poured into the student-vessels as empty vessels from the full teacher-vessel (Kay, 1991). This delivery method does not match up well with today's interactive, collaborative, self-directed educational practice (developmental model). The behaviourist approach to the

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technology focuses undue attention on questions about what technologies such as computers and authoring software programs can be made to do, thus distracting researchers, instructional designers and educators from asking the more crucial questions about what these technologies should accomplish and what their roles should be in the teaching and learning process (McPherson and Nunes, 2004). According to Mason (1998:35) the course materials used in online environments should be designed specifically for those environments.

> …it is common to hear academics talking glibly about putting their lecture course on the Web, and it is sadly all too common to find teaching materials designed for a different delivery medium 'dumped' on the Web,… Course content needs to be re-thought for the hypertext structure, for the possibility of collaborative group work, and for the opportunity of interaction with the course materials.

In fact, online learning requires more in terms of pedagogy than merely transforming lecture slides into web-based lecture notes.

Many scholars have published guides for designing effective web sites for online courses (Smith and Ebooks Corporation., 2008; Lee and Owens, 2000; White and Weight, 2000). The impact that specific tools, such as electronic bulletin boards, interactive television, and collaborative computer technology, have on the learning experience has also been widely discussed by researchers (Bozik and Tracey, 2002; Chadwick and Russo, 2002). E-learning can increase flexibility in curriculums in terms of considering learners' differences and overcoming the traditional classroom time limitations (Thierry, 1996). Learning in an e-learning environment can occur at the same time in different places (e.g., through scheduled video conferencing events), at different times in the same place (e.g., discussing and exchanging information on a bulletin board in an e-learning classroom by individuals' time schedule), or at different times in different places (e.g., using e-mail to communicate with the instructor and students).

However, for online learning to be successful, it is not enough that the courses are well designed. The module delivery approach of an online course, demands that instructors adopt appropriate pedagogic approaches and teachers are well-versed and qualified and able to facilitate the courses online (McPherson and Nunes 2004).

2.3.2 Computer-Mediated Communication (CMC)

In the previous section, the use of computers and internet technology was discussed as being examples of collaborative and communicative tools. Dabbagh and Kitsantas (2005) address how such web-based pedagogical tools (WBPT), whether asynchronous (different users accessing at different times) or synchronous (different users, particularly instructors and learners, accessing at the same time), allow participants to create socio-constructivist learning communities.

Such learning environments encourage students to take on a more active role and become problem solvers, and take ownership of their knowledge rather than just memorizers of knowledge (Rivens Mompean, 2010; Kai, 2009; Polisca, 2006; Alavi and Dufner, 2005 ; Carey, 1999; Ocker and Yaverbaum, 1999; Jonassen, 1994). It is a given that such virtual learning environments provide many potential advantages for participants, as the interaction and collaboration of online learners, prompted occasionally by the instructor, can have a positive impact on learning. Alavi (1994) and Alavi and Dufner (2005) go so far as to claim that these interactive and collaborative opportunities in virtual learning spaces have positive effects on learner satisfaction and retention. Time- and place- independent learning environments allow students to write and receive messages and access course materials on their own time schedules (Warschauer, 1997). Furthermore, Warschauer claims that this environment extends the potential of online collaboration in two ways:

- allows for more in-depth analysis and critical reflection.
- allows students to initiate communication with each other or with the teacher outside the classroom.

<div align="right">(ibid, p.474)</div>

For example, students can collaboratively work in pairs, small groups, or with the whole class through the entire week. The asynchronous components, such as a discussion forum or e-mail, allow for the possibility of more complex tasks. For example, a web board allows the same messages to be posted in a central place to be accessed and read by many people. Warschauer (1997) suggests five distinguishing features of these asynchronous components:

- text-based and computer-mediated interaction,
- many-to-many communication,
- time-and place-independence,
- long-distance exchanges,
- hypermedia links.

He emphasizes that CMC facilitates the accomplishment of learners' learning goals in terms of exchanging information faster, more easily, less expensively, more naturally and more frequently, and creates "the opportunity for a group of people to construct knowledge together, thus linking reflection and interaction (p.473)."The study by Warschauer and Turbee *et al*. (1996) examined the social dynamics of CMC and found that CMC results in more equal participation by students, than face-to-face discussion by those students who are often shy or are apprehensive about writing. They explain that the use of CMC, being asynchronous, gives such students time to reflect, and submit writing samples not pressured by the need to make an immediate response. Sproull and Kiesler (1991), using a meta-analysis of published research, found that electronic discussion groups of people of different status results in the chances and opportunities for equitable interactions approximately twice as often as does face-to-face discussion groups. Huff and King (1988) discovered that proposals by high status people

(graduate students compared to undergraduates) were invariably favoured during in-person discussion groups, whereas proposals by lower status and higher status people were selected equally as often in electronic discussion. Warschauer (1997:473), quoting from other research done in this area, summarizes the advantages of electronic discussion, suggesting that "CMC : a) reduces social context clues related to race, gender, handicap, accent, and status (Sproull and Kiesler, 1991); b) reduces nonverbal cues, such as frowning and hesitating, which can intimidate people, especially those with less power and authority (Finholt et al., 1986); and c) allows individuals to contribute at their own time and pace (Sproull and Kiesler, 1991)."

2.3.2.1 Asynchronous Computer Mediated Communication (ACMC)

There has been much research, and a great deal of literature generated about the successful implementation of ACMC in virtual learning environments. For example, e-mail exchanges or discussion boards often include lively information exchanges (Hewings and Coffin, 2007; Kawai, 2006; Pawan et al., 2003; Ushioda, 2000), which display in-depth processing (McKenzie and Murphy, 2000). Hara *et al.*(2000) found that students posted more messages than the instructors in asynchronous discussions, and the student messages were of greater length and depth than those communications found in traditional learning environments.

Researchers in this area have differing focuses. For instance, Poole (2000) is looking at the contribution of more advanced learners. In these virtual learning environments, the instructor, or more-advanced students, he notes, dominate the discussion. Fleming and Hiple (2004), looking at the same aspect of VLEs, support the view that more advanced learners, having a foundation of reading and writing skills, can make more appropriate use of asynchronous tools as a means for two-way communication. Mitchell (2003), looking at the learning exchange in a broader sense, claims that reading others' comments, ideas and experiences in an online discussion exposes students to multiple perspectives and helps to

broaden students' knowledge and deepen their understanding. Other researchers note that such online interaction allows for the opportunity to build on each other's ideas (Godwin-Jones, 2003; Pawan et al., 2003), the co-construction of knowledge (Sengupta, 2001), and gives learners time to reflect before contributing (Ware and Warschauer, 2006; Lamy and Goodfellow, 1999; Aiken, 1993).

While there have been many studies reporting on the positive social benefits of ACMC, it is also useful to look closely at how those studies, which disagree with such positive findings. The critical evaluation of Curtis and Lawson (2001), for instance, claims that participants engaged in discussions via discussion boards, rarely elaborate on their own contributions or challenge an opinion. Pawan *et al.* (2003) add that ACMC discussions, sometimes tend to consist of independent messages, making learners' communications "one-way" interactions.

However, on closer examination of how such research was conducted, one finds that such negative results may be due to differences in how exactly ACMC mechanisms were implemented. Questions must be asked, just as they are asked in positive studies, about how the mechanisms of ACMC were integrated into the course, about the methods of assessment, the task types, about teacher involvement in the discussions, and about the group composition and dynamics, and the time allotted for the discussion (Arnold and Ducate, 2006). As Salaberry (2000) points out, an apparent drawback of technology can sometimes be used as a pedagogical advantage. ACMC, for instance, does not provide participants with immediate feedback from their peers and/or teacher. Despite that drawback, researchers agree that asynchronous technologies add to students' language learning in new and significant ways (Dippold, 2009; Kamhi-Stein, 2000; Ocker and Yaverbaum, 1999; Jonassen, 1994). Given the time lag between posting and getting feedback, students have time to reflect, and some may even log back on

and seek commentary. Thus, asynchronous technology can, at times, encourage collaborative learning.

Other researchers, echoing Salaberry's idea of pedagogical advantage, point to asynchronous electronic exchanges fostering the building of learning communities, where participants offer each other support and praise (Sengupta, 2001; McKenzie and Murphy, 2000).

2.3.2.2 The Role of Web Boards

Online learning practitioners rely mostly on web boards, also referred to as discussion forums. Web boards (or discussion forums) encourage and facilitate the exchange of resources and thoughts (Williams and Jacobs, 2004; Godwin-Jones, 2003), motivate learners to interact meaningfully (Rivens Mompean, 2010), and enable students' work to be evaluated and assessed by peers (Ward, 2004). Moreover, web boards foster critical thinking, because learners need to reflect on the possible reactions of others to their postings (Ducate and Lomicka, 2008; Williams and Jacobs, 2004; Oravec, 2003; Aiken, 1993). Recent research also mentions the use of blogs as tools for collaboration and self-reflection on the course content (Baggetun and Wasson, 2006; Williams and Jacobs, 2004), peer feedback (Cooper and Boddington, 2005) and as a resource bank (Martindale and Wiley, 2005).

The findings by Lamy and Goodfellow (1999) suggest that asynchronous web board messages in a foreign language class promoted three degrees of interactivity, described as (a) monologic (i.e., "containing no invitation to interaction (p.48),." (b) conversational (i.e., social in nature), and (c) reflective (i.e., allowing participants to negotiate meaning through personal exchanges, focus on formal features of language and strategies, and produce modified output within a structured setting).

2.3.2.3 Feedback

Feedback not only plays a pivotal role as an additional teaching and support mechanism, but also a socio-constructivism role allowing for features such as participation, interaction and collaboration in language learning and teaching contexts. In a virtual learning environment, feedback to language learners has been examined from a number of different perspectives including that of motivation (Hyland and Hyland, 2006; Hyland, 2001; Garrison, 1985). Even the marking of assignments, some researchers found, could further collaborative learning. Jarvis (1978) summarized three levels at which marking of assignments could function: (1) marking as a means of assessment; (2) marking as a means of communicating knowledge; and (3) marking as a way of facilitating learning. Jarvis pointed out the importance of the third level which could be stimulated by a 'dialogue'. Establishing a rapport through creating an ongoing sense of dialogues between teachers and students is essential for effective feedback in distance learning context (Cole et al., 1986). They emphasized that feedback should be a part of 'good teaching' rather than simply a matter of 'marking' students' work.

Computer conferencing allows student to exchange comments with each other and with a teacher, and more actively to interact and collaborate in order to complete their task or to share their emotional issues. Software has also been developed which can provide students with automated feedback, providing, for example, a holistic score for an essay based on assessment of grammar, usage, organization and development (Burston, 2003). Electronic corpora are also influencing feedback, by using concordancing software which provides students with access to collections of authentic language data. Sophisticated concordancing software, *Mark my words*, designed by Milton (2006), enables teachers to insert comments in any language and to link the comments to the online resources with corpus data.

Warschauer and Ware (2006: 110) summarize the advantages of feedback through

virtual learning technologies as follows:

> Technology-enhanced environments provide resources for promoting student peer response online in a range of useful ways. Student papers can be made more widely available, and such collaborative effort can foster a sense of community in the classroom (Kamhi-Stein, 2000; Plass and Chun, 1996). Electronic discourse provides an audience of peers beyond the instructor, which helps heighten awareness of audience and of communicative purpose (Ware, 2004). Online discussions also provide spaces for students to practice their literacy skills in a nonthreatening environment (Colomb and Simutis, 1996). Learners have been found to participate more actively and with greater motivation when provided the opportunity to share their writing through online discussions (Greenfield, 2003; Warschauer, 1996b; Warschauer, 1996a; Sullivan and Pratt, 1996).

Catera and Emigh (2005) found that the amount and quality of the feedback learners

received from other students influenced their motivation to post comments. According to Nicol

and MacFarlane-Dick (2006), peer feedback is practical both for students who receive it and

students who provide it, as it helps students to develop critical thinking and the ability to

evaluate work objectively as well as to reflect their own work.

Rolliston (2005:25) claims that one feature of peer feedback in a L2 writing class is that

students learn to write for an audience and that writers are encouraged "to formulate writing in

line with the characteristics and demands of the reader." They noted also that peer feedback

can encourage a collaborative dialogue, and it operates at a level that is less formal and

potentially more accessible than instructor feedback. Liu and Carless (2006) emphasize the

interactive and collaborative aspects of peer feedback. For example, they describe peer

feedback as "a communication process through which learners enter into dialogues related to

performance and standards (p.280)."

While looking at the positive and negative outcomes relating to feedback in virtual

learning environments, researchers have also commented on the importance of the perceived

value of the teacher's feedback (Hyland and Hyland, 2006; Hyland, 2003; Hyland, 2001;

Cohen and Cavalcanti, 1990). In multi-cultural, online learning communities, learner participants often give the teacher's feedback much more credence than they give to even their more advanced peers. Currently instructor feedback remains the prevalent way of providing feedback on student progress in the second language classroom. Yildiz and Bichelmeyer (2003) found that L2 students from Taiwan and Turkey believed that "the teacher is the only source of knowledge" and instructors' opinions are more important than classmates' opinions. They reasoned, Yildiz and Bichelmeyer said, that their classmates could be wrong, whereas their instructor could not. Hyland and Hyland (2006), reviewing relevant literature on surveys of students' preferences regarding types of feedback on foreign language tasks, point out that foreign language learners generally value teacher feedback more highly than peer feedback. Furthermore, students perceive their expertise to be insufficient to provide peer feedback, which they see as the teacher's role (Hanrahan and Isaacs, 2001).

Not all researchers find the feedback that takes place in a VLE, is positive. In a wider experiment, the VLE Blackboard was used for a peer feedback exercise in a virtual seminar with students from five different countries (Prins et al., 2005). In this expanded electronic community, Prins *et al.* (2005) found that the quality of peer feedback was low and consisted of mostly negative rather than positive statements. They also found, because, in these online environments the teacher is being pushed into a marginal role due to lack of face-to-face interaction, how vitally important the quality of teachers' moderation skills is. Hewings and Coffin (2007) support this claim. Teachers took different roles during electronic written exchanges via an asynchronous electronic conference in three control groups. The findings indicate that when the teacher took a back seat after initiating the topic, little follow-up interaction occurred after initial responses and feedback. However, when the teacher asked probing questions, students continued and elaborated on their discussions.

As an addendum to this discussion on feedback in VLEs, the literature indicates that there is much research yet to be done. An important issue, for instance, in this feedback discussion in second language learning, is where to focus such research when looking at VLE feedback. Eskey (1983) and Fathman and Whalley (1990), for instance, suggest that feedback on both form and content is important. And Cohen and Cavlcanti (1990), Zamel (1985) and Truscott (1996) cautioned about the tendency to focus feedback only on form, at the expense of content.

Hyland and Hyland (2006:96) investigated the various roles that feedback, including computer-mediated feedback, can play:

> … feedback studies have moved away from a narrow obsession with the effectiveness of error correction and the practice of peer feedback to embrace a new range of issues, so that we are now more aware of the potential of oral conferencing and computer- mediated feedback, of the importance of exploring student preferences and responses to feedback, and the role of wider social, institutional and interactional factors on feedback and its uptake.

Hyland and Hyland (2006) are suggesting that research must move beyond simply assessing students' responses to assignments, and find ways to observe and examine the social and affective exchange in peer feedback in terms of the role such feedback plays in language learning.

2.3.3 Learning Community

Johnson and Johnson (1999, cited in Hrastinski, 2008:80), defined the learning community as "a limited number of people who share common goals and a common culture." Learners, working together, learn from each other. In online learning communities, networked technologies contribute to interactive and collaborative learning (Gunawardena et al., 2009; Urban and Ove, 2005; Brown, 2001). Rovai (2000) points out communities make demands on its members, and members feel an obligation to respond. These feelings of obligation reinforce

the bonds among community members by letting members know their contributions are expected and valued by the community.

In the traditional classroom, where students attended classes in an enclosed, physical space, there was the teacher at the front of the classroom and the students sitting isolated, separated, in front of the lecturer. Each individual took in information and processed it internally, without collaborating with their classroom peers. As new developmental concepts and ideas of collaborative learning entered educational theory, the idea that the educational experience could be enhanced by collaboration took hold. The idea that education, that learning, was a one-on-one relationship between the instructor and the individual student shifted toward a concept that learning was a shared, a community, experience. The learning experience became a complex interchange of information and learning-information exchange between all the possible intra-, and inter-relationships of all the participants. By the time that technology allowed for the possibilities of distance learning, where teachers and students could be connected without regard to space or time, the concept of a learning community was already an inherent given of the learning environment. The work of Lave and Wenger (1991), further developed by Wenger (1999), expanded and transferred these findings to the new age of distance, e-learning, environments.

When community is viewed as what people do together, rather than where or through what means they do such things, community becomes separated from geography, physical neighbourhoods, and campuses (Wellman and Gulia, 1999; Wellman, 1979). One facet of this interest concerns the building and nurturing of a sense of community among learners who are physically separated from each other (Rovai, 2000). Researchers generally agree that positive outcomes are related to sense of community among learners in an e-learning environment. Strong feelings of community increase the flow of information, the building of support,

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commitment to group goals, cooperation among members, and satisfaction with group efforts (Dede, 1996). Poole (2000) found that the web-based delivery medium enhanced the development of the class as a learning community. Though learners could not read facial expressions or gestures in a discussion, their written responses were such that peers could interpret meaning and emotion.

However, Rovai (2000) points out that an educator who perceives the value of social bonds in the learning process must reconceptualise how sense of community can be stimulated in virtual learning environments, where many of the verbal and nonverbal cues needed to support strong interpersonal ties are missing. He also adds that learners in these courses, though physically separated, still have the advantage of interacting with each other through the use of text-based discussion boards and e-mail, without seeing or hearing each other and without the requirement to be online at the same time.

Fleming *et al.* (2002) stress that interactive and collaborative involvement lessens the psychological effects of distance for learners at remote learning sites. Haythornthwaite *et al.* (2000) emphasize the importance of social interaction and community development in reducing feelings of isolation and increasing satisfaction with online educational experiences. He also adds that it is not necessary for an instructor in a virtual learning environment to reply to all learner postings. He emphasizes, however, the importance of learners feeling that others are reading their written comments. This sense of involvement and engagement can be critical to creating a sense of community among learner.

2.4 Content-Based Instruction (CBI)

Content-based instruction is not a new topic of exploration in language education. Many researchers have suggested that content-based instruction (CBI) fosters academic growth while

also developing language proficiency (Stoller, 2004; Short, 1999; Snow, 1998; Crandall, 1992). This section will start by defining CBI, look briefly at the foundations of content-based instruction (CBI), and the various ways it has been introduced in language learning education.

2.4.1 Definition of Content-Based Instruction

There are several definitions of Content-Based Instruction (CBI). Krahnke's (1987:65) definition describes it as "the teaching of content or information in the language being learned with little or no direct or explicit effort to teaching the language itself separately from the content being taught." Curtain and Haas (1995) define it as "a way of providing a meaningful context for language instruction while at the same time providing a vehicle for reinforcing academic skills." More recently, Brinton *et al.* (2004:2) define CBI as "the integration of particular content with language-teaching aims." In a more empirical way, CBI emerged out of immersion experience as "a major impetus for Communicative Language Teaching (CLT) in the instructed language teaching sector (de Bot et al., 2005:79)." Järvinen (2006) also discussed the "meaning-based" nature of CBI in which "Language is a tool of learning relevant academic content; and as such its use in the classroom is real and thus potentially more challenging, motivating and more pushing (Swain, 1993, cited in Housen, Pierrard et al.,2006:439)."

Three different definitions of CBI are given by Bycina (1986), Brinton *et al.* (1989), and Wesche (1993). The following five, common objectives, taken from Brinton and Holten (2001), provide a framework within which these varying definitions are compatible.

1. The goal of CBI is to provide a meaningful context for language teaching to occur.
2. The organization of a CBI course centers on content.
3. Content drives a curriculum, that is, it is the starting point for decisions about what is taught.
4. Language and content are taught concurrently.
5. Comprehensible input, provided through the content materials leads to language acquisition.

(Brinton and Holten, 2001:240, cited in Snow, 2005: 693)

Thus, CBI is supposed to enable the learners "to develop and refine these necessary literacy skills. Through planned, purposeful, and academically based activities that target linguistic and critical thinking skills and engage students in meaningful and authentic language processing (Kasper et al., 1999:3)."

2.4.2 Foundation of Content-Based Instruction

Brinton *et al.* (2004) suggested the fundamental foundation of content-based instruction may be traced back to as early as 389 A.D., when St. Augustine emphasized the need for a focus on meaningful content in language learning as cited in Kelly (1996)'s quotation:

> Once things are known, knowledge of words follow… we cannot hope to learn words we do not know unless we have grasped their meaning. This is not achieved by listening to the words, but by getting to know the things signified.
>
> (St. Augustine 60:XI, as cited in Kelly, 1996:36)

In second language acquisition (SLA) research, the development of content-based instruction was hinted at in Krashen's (1985) work on the comprehensible input hypothesis. He argued that the best way to acquire language is by being incidentally and extensively exposed to comprehensible input. The studies by Snow (1993) and Wesche (2002) supported the importance of comprehensible input for L2 development and L2 content learning.

Garrett (1991), Lightbown and Spada (1994), and Tarone and Swain (1995) claim that form (language) and meaning (content) may not be separable in language learning. Language communication combines formal accuracy and relevant content. As Vygotskian approaches reflect, it is necessary to negotiate meaning as well as form while interaction or collaboration takes place between student-student or student-teacher. Grabe and Stoller (1997) state CBI gives students many opportunities to negotiate the knowledge that they are acquring and to build up their knowledge. They add that students develop learning strategies from teachers and

peers rather than from teaching strategies. The studies of Brown *et al*. (1996) and Pressley and Woloshyn (1995) support the view that learning strategies, in particular, metacognitive strategies, develop effectively in integrated content and language instruction. Thus, the purpose of CBI is realized through a socio-constructivist approach, in particular, through interaction and collaboration.

2.4.3 Content-Based Instruction and Learning

Many studies have promoted the benefit and effectiveness of integrating content knowledge into language teaching (Mohan, 1986; Allen and Howard, 1981; Cummins, 1979). According to Stoller (2002:123), content-based instruction is intended to facilitate the integration of language and content, viewing "language as a medium for learning content" and content "as a resource for learning improving language." Mohan (1986:18) asserted the importance of integrating language and content learning:

> Regarding language as a medium of learning naturally leads to a cross-curriculum perspective. We have seen that reading specialists contrast learning to read with reading to learn. Writing specialists contrast learning to write with writing to learn. Similarly, language education specialists should distinguish between language learning and using language to learn. Helping students use language to learn requires us to look beyond the language domain to all subject areas and to look beyond language learning to education in general. Outside the isolated language classroom students learn language and content at the same time. Therefore we need a broad perspective which integrates language and content learning.

Brinton *et al.* (2004:2) emphasize the practical aspects of content-based instruction:

> In a content-based approach, the activities of the language class are specific to the subject matter being taught, and are geared to stimulate students to think and learn through the use of the target language. Such an approach lends itself quite naturally to the integrated teaching of the four traditional language skills. For example, it employs authentic reading materials which require students not only to understand information but to interpret and evaluate it as well. It provides a forum in which students can respond orally to reading and lecture materials. It recognizes that academic writing follows from listening, and reading, and thus requires students to synthesize facts and ideas from multiple sources as preparation for writing. In this approach, students are

exposed to study skills and learn a variety of language skills which prepare them for the range of academic tasks they will encounter.

Content-based instruction approaches are now integral components in online learning environments and technology allows the use of web resources to develop content-based materials. There is little doubt about the important role that content-based instruction can play in language learning, however, despite the increased interest in it, content-based instruction presents some challenges including the vacillating emphasis placed sometimes on content, sometimes on form. Stoller (2002:112) points out that "many language programs endorse [content-based instruction] but only use course content as a vehicle for helping students master language skills." Conversely, Pessoa *et al.* (2007) mention that focusing on academic content without providing explicit language instruction might hinder students' abilities to fully develop the modes of communication. The study by Langman (2003) confirmed the Pessoa *et al.* (2007) findings when working with beginning-level language learners. His study, with middle-school, second language learners at the beginner level, and an ESL-trained science teacher, showed students developed their academic English less effectively even though the content was conveyed effectively. In this study, Langman concludes that the students had less opportunity to learn incidental language. Incidental language comes from the content of the lesson, or assignment and, as found in this study by Langman, adds to students effectively learning academic English. In this study, however, despite the instructor, an English native speaker in this case, trained both in the content (science), and as an ESL instructor, the participating students developed their academic English less effectively. The conclusion, then, Langman suggested, was that these particular students, because they were beginning learners, were unable to pick up on the incidental language cues. In addition, Bragger and Rice (1999:373) claim that the foreign language curriculum moves from familiar to less familiar content to minimize "the 'sudden jumps' in difficulty." Similarly the effectiveness of CBI is related to the

appropriateness of content. EFL students would experience frustration if the content was unfamiliar and too challenging. Content related to students' prior knowledge and experience will allow students more learning opportunities and is likely to result in greater intrinsic motivation (Bereiter and Scardamalia, 1993).

There have been many studies of different forms of content-based instruction. Brinton *et al.* (2004) demonstrates three different models of content-based instruction at the university level; theme-based instruction, sheltered content instruction, and adjunct language instruction. Theme or topic-based language courses are designed to help students develop L2 competence within specific topic areas. Sheltered instruction consists of a content-based course, e.g., a law class, being taught by a teacher versed in content-based language instruction; the teacher, facilitates language learning using the content-based law text; thus, teaching language learning and helping students to interpret and understand the content-based (law) materials. The third type of content-based instruction - adjunct instruction - comprises two linked courses - a language course and a content course - both courses being facilitated by individual instructors (one language, and one content).

Met (1998) demonstrates a content-based instruction continuum; from 'content-driven' to 'language-driven'. Content-driven approaches have strong commitment to content-learning objectives, for example, immersion, partial immersion, or sheltered subject-area courses. On the other hand, language driven approaches emphasize language learning, using content mainly as a springboard for language practice, for example, theme-based courses. Wesche and Skehan (2002) also describe a continuum from 'strong' forms of CBI to 'weak' forms of CBI which are parallel to Met's (from 'content-driven' to 'language-driven').

Stoller (2002) has proposed ways of modifying theme-based courses so that students are better prepared for the demands of future subject-area courses. Short (2002) presented the Language-Content-Task (LCT) model: Knowledge of the target language (L), knowledge of the content area (C), and knowledge how tasks (T) are to be accomplished in academic settings. This model was applied to a sheltered social studies class at the middle-school level. Short concludes that this model provides "the glue for students to pull together their knowledge of language, content, and task so that they can participate actively in the academic classroom (p.20)."

Overall, the different types of content-based approaches in a continuum may provide flexibility to allow for differing student proficiency levels and course objectives.

2.5 Motivation and Attitude

Second/foreign language motivation is a complex and multi-faceted concept (Gardner, 2001; Dörnyei, 1998). Although motivation is constantly referred to as a pivotal factor in foreign language learning research, there is disagreement in the literature as to how motivation is encouraged or what the effects are in the language learning context. Even those researchers to whom we turn for clarification (Dörnyei, 1998), within their own work, posit evolving explanations over time. Ushioda (2005) attempted to summarize these evolving findings into two main approaches by using Gardner's socioeducational model (see section 2.5.1), and by implementing of a new "agenda" (Crookes and Schmidt, 1991) movement (see section 2.5.2). Gardner's work investigates "causal relationships among possible individual-difference variables with various L2 achievement measures"; while Crookes and Schmidt focus on identifying "possible variables which could influence learners' motivations within the immediate L2 learning context (Ushioda, 2005:50)."

The following section reviews and explores these two seminal approaches, and looks at some of the other research dealing with the how and the what of motivation in second/foreign language learning.

2.5.1 Gardner's Socioeducational Model

In Gardner's earlier studies, Gardner and Lambert (1972; 1959) examined the nature of motivation in second/ foreign language study by looking at two components: integrative motivation and instrumental motivation. Integrative motivation, according to Gardner and Lambert, is the desire to identify and belong to the community represented by the target language. Instrumental motivation refers to specific outcomes resulting from learning the target language, e.g., furthering career objectives. In practice, it is not always immediately evident what the relationship is between the two kinds of motivation, nor which comes first, integrative or instrumental. Oxford and Shearin (1994), for instance, point out that initial participation might lead to interest - integrative - (e.g. watching English movies), which in turn may lead to further involvement - instrumental - (e.g. registration in an English language class) and to changes in the motivational reasons for L2 learning (e.g. from understanding English movies, leading to wanting to, maybe, be a translator). Though it is not always evident which comes first, integrative (wanting to be a part of the community - target language - in this case, English), or instrumental (practical considerations such as career objectives - to get a better job, e.g., being a translator), it is clear that these two motivational impetuses are important components of L2 learning.

Working with MacIntyre, Gardner refined his socioeducational model of SLA. The refinement included antecedent factors, individual-difference variables, language acquisition context and outcomes (see Figure 2.2). The resulting model that Gardner fashioned, working with MacIntyre, illustrates the importance of what takes place in the learning context.

Figure 2.2Representation of Socioeducational Model of SLA (Gardner and MacIntyre, 1993:8)
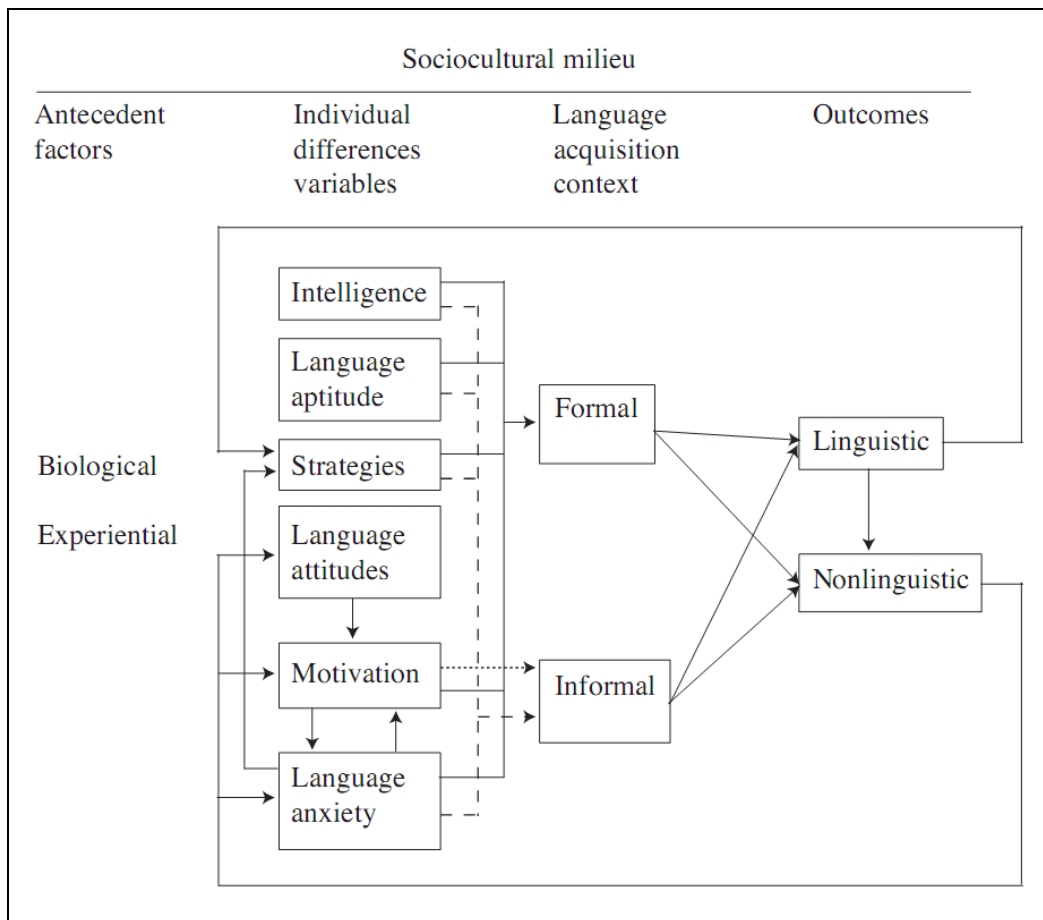
However, further research made it clear that there were additional factors. These additional factors did not diminish Gardner's earlier findings, but simply supported them. With further research, Gardner found that, "teachers, instructional aids, curricula, and the like, clearly have an effect on what is learned and how students react to the experience" (Gardner and MacIntyre, 1993:9). Ushioda (2005:52) clarified the role of motivation in the Gardner's model:

- First, it mediates any relation between language attitudes and language achievement.
- Second, it has a causal relationship with language anxiety.
- Third, it has a direct role in the informal learning context, showing the voluntary nature of the motivated learners' participation in informal L2 learning contexts.

2.5.2 New Research Agenda Movement

In the 1990s, Gardner's socioeducational model with new research (Vallerand, 1997) shifted the paradigm to consider environmental factors. Vallerand (1997) influenced the paradigm by adding his concept of intrinsic and extrinsic motivation. Intrinsic motivation, Vallerand suggested, referred to the urge to engage in the learning activity for its own sake; and extrinsic motivation was motivation derived from external incentives.

According to Vallerand, intrinsic motivation addresses experience coming from pleasure and satisfaction; whereas, extrinsic motivation involves the attempt to avoid punishment or threats. Intrinsic interest value is the enjoyment or pleasure that task engagement brings about; whereas, extrinsic utility value refers to the usefulness of the task in reaching future goals.

Oxford and Shearin (1994:20) emphasise that sometimes "intrinsic rewards- those that come from within the student or from the language task itself- are more powerful than teacher-provided rewards."

The work of Deci and Ryan (1985, 2000) also focuses on these intrinsic and extrinsic motives. They claim that extrinsic motivation is arguably equally as important and powerful as intrinsic motivation. Others have continued to explore the importance of extrinsic versus intrinsic motivational influences in L2. Dörnyei (1998), for instance, points out that extrinsic motivation is no longer regarded as an opposite counterpart of intrinsic motivation. He explains that they are not either-or choices, and often overlap one another.

And Crookes and Schmidt (1991) point out that Gardner's socioeducational model, though crucial to the understanding of L2 instructional context, has limitations:

1. Despite the large sample of subjects with whom Gardner and his associates usually worked, their research was always based on data collected at one point in time;

2. Their research is limited by local focus on French Canadians learning French

Motivational research is as yet ongoing. For instance, Crookes and Schmidt (1991) further suggest that motivation changes as a result not only of integrativeness (Gardner, 2000; Gardner, 1985) influences, but also of a number of environment factors. Oxford and Shearin (1994) insist on the importance of identifying motivational factors within the learning situation in order to find ways to motivate learners.

Dörnyei (1994)'s work also influences this discussion. In addition to the intrinsic/extrinsic and environmental (immediate learning situation) influences, Dörnyei contributes the suggestion that three components in L2 motivation need to be examined: the language level, the learner level, and the learning situation level (see Table 2.1). Ushioda (2005) points out that Dörnyei's model helps to identify motivational strategies, by classifying strategy depending on learning level, motivational strategies.

Table 2.1 Components of foreign language learning motivation (Dörnyei, 1994:280)

Language Level	Integrative Motivational Subsystem Instrumental Motivational Subsystem
Learner Level	Need for Achievement Self-Confidence • Language Use Anxiety • Perceived L2 Competence • Causal Attributions • Self-Efficacy

Learning Situation Level	
Course-Specific Motivational Components	Interest
	Relevance
	Expectancy
	Satisfaction
Teacher-Specific Motivational Components	Affiliative Drive
	Authority Type
	Direct Socialisation of Motivation
	• Modelling
	• Task Presentation
	• Feedback
Group-Specific Motivational Components	Goal-orientedness
	Norm & Reward System
	Group Cohesion
	Classroom Goal Structure

2.5.3 Motivation in the New Learning Environment

With the advent of the Internet, new learning environments including computer mediated

communication (CMC), appeared on the scene. Within this new electronic, virtual environment,

new ways of motivating learners became possible. From surveys he conducted, and from

learners' self-reports, Warschauer (1996b) found that computer-assisted instruction increases

students' motivation to communicate, feel empowered, and feel an increased desire to learn.

These electronic, virtual classrooms are able to enhance learner's motivation to learn a second

language when CALL technology is implemented effectively in the classroom.

Torii-Williams (2004), for example, working with American college students learning

Japanese, investigated how the use of e-mail in the target language (Japanese) motivates and

enhances learning. The study found that e-mail exchanges in the target language made the

students feel engaged, and feel like they were using the target language for authentic purposes.

Some students in the Torii-Williams study felt so engaged that they wrote more than the

assignments required. In a similar study, where students were encouraged to use blog posts in

their writing assignments, Arslan and Şahin-Kizil (2010), Leverett (2006) and Ward (2004) found that such exchanges between students gave them a sense of community. Felix (2001) reported similar results. His learners reported positive attitudes to the work, and several peripheral benefits, such as time flexibility, learning reinforcement, a sense of privacy, and sudden access to a wealth of information. Felix (2001)'s findings also comment on the negatives of the online environment (e.g. the lack of speaking practice, the absence of direct access to the teacher, lack of face-to-face interaction with peers, and inadequate feedback), although these sorts of shortcomings can also be found in a live classroom environment.

Stacey (1999) worked with students in a Master of Business Administration (MBA) program. The students used computer-mediated communication (CMC) to facilitate small- and large-group conversations to examine a theoretical framework for collaborative learning in an online environment. This study found that socioaffective support (i.e., posting supportive comments and sharing personal anecdotes and information) in the online environment was an essential element to the success of social constructive (online) learning. The results of Stacey's work further showed the strong connection between the construct of social relationships which were established online to the development of the trust and emotional support which the participants felt. This trust and support further strengthened the learners' motivation and desire to think and learn in more original and deeper ways. The participants in Stacey's study also showed marked improvement in their confidence as they shared discussions about their progress. Success strengthened success, and continued collaboration motivated students to study more effectively and to seek to continued collaboration throughout the duration of course. And finally, the MBA students in Stacey's research, because of the effects of CMC may have tempered their affective filters (anxiety or fear causing barriers/blocks to language learning),

allowing them to work together in ways that are less restrictive than is normally possible in a traditional face-to-face environment.

Dörnyei (2000) suggests a framework of motivation should include a time dimension. Motivation occurs over a period of time. What happens to motivate learners over a period of time, Dörnyei refers to as a 'process-oriented approach (p.521)'. It focuses on how the specific learner's behaviour changes and adapts as the class, over a period of time, progresses. Kimura (2003:78) supports Dörnyei's argument:"…classroom L2 learning motivation is not a static construct as often measured in a quantitative manner, but a compound and relative phenomenon situated in various resources and tools in a dynamic classroom context." In adult language courses it is not at all uncommon to find people who soon drop out because they realise that they cannot cope with the day-to-day demands of attending the classes and completing the home assignments.

Considerable research argues that students who are more motivated, who develop an interest in curricular learning goals and activities, and who perceive themselves as successful and capable students, learn more (Alexander et al., 1994; Tobias, 1994; Turner, 1993; Krapp et al., 1992). In addition, students with high interest and motivation make greater elaborations with learning material, going into greater detail and giving more examples, make more connections among topical information, and can recall information better (Alexander et al., 1994; Krapp et al., 1992)

2.6 Summary

This chapter dealt with the literature on existing research on collaborative learning in socio-constructivist perspectives. It included reports dealing with virtual learning environments (VLEs), computer-mediated communication (CMC) and the literature examining feedback in

these environments. Two other theoretical perspectives - factors affecting learners' motivation and attitude within a VLE; and the nature, effects and use of content-based instruction (CBI) - guide the development of the current study which focuses on the development of collaborative learning in a VLE with EFL at the university level.

Socio-constructivist perspectives are the fundamental basis of this current study. The core of such research emphasizes that social interactions and collaboration are requisite to learning. Learners reach the zone of proximal development (ZPD, see section 2.2.2) by scaffolding through social interactions and collaboration. Learning within VLEs in this study was viewed as a social practice. This study does not focus on the effects of collaboration on language acquisition. Building on the literature that emphasized the importance of social interaction - it focused, rather - on the appropriate use of technology to encourage and enhance that social, collaborative interaction in the belief not only that such collaboration would be conducive to learning, but that it would encourage learners to persist with the course.

Content-based instruction, consisting of theme-based, and sheltered content, and adjunct-language instruction (see section 2.4.3) is crucial to this study. Specifically, this study focuses on theme-based instruction, as it, as previous research showed, was the most useful approach for learners who generally did not share the same academic backgrounds (Brinton et al., 2004). It is essential to negotiate meaning (content) as well as form (language) by interaction and collaboration (with peers, or between students and instructor), to construct or re-construct new knowledge based on the students' individual background. Thus, this study, attempted to look at whether, and how, language learners focused on content, or language when working together in a VLE.

Motivation in language learning is not static. The time-dimension factor should be considered (Dörnyei, 2001; 2000). In a new learning environment, such as a VLE, various resources, tools and other factors (e.g., peers, activities, etc.) affect, as a course progresses.

This study examined what factors influenced learners' motivation and attitude and how they changed over time.

III. METHODOLOGY

This chapter explains what methods were used to investigate the research questions, how the methods were chosen, and how the data was analysed. Section 3.2 will present the research questions and Section 3.3 will discuss how research based on the grounded theory approach was applied, namely how the researcher used action research to apply a grounded theory approach. The next major discussion in this chapter is a review of the methodologies which were used for gathering data. The chapter concludes by examining the practical considerations in conducting and analysing data in order to ensure reliability and validity, and the manner in which ethical issues were dealt with.

3.1 Methodological Introduction

This study did not attempt to focus on any particular language learning theory. Taking such a broad, epistemological perspective (the ways to acquire knowledge (Bryman, 2008)) allowed both subjective and objective analyses. One such approach, based on grounded theory (see section 3.3.1), made it possible to analyse students' journals qualitatively, to elicit themes and identify collaborative behaviour, the kinds of collaboration that took place over a period of time, and the changes in the kinds of collaboration that emerged as participants became more comfortable with the process of language-learning in a virtual learning environment (VLE). Bryman (2008) refers to ontological assumptions which concern the nature of the world and human beings in social contexts. This study allows the researcher to create and use a VLE as a stage upon which 'the nature of the world and human beings in social contexts' (i.e., collaboration) can be scientifically observed. This study, using a constructivist approach based on action research (see section 3.3.2), focused on process (how collaboration facilitates and

enhances language learning), not on outcome (evaluating any individual student's language-learning outcome).

Both qualitative and quantitative approaches were used (see Table 3.1). The main benefit of using both of these approaches is that they allowed the same data to be analysed in different ways, and in greater depth, thereby providing a richer picture and increasing confidence in the research findings (Denscombe, 2010). The information resulting from the statistical analysis of the quantitative data can, for example, be enhanced by interviews or narrative accounts (Robson, 2002). Because foreign language classrooms are extremely complex environments, researching and reporting on such complexity requires multiple ways of collecting data to give a fuller picture of how the course has been implemented in specific contexts, taking into account such parameters as the language learners themselves, and, in the case of this study, content-based instruction and a virtual learning environment. The multiple methods used to collect and analyse data in this study included document analysis of (1) self-reflection journals by learners; (2) learners' written documents posted as assignments in the web bulletin board, e-mail messages, and enquiries (question-and-answer web board postings); (3) post-questionnaires (surveys); as well as (4) classroom observation using a Learning Management System (LMS).

3.2 Research Questions

The aim of this research study is to observe whether and how individual students collaborate in an online e-learning course, what forms their collaboration takes, how the pattern of collaboration changes as the course progresses, and what implications this has for course design and management.

The main research question is:

What opportunities does an e-learning environment provide for collaborative learning and what effect does this have on the learners as the course progresses?

This main question gives rise to the following 'sub-questions':

1.   Do learners work collaboratively? If so, how do they collaborate? Does this change as the course progresses?

2.   What motivation and attitude do learners have toward the course? Do they change as the course progresses?

3.   Do learners orient towards language or content? How?

3.3 Research Methodology Approaches

This study adopted both action research and a grounded theory approach, and the data gathered were analysed using both qualitative and quantitative methods in order to improve validity and reliability (see section 3.7)

Krathwohl (1993) defines a qualitative approach to research as describing phenomena in words while a quantitative approach describes phenomena in numbers and measures. However, these two research types are by no means as dichotomous as they appear on the surface. As Mackey *et al*. (2005) have pointed out, it is not unusual, and may even be enhancing, to use both methodologies in the same research study. Both qualitative and quantitative approaches are likely to be seen as complementary means of investigating the complex phenomena in a second language classroom rather than as opposing poles in a dichotomy. Considering the research questions and the purpose of this study, it therefore

seemed appropriate to combine quantitative and qualitative approaches in order to maximize both the breadth and the depth of the insights examined in an e-learning environment.

This thesis developed out of two separate studies – the preliminary (providing theories and themes) (see section 3.5.8), and the main study (the basis of this thesis) (see section 3.5.9). The collaborative learning themes which provided the framework and were analysed using an action research approach in the main study, were identified, using the grounded theory approach, in the earlier preliminary study.

The preliminary study, generating research concepts (e.g. collaboration in a VLE) and developing research techniques, took place over the spring semester, a period of 15 weeks in 2008; the main study, using the autumn class of the same year, looked at the same phenomenon, collaboration in a VLE. By using the collaborative learning themes identified in the preliminary study, interventions were implemented as a way of investigating aspects of research questions.

For example, data collected in the preliminary study from students' journals were used to develop themes relating to collaboration and consequences (see section 4.1) to be explored in the main study, and identify appropriate interventions to encourage collaborative learning practices.

The following sections discuss the grounded theory approach (section 3.3.1) and action research (section 3.3.2) in order to clarify the reasons for choosing these approaches, and the way they were applied in the current study. A number of interventions (section 3.5.9.2) were made based on the results obtained from the preliminary study (section 3.5.8) and observation of the previous week's classroom in the main study. To establish validity in this study, the

researcher needed to collect a variety of types of data, and use a range of data analysis techniques. These are summarized in Table 3.1 (see section 3.6.5 Triangulation).

Table 3.1The way of data approach

Types of data collected	Data analysis techniques	
	Qualitative	Quantitative
classroom observation (LMS)	✓	✓
self-reflective journals	✓	
written documents	✓	
post-questionnaire	✓	✓

3.3.1 Grounded Theory

Grounded theory was developed by Glaser and Strauss and emphasizes the importance of theory-building within research (Glaser and Strauss, 1967). It can be described as "a general methodology for developing theory that is grounded in data systematically gathered and analysed (Strauss and Corbin, 1998:158)." Cohen *et al*. (2007) point out that theory is grounded in the data and emerges from it. This means theoretical (coding and analysis) and empirical (data gathering) activities are not strictly separated in such research. Consequently, theory is not considered as a perfected 'product', but rather as a process, as an 'ever-developing entity' (Glaser and Strauss, 1967:32). The following passages set out some of the key elements of Glaser and Strauss's approach:

(a) The researcher has to enter his/her field in an unprejudiced state of mind "without any preconceived theory that dictates, prior to the research, 'relevancies' in concepts and hypotheses" (Glaser and Strauss, 1967:33):

An effective strategy is, at first, literally to ignore the literature of theory and fact on the area under study, in order to assure that the emergence of categories will not be contaminated by concepts more suited to different areas. (*ibid*: 37)

(b) Once the researcher has 'dived' into his/her field, grounded theory is derived from data and then illustrated by characteristic examples of data:

Generating a theory from data means that most hypotheses and concepts not only come from data, but are systematically worked out in relation to the data during the course of the research. (*ibid*: 6)

(c) By constantly interrelating theoretical (evolving concepts and theories) and empirical (data) aspects, an 'analytic core' of the research emerges. This core of the evolving theory serves as a guide for further collection and analysis of data and for further development of concepts:

> In the beginning, one's hypotheses may seem unrelated, but as categories and properties emerge, develop in abstraction, and become related, their accumulating interrelations form an integrated central theoretical frame work-the core of the emerging theory. (*ibid*: 40)

> Beyond the decisions concerning the initial collection of data, further collection cannot be planned in advance of the emerging theory (as is done so carefully in research designed for verification and description). The emerging theory points to the next steps-the sociologist does not know them until he is guided by emerging gaps in his theory and by research questions suggested by previous answers. (*ibid*: 47)

Altrichter and Posch (1989), on the other hand, report on the limitations of grounded theories in teacher research. They claim that educators, unlike sociologists, who tend to enter social domains they are unfamiliar with: "cannot enter their research field in an unprejudiced manner because they *already live and work in it* (p.26)." Therefore, they suggest that it is ideal to combine inductive (grounded theory) and deductive (action research) approaches in order to produce supportive results. Hence, this thesis follows that suggestion by having used a grounded theory approach and an action theory approach in the main study.

Similarly, Bell (1993:10) points out that ethnographic research, such as grounded theory, may pose problems in terms of generalizing findings, but such studies do enable members of similar groups to recognize problems and, possibly, to see ways of solving similar problems in their group. Also, the process of analysis, namely, theory generation, takes a long time and the researcher is under considerable effort to produce a theory.

The preliminary study was mainly concerned with developing thematic theories that were excerpted from the data collected from students' journal entries about both their actual learning experience and their perceptions about that experience in an e-learning environment.

3.3.2 Action Research

3.3.2.1 Action Research Defined

Action research is 'small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention'(Cohen and Manion, 1994). Cohen *et al.* (2000) define action research as a flexible, situationally responsive methodology that offers a rigorous and authentic voice to educators, researchers and students in educational settings. The focus of action research is the solution of context-bound, real-life problems (Levin and Greenwood, 2001, cited in McPherson and Nunes, 2002). A general definition of action research by Kemmis and McTaggart (1988:5) is "a form of collective, self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out."

Most research conducted on second/foreign language classroom practices seems to share similar goals, which include an attempt to better understand how second/foreign languages are learned and taught, together with a commitment to improving the conditions, efficiency, and ease of learning (Mackey et al., 2005). Eden and Huxham (1996:75) believe that action research provides an ideal research methodology for the educational study because a close "collaboration between practitioners and researchers over a matter that is of genuine concern to them" is required. Adopting a more language teaching and learning educational stance on action research, Wallace (1998:4) claims that action research is "basically a way of reflecting on your teaching… by systematically collecting data on your everyday practice and analysing it in order to come to some decisions about what your future practice should be." In action research which examines various aspects of classrooms primarily to improve teaching practice and the quality of education delivered to learners, the researchers are commonly teachers (Wallace, 1998; Crookes, 1993; Allwright and Bailey, 1991).

Chaudron (2000:4) argues action research does not "imply any particular theory or consistent methodology of research." Nevertheless, there are action researchers who identify practicalities of using an action-research approach. Wallace (1998) points out the main function of action research is to facilitate the 'reflective cycle' (Figure 3.1) and in this way provide an effective method for improving professional practice. Nunan (1992b) supports this view by illustrating the scope of action research and the various stages involved (see Table 3.2). Although there are differences in the way that Wallace and Nunan describe action research, both share the same basic features of influences, outcomes, and assessments.

Figure 3.1The reflective cycle and professional development (Wallace, 1998:13)
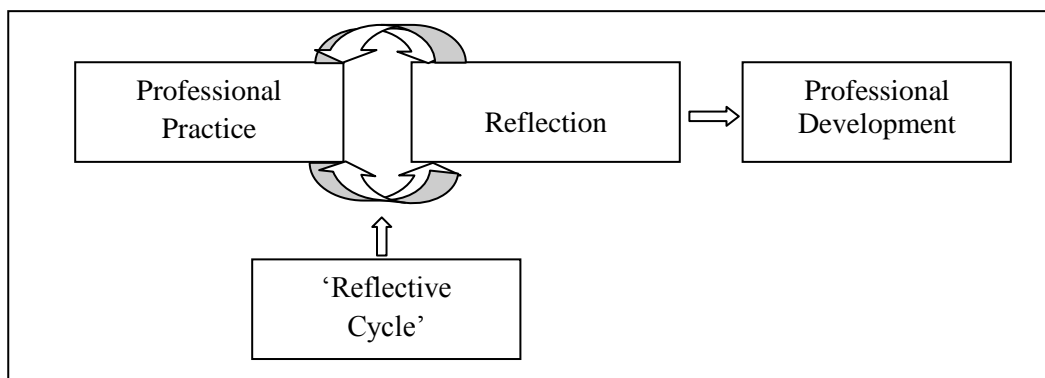
Table 3.2 Steps in the action research cycle (Nunan, 1992:19)

Step 1: Initiation	A teacher comes to me with a problem: His current group of students do not seem interested or motivated. What should be done?
Step 2: Preliminary investigation	We spend some time collecting baseline data through observation and recording classroom interaction.
Step 3: Hypothesis	After reviewing the initial data, we form the hypothesis that the students are unmotivated because the content of the classroom is not addressing the needs and interests of the students.
Step 4: Intervention	The teacher devises a number of strategies for encouraging the students to relate the content of the lessons to their own backgrounds and interests. These include increasing the number of referential over display questions.
Step 5: Evaluation	After several weeks, the class is recorded again. There is much greater involvement of the students, and the complexity of their language and student-led interactions is enhanced.

Step 6: Dissemination	The teacher runs a workshop for colleagues and presents a paper at a language conference.
Step 7: Follow-up	The teacher investigates alternative methods of motivating students.

On the basis of the above definitions and characteristics, this researcher adopted the three defining characteristics of action research. First, the research is undertaken by the classroom teacher as the researcher, rather than by an outside researcher. Secondly, the research is carried out involving a professional (the supervisor) in this research field. Thirdly, the research is aimed at changing and improving language teaching and learning practice (in this case, in a virtual learning environment). Interventions derived from both the teacher (researcher), but also from suggestions resulting from consultations between the teacher and the teacher's supervisor. The teacher and the supervisor discussed which interventions might best encourage learners' collaboration, and practical language learning, applicable in real-world situations. The interventions will be detailed in section 3.5.9.2 with regard to the tracking (i.e. recording of how students worked) together with an explanation of why particular changes were made to the course.

In summary, the term 'action research' was used in the main study to refer to a form of research, the primary purpose being to develop the course quality and to improve research practices in language education in an online course.

The following section will discuss the reasons why action research was used the current study.

3.3.2.2 Why an Action Research Approach Was Used

Action research, which is sometimes referred to as "collaborative research" or "practitioner research" or "teacher research" (Mackey et al., 2005:217) usually stems from a question or problem arising from classroom practice. Teachers may believe that others' research findings

are not sufficiently related or applicable to their own unique teaching situations (Crookes, 1993). Despite Crookes' caution that "research questions should emerge from a teacher's own immediate concerns and problems" (*ibid*: 130), most research questions, according to Allwright and Bailey (1991) are conducted to construct and test theories by researchers outside the classroom. Action research, however, commonly involves the teacher as a researcher who is directly involved in setting the focus of the research as well as in carrying it out. The teacher as a researcher thus has a direct impact on the events being studied. The investigation therefore addresses the dual demands of the researcher and the educator.

Nunes and McPherson (2002:17) emphasize that "Action research is highly appropriate to the development of e-learning, where experience suggests that significant modifications are required to the traditional paradigm… changes imply not only alterations to course models but also development of new attitudes." Other educational researchers emphasize the importance of using a range of participatory methods for data collection and analysis (Cohen et al., 2007; Elliott, 2007; McPherson and Nunes, 2004; Wallace, 1998; Nunan, 1992a; Nunan, 1992b). In the context of the virtual learning environment resulting from the design a development of the course, it is necessary for teachers and learners to exchange feedback and to participate actively. Technologically innovative thinking was required; action research provided a mediating role for the researcher.

The ongoing curriculum development of the course used in the main study since 2004 seems to satisfy the parameters of action research, the diagnosis of a problem and the development of a solution based on the diagnosis. Specifically, the present study concerned the problem of fostering learner collaboration in a Korean EFL e-learning environment. The researcher began by collecting data on learner perceptions and behaviours from students' journals in the preliminary study. This led to the formulation of an intervention that concerned

a more flexible teaching and learning environment. Finally the impact of this intervention was examined in order to adapt solutions to specific teaching and learning needs. In other words, in the last phase, the researcher noted how students interacted and, during and after each lesson, reflected on the delivery methods to find ways of enhancing student collaboration and feedback. The course evolved as a result of several cycles of course development, spanning five years. The course development met the researcher's philosophy of teaching (see section 3.5.1) as well as the aims of action research.

3.3.2.3 How the Action Research Approach Was Used

Action research does not necessarily constitute the daily activities of educators and tutors. Cohen *et al*. (2007:297), in citing Kemmis and McTaggart (1992:10), claim that "to do action research is to plan, act, observe and reflect more carefully, more systematically, and more rigorously than one usually does in everyday life." Kemmis and McTaggart (1992:21-2) offer four conditions distinguishing the meaning of action research from the way the word 'action' is used commonly:

- It is *not* the usual thinking teachers do when they think about their teaching. Action research is more systematic and collaborative in collecting evidence on which to base rigorous group reflection.

- It is *not* simply problem-solving. Action research involves problem-posing, not just problem-solving. It does not start from a view of 'problems' as pathologies. It is motivated by a quest to improve and understand the world by changing it and learning how to improve it from the effects of the changes made.

- It is *not* research done on other people. Action research is research by particular people, to help them improve what they do, including how they work with and for others […]

- Action research is *not* 'the scientific method' applied to teaching. There is not just one view of 'the scientific method', there are many.

Action research requires a systematic process to achieve its aims. There are several models in which the steps involved in action research have been incorporated (e.g., (McNiff et al., 2010; Sagor, 2005; Altrichter and Gstettner, 1993; Kemmis et al., 1988; Lewin and Lewin, 1948). Lewin (1948) classifies the process of doing action research into four main stages: planning, acting, observing and reflecting. He proposes that to obtain a general idea and gather data from a current situation is the first stage in action research. The production of a plan of intervention to meet an identified purpose is the pivotal outcome of the research. Actual interventions involve modifying the original plan. The next stage, acting, comes with ongoing fact-finding to observe and assess the intervention. This leads to a revised plan and set of processes for implementation including monitoring and evaluation. He suggests that the four stages can be conceived as a series of spirals.

With some variation, this study blends the Lewin (1948) model (planning, acting and observing, and reflecting) and Nunan's framework (1992 - see Table 3.2), as shown below in Table 3.3. These are similar approaches. Nunan's *Step 6* (dissemination) and *Step 7* (follow-up) are not included, as these are not part of the research results, but, rather, discussing after-the-fact the results, and working on developing future course design methodology.

Table 3.3 The adapted framework used in the main study

Nunan (1992)	Lewin (1948)	
Step 1: Initiation		The researcher as a teacher and the supervisor discuss with issues in the current e-learning course.
Step 2: Preliminary investigation	planning	The researcher identifies the research themes appearing in the preliminary study (i.e. journal entries tapping into the learners' perspectives)
Step 3: Hypothesis		From the preliminary study, the hypothesis is formed that the students read others' assignments in the web board in order to complete tasks. Also, collaboration facilitates students to motivate to learn.
Step 4: Intervention	acting	The researcher modifies some tasks for encouraging the students to participate actively.

Step 5: Evaluation	observing & reflecting	After each intervention, there are more students' contributions in the lesson. And they seem to feel less isolated and have more confidence to share their feedbacks and participate actively.

3.4 The Context of Study

The S university has an English graduation requirement. There are three ways to meet this requirement: 1) a compulsory English exam, 2) an appropriate score on an official English test (see Tables 3.4 and 3.5), 3) above 60% in a university English course. The course in the current study was proposed and accepted as an acceptable (to S university) alternate option. In this sense students may have been motivated extrinsically. Having been allowed this alternate option, they may have felt some pressure to improve their English performance because they had accepted this way of fulfilling the English requirement.

Table 3.4 Acceptable standard scores in TOEFL, TOEIC

General area of study	Acceptable standard scores			
	TOEFL			TOEIC
	PBT	CBT	IBT	
Social Science and Humanities	550	213	80	790
Science	530	197	71	750
Music and Art	500	173	61	690

*The score is valid when the test date is within 2 years of the submission date.

Table 3.5 Acceptable standard scores on MATE**

General area of study	Acceptable standard scores	
	Speaking	Writing
Social Science and Humanities	Moderate. Mid	Moderate. Mid
Science	Moderate. Mid	Moderate. Mid
Music and Art	Moderate. Low	Moderate. Low

*The score is valid when the test date is within 2 years of the submission date.
**MATE stands for Multi-media Assisted Test of English. It is a computer-based test developed at S University, which endeavours to evaluate global levels of proficiency in the English of the test-takers.

3.5 The Courses

This e-learning English course has been running in the distance learning division of the graduate school at S University in Korea since 2004. The course was initiated to allow distance learners or part-time learners to complete their requirements for graduation. In particular, it was designed for those who were unable to attend off-line courses, or did not submit official English scores (See Tables 3.4 and 3.5 in section 3.4). Students had to complete this course to graduate: Pass (above 60%) or Failure (under 60%).

3.5.1 Aims

When this course was designed, one of the intended aims was to provide learners with a non-threatening, supportive environment in which they would be encouraged to collaborate with other students and with the lecturer on content-based, online activities. Students are encouraged to use the technology as a language learning tool. In general, Korean EFL learners are exposed to English following mainstream methods. In the typical instructional context, elements of language, such as vocabulary and grammar are dealt with distinctly and in a decontextualized manner, in much the same way in which generative linguists investigate languages. Although many English courses focus on form, especially grammatical accuracy, this was not the main pedagogical purpose in this course.

The course tries to take into account the students' motivations, interests and preferences. Therefore, tasks in this course were designed not only to encourage students to apply the target language in practical, every-day situations, but also to require the learner to use language in order to meet their individual goals. The next section explains how the course was designed to meet these aims. The course design also considered ways of improving the effectiveness of learning language in an e-learning environment, while accommodating personal interests.

3.5.2 Historical Notes

Changes occurred in some components as the course was taught from 2004 through 2008. Each change occurred as a result of course evaluations that were carried out on versions of the course taught in previous semesters. These changes included some curricular revisions (changes to previously assigned tasks, the assignment of new tasks, the replacement of the portfolio approach with the keeping of a journal, a reduction in the number of themes, and a new vocabulary-building component was added); evaluative practices were revised; instructor interventions were revised and increased to enhance students' orientation to the special demands of online learning.

Table 3.6 Features of the course

Date (Semester)	Features of the course (2004-2008)								
	Curricular revision						**Evaluative practices**		**Interventions**
	Number of chapters (tasks)	Group work	Speaking	Vocabulary	Portfolio	Self-reflection journal	Assessment	Self-evaluation	Orientation
Autumn, 2004	14 (28)	✓(7)					Mid/Final test		
Spring, 2005 - Autumn, 2007	10 (20)		✓	✓*	✓*		Final test		✓
Spring, 2008	10 (20)		✓	✓*		✓*	Final test		✓
Autumn, 2008	10 (20)	✓ optional	✓	✓*		✓*		✓	✓

*: 3 times (weeks 5, 8, and 11)

In order to improve the course based on the researcher's reflection on practice and course evaluations, the first fine-tuning looked at curricular revisions. Initially, the researcher scrutinised the tasks.

Course evaluations, for example, revealed the course in 2004 was weak in developing oral skills. Students also pointed out the difficulty of working with the group due to the time and place challenges of being on-line learners. In an attempt to address these shortcomings, and being mindful of the aim to create an encouraging environment while promoting more collaborative exchanges, the compulsory group projects were refashioned into optional choices. Furthermore, in an attempt to improve and practice speaking skills, students were asked to record their tasks and assignments. For instance, after introducing themselves in a written format on the web-board, students were asked to record what they wrote on the web board using the recording software which was subsequently added to the assignment room. Recording tasks were required every two weeks in the course.

The previous version did not sufficiently encourage collaboration in the assigned group-work tasks. Although the researcher divided learners into groups according to their major, learners expressed difficulties such as lack of time to work together and opportunities to meet because of the challenges of distance and being part-time learners. Because of these challenges, and, again, being mindful of the intent to create an encouraging environment, the course was adjusted to reduce stress and reinforce the collaborative, supportive elements.

Early in the course, in 2005, as part of the curricular revisions, an additional task was introduced which required each individual to create a portfolio to promote reflective practice (i.e. to review content and language they had learnt in the previous weeks), articulate learning outcomes and collate their achievements. In 2008, students were asked to replace the portfolio with a self-reflective journal, which would allow them to review their learning experience and behaviour. The Nvivo software would also be able to collect data from these self-reflecting journals, providing a source from which a picture of the students' perspectives of an e-learning environment could be captured.

Another curricular change involved decreasing the number of themes from seven to five. In 2004, the themes included *Learning Style, Health Care, Appearance, Food, Shopping, Travel, and Culture*. In 2005, those had been reduced to *Learning Style, Health Care, Shopping, Travel, and Culture*. Still working to fine tune the curriculum, a vocabulary chapter was added to the curriculum. Each thematic assignment (e.g. Health care, Travel, Culture) lasted two weeks. After each of these themes were explored and covered, the instructor (instructor intervention) would encourage and try to provoke discussions around common thematic terminology (e.g. immune systems, ecological travel, and cultural shock). This vocabulary section was based on a lexical approach that had been developed in the 2005 version of this course. It was focused on developing learners' lexical knowledge, particularly, in collocations or chunks. The purpose of this lexical task was to provide a mechanism for learners to discover a different approach to building vocabulary, recognizing frequent verb usage, and incorporating the practice in their language learning.

As the course progressed it was clear that, as well as fine tuning the curriculum, the way in which the students' performance was evaluated needed to be revised. It became clear that the stages at which, and the ways in which, students were assessed, needed to be examined. Either program requirements or to meet the English requirement for degree fulfilment there were two exams required, one at mid-term, in May or October, and the final, in June or December. Due to the time-location challenges of this VLE-delivered course, some adjustments, sanctioned by the degree-granting administrators, were allowed. The two off-line written tests, that had been previously administered, were modified to one final test in the spring 2005 semester.

In the autumn 2008 semester, because it was thought that a chance to edit a previously submitted document would more readily encourage reflection and mastery of language learning, a self-evaluation and a chance to modify previous work replaced the final written test. This

self-evaluation - students suggesting what their mark should be - was added and sanctioned by administrators as meeting final examination requirements. Their suggested grade was to include a detailed explanation. The self-evaluation, and detailed explanation, was examined and balanced by the instructor looking at the revisions the students had made to their previous work.

Another change, apparently minor, but actually quite important, that had to be made as the course went through the curricular and evaluative revisions, had to do with an attempt to orient student participants to the special challenges of a learning environment (VLE). This was where much of the instructor intervention effort came into play. The researcher/instructor spent a great deal of time helping student participants learn how to use the technology to implement or even enhance, the motivational learning components (e.g. body language) of place-based experience, with the advantages (e.g., anonymity and reciprocity, see section 5.4) available in a distance-learning environment.

3.5.3 Structure of a Unit

This course was designed to integrate content and language by means of real life-based themes: *Learning Style, Health Care, Shopping, Travel, and Culture*. During the 15-week academic semester, the lessons consisted of five themes with 36 tasks occurring successively every week (see Table 3.7). An orientation to the course was given in the first week of the class.

Except in weeks 6, 7, and 13 due to interventions which will be explained in detail in the 'Interventions section (3.5.9.2)', each theme lasted for two weeks and included four tasks. The structure of each two-week theme was as follows: (see Table 3.7)

Table 3.7 Structure of each theme as a unit

Week 1	1. Warm-up	All products are submitted on the web board or assignment room*.
	2. Task 1	
	3. Task 2	
	4. Task 3	
Week 2	5. Lecture (Warm-up, Vocabulary, Expression, Functions)	
	6. Task 4	

*: The 'web board' is publically available to all participating students, whereas the 'assignment room board' is accessible only to the teacher and the submitting student. In the assignment room board, it is not possible for other students to read submitted assignments. An audio-record function was installed on the assignment room board, with which students could record themselves reading their assignments aloud. The multiple choice assignments were submitted on the assignment room board. The assignment room board posts are only viewable to the instructor.

In weeks 5, 8 and 11, students kept journals to reflect on their learning experience and feelings. In weeks 14 and 15, students, on their own, without comment from the instructor, evaluated their learning process during the course by writing notes to self-assess, report, and edit their own assignments .

Tasks were designed to immerse the learner in problem-solving situations which required knowledge of content and collaboration with other students within a theme. Tasks gradually became more complicated in order to integrate their background knowledge with the new content knowledge. All assignments, except those that involved creating a sound file, and answers to multiple choice questions on the web board, were available to be shared with other learners in order to exchange comments and read each others' assignments. The goal of the public posting of assignments was to encourage students to interact, collaborate and reflect on the class material. It also was designed to scaffold weaker students in the completion of certain more challenging tasks.

3.5.4 Tasks

In an effort to understand the nature of tasks, Richards and Renandya (Ellis, 2003; 2002:94) provided the following definition which highlights "using their [learners'] available language resources and leading to a real outcome". In other words, a task should be able to guarantee various learning opportunities through which the learners would experience real life language use. In the case of a given project, it was deemed that students should address the professional, contextual terminology: i.e. when reading an article in health care, for instance, they need to address, not the general sense of the article, but rather the specific, health-care terminology, the symptoms of the disease, suggested treatment, and so on. In addition, when adapting content to be delivered in an e-learning environment, the tasks which had been designed for use in a face-to-face classroom setting needed to be adjusted. Chapelle (2001) emphasizes that course developers need to consider how software can provide learners with opportunities believed to facilitate SLA. Furthermore, in this course, the task design process was based on 'Six common features of task'(Ellis, 2003) and 'Criteria for CALL task appropriateness' by Chapelle (2001). There are 'Six common features of task' and 'Criteria for CALL task appropriateness' (Table 3.8) as follows:

- A task is a workplan
- A task involves a primary focus on meaning
- A task involves real world processes of language use
- A task can involve any of the four language skills
- A task engages cognitive process
- A task has a clearly defined communicative outcome

<div align="right">(Ellis 2003:9-10)</div>

Table 3.8 Criteria for CALL task appropriateness (Chapelle, 2001:55)

Language learning potential	The degree of opportunity present for beneficial focus on form
Learner fit	The amount of opportunity for engagement with language under appropriate conditions given learner characteristics
Meaning focus	The extent to which learner's attention is directed toward the meaning of the language
Authenticity	The degree of correspondence between the CALL activities of

	interest to learners out of the classroom
Positive impact	The positive effects of the CALL activity on those who participate in it
Practicality	The adequacy of resources to support the use of CALL activity

These are examples of tasks in the course (Figure3.2).

Figure 3.2 Examples of tasks set for E-learning environments
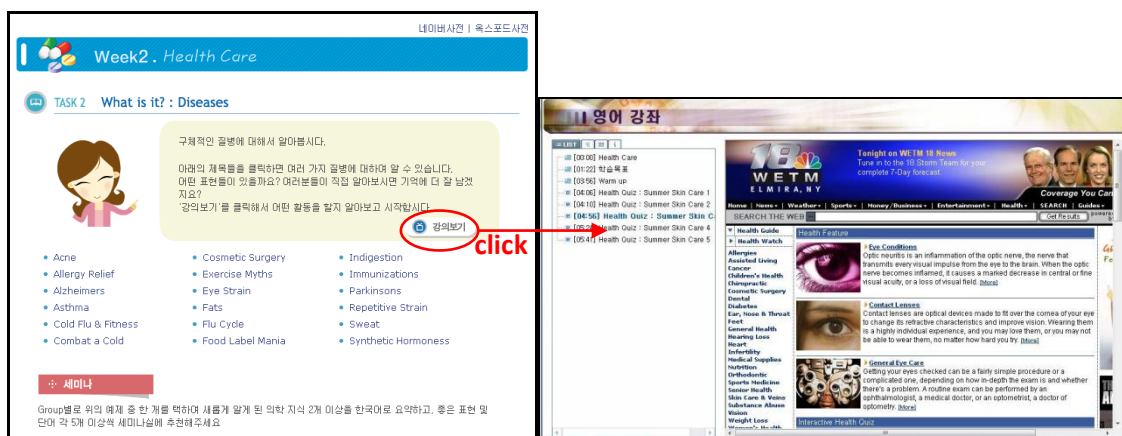
As Ellis (2003:199) emphasizes, "the learners' outcome resulting from a task may vary from learner to learner" because learners carry out their activity in unpredictable ways on the basis of their own experience and prior knowledge according to their individual aims. In other words, the goals of tasks are adjusted to fit an individual's needs or interests. It is anticipated that learners will modify their goals significantly as they learn new ways of constructing and applying knowledge. In this course, it was expected that the exchange of feedback and the reading of peer's assignments and comments would impact the processes students used to complete the assigned tasks. Moreover, students in this course needed to be somewhat autonomous in their selection of items in tasks, unlike typical courses which mandated the assignment so that students had little choice. In other words, the items in the task could be dynamically selected according to the learner's current knowledge level and particular course strategies. For example, in warm-up in Week 3, Health care I, there are five different health issues the students can choose from based on their interests and previous knowledge.

For instance there were five quizzes based on different health issues, 1) cholesterol, 2) common cold, 3) sleep loss, 4) skin care, and 5) winter workout (see Figure 3.3).

Figure 3.3 An example of a task (warm-up) in Health care: Five quizzes with an instruction page
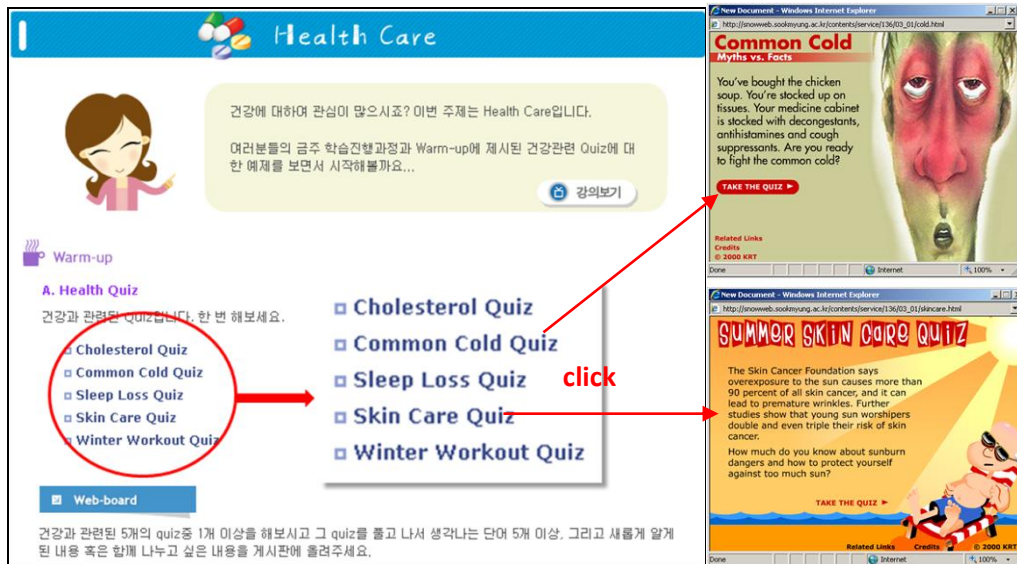
The instructions on how to complete the tasks and interpret the materials in each task allowed for different levels of language proficiency and prior content knowledge.

3.5.5 Materials

All materials for the course were presented in a sequential manner in the LMS. However, the sequence within a week's lessons was determined by learners rather than by the teacher. Accordingly, if, for example, students wished to refresh some linguistic knowledge (e.g., looking up word usage or vocabulary in the dictionary) or information learned in a previous exercise, they would go directly to the required information and then return to the point of choice.

Learners were accorded more flexibility in terms of various items in a given task than in traditional language courses commonly offered in Korea to cater for learners' interests and motivation. In other words, the design of the materials allowed for flexibility. In addition,

materials which were deemed to be authentic and interactive, as identified in the literature, were favoured. This was done to compensate for the infrequent opportunities for face-to-face communication.

3.5.6 Teacher's Role

Due to the fact that asynchronous communication changes the role of teachers and students and extends the classroom in time and space (Weasenforth et al., 2002), one of the primary roles for the teacher is to act as a facilitator of student participation. Other roles are as judge, or intermediary, or guide in which the teacher intervenes to clarify misunderstandings.

In this course, the instructor provided feedback on each student's assignments on a weekly basis. This consisted of encouragement, enhancing collaboration and interaction, and indirect correction. In addition, the teacher commented on their contributions, such as their effort in giving feedback to others' assignment. During the course design, the assessment scheme was considered in order to improve interaction and collaboration among students. Linguistic accuracy, however, was not the primary focus. The role of the teacher was more to enhance students' motivation and to encourage the use of the target language. In addition, the researcher as an instructor was responsible for the instructional design and development of the course. Website development and technical support were available.

3.5.7 Delivery

Virtual learning environments (VLEs) "imply an extra level of complexity for the learner and additional problems of maintenance, communication and support for tutors (McPherson and Nunes, 2004:81)."The delivery of a course (in this case, a second language course) in an e-learning environment needs to address issues relating to: e-learning learner skills; e-learning facilitation, tutoring and support; the effective and appropriate use of e-learning materials; the

use of computer mediated communication (CMC) tools to enable both peer-to-teacher and peer-to-peer interaction; and teacher strategies, skills and training (McPherson and Nunes, 2004).

To address some of these issues, this course made use of the Learning Management System (LMS) software. It is a software delivery system for a virtual learning environment and is a tightly integrated system which supports and facilitates the creation of web-based educational environments. It was used because the university managed all e-learning courses through it. Although it provided the platform for some other elements (i.e., chatting, seminar, quiz, and test), this course mainly used five functions of the LMS platforms:

- The syllabus for the course

- A notice board for up-to-date course information. This area provides students with detailed administration information in advance about the module such as orientation date and a final exam date (if it is held). Additionally, notices by the teacher are posted about course on the notice board.

- Electronic communication such as e-mail, discussions, enquiry and messages

- Web-boards include an assignment box for submitting assignments and voice recording assignments

- Records of students' performance such as participation, number of assignments, attendance and frequency and duration of access.

3.5.8 The Preliminary Study

The aim of the preliminary study was to examine how collaborative learning takes place in a VLE, to look at the challenges and problems, and revise approaches to tasks and assignments in order to develop a theoretical foundation, or a hypothesis that could be tested with a valid

and reliable way. The preliminary study was carried out over 15 weeks during the semester preceding the main study, with 50 learners who were representative of the target subjects (see section 3.5.9.1). The researcher did not begin with a particular theory in mind but adopted an inductive approach that allows theory to develop from the data and in particular data from the learning journals which reflected the participating students' views and perspectives on learning.

Using coding procedures that allowed themes in the data to be identified, the researcher wrote memos on the emergent theorizing and as this thinking developed the researcher used it to inform further data gathering that formed the basis for further coding, theorizing and data collection.

3.5.9 The Main Study

Using the findings from the preliminary study, the main study explored and expanded on the dynamics of a VLE, and fine tuned a hypothesis that could be tested for validity and reliability. From what was learned in the preliminary study, interventions (see 3.5.9.2) were introduced in the main study. Additionally, as well as using raw data from the students' journals in the preliminary study, four leading questions were added to prompt journal entries to elicit specific information about individuals' collaborative learning styles.

3.5.9.1 Participants

This study was carried out in an e-learning environment English language course conducted in South Korea with graduate students through an academic semester, which ran for 15 weeks in Autumn 2008. The students, all English as a foreign language learner, ranged in age from 24 to 63. Thirty-two of the students, 68% of the total, were between 25 and 34(see Table 3.9). The students were studying a variety of majors and had at least six years of formal English instruction at middle and high school in South Korea. Of the 67 learners in total registered for

the course, 47 students were included in the study. Because ten students never participated in

any given task for a number of reasons (e.g., personal schedule, the content was too difficult, or

they had misconceptions of what an e-learning course consisted of), these ten were not

included in the study. Four of the remaining ten students gave up after two weeks due to the

mistaken belief that the course consisted of only a lecture format; hence they did not participate

in the other components (board postings, collaborative tasks) of the course. Two of the students

submitted an official English score to fulfil their degree requirements and so were not required

to do the course; and four others did not begin to participate until the course had been running

for eight weeks. The data in this study came from the 47 remaining students who joined the

course in week one, and remained involved throughout the duration of the course. There was

no language level entry requirement.

Table 3.9 Age range

Age range	Frequency	Percent	Valid Percent	Cumulative Percent
25-29	**20**	**42.6**	**42.6**	**42.6**
30-34	**12**	**25.5**	**25.5**	**68.1**
35-39	3	6.4	6.4	74.5
40-44	7	14.9	14.9	89.4
above 45	5	10.6	10.6	100.0
Total	47	100.0	100.0	

3.5.9.2 Interventions

During the research, a number of interventions were introduced to improve the collaborative

learning process. The supervisor and the researcher had regular meetings (i.e., once a week) in

order to discuss issues which arose in the course to determine appropriate interventions. Table

3.10 illustrates these interventions which are arranged in ascending chronological order, to

show how certain aspects of tasks and instructions have or have not changed over the semester.

Table 3.10 Interventions

Date	Interventions	Why?
Week1-3	There was no intervention (this was the same practice followed in the preliminary study) and, as well, the instructional content was the same in the main study as it was in the preliminary.	
Week 4 (Sept.22)	A notice was posted in order to encourage students' participation and contribution. For example, as students read others' assignments, they were recommended to leave some comments on it without any guideline. All comments were welcomed.	Several students started giving some comments on others' work. Students who received comments from others were delighted and tended to give comments on others' work as well. From this observation, the instructor felt that some students might be hesitant to make a comment either from lack of confidence, or lack of clarity about what was required.
Week 5(Sept.29)	At this stage, some guidelines were given to students about what they should consider including in their journals. 1. How did you use other students' assignments? 2. Which assignments did you choose? Why? How much did you use it? To what extent did you use other students' assignment? How did they influence your own assignment? 3. How do you think your own public submissions were received? How did that reception influence what you did or did not do subsequently? 4. What factors encouraged you to submit early or late? What advantages (or disadvantages) do you think this gave you?	The instructor's daily observational experiences led to the conclusion that students' perspectives needed to be accounted for in the study; thus, appropriate interventions were introduced.
Week 6 (Oct. 6)	First, the task modified in order to encourage students to read each others' opinions actively rather than having students reading passively and not commenting, the instructor intervened and asked students to comment on others' posts. The previous practice was to present their opinion without discussion. (previous)	Students seemed to be aware that they might benefit from reading others' work. Moreover they became familiar with each other via reading others' assignments and exchanging comments even though they had not met face-to-face. The journals from the previous week showed that they seemed to be encouraged to use English regardless of their English language ability. Thus, a discussion

	Look at the pictures. What's each commercial about? Make a guess. (now) *Look at the pictures. What's each commercial about? Make a guess. Then discuss your opinion how your guess is similar or different to others and why.* Students were asked to discuss their opinions and to express how different from others' opinion. In addition, 'A discussion room' was opened for the task. Second, the number of tasks was reduced from three to one.	task would not be too difficult for them. As a discussion task would need more time if learners were to participate actively in it, another two tasks which had already been designed were removed.
Week 7 (Oct. 13)	Students were asked to read others' work, and use that to further develop and add to their own submissions. Alternatively, they were allowed to revise other students' work based on their understanding of the same content.	In the previous week's discussion task, most students did well and were likely to enjoy it. If discussion task would be encouraged to read others' opinion implicitly, the task in this week could be explicit way to read others work.
Week 10 (Nov. 3)	A group work task was suggested as an optional way of completing a given task.	Students worked collaboratively and very actively in terms of reading others' work and giving comments on them over weeks. The instructor wondered whether students were willing to do a group work task if it were optional.
Week 12 (Nov.17)	The instructor intervened, attempting to encourage collaboration, by suggesting that students could form groups to complete tasks.	This intervention was suggested by a few assignments having appeared in the previous week. The instructor indicated to the students that she hoped for more such group-submissions.
Week 13 (Nov.24)	Students were supposed to take a 'body language' quiz in a given web site in order to identify what their body language style was. However, a technical problem arose unexpectedly. Task revision was required. Students were asked to add information related to 'body language' using various	There was a technical problem which prevented access to a given web site, so the original task that was assigned was simply changed to solve the problem.

	formats, including video clips or audio files, to the previously submitted work of other students. These compiled submissions, could then be used to create one, all-student, group project.	
Week 14-15 (Nov.29)	Students were asked to revise the assignments they submitted during the course with a self-evaluation report as an assessment.	There was an explicit opportunity to revise their work by using peers and the instructor comments during the course. The aim of a self-evaluation report was to make students reflect critically on what they had produced during the semester. Furthermore the instructor wondered what factors students would prioritise when they evaluated. It would be a way to moderate between the students', self-evaluated marks, and the instructor's evaluation.

3.6 Data Collection

In order to find some answers to the research questions above (section 3.2), various sources of data were used. Participants' reflective journals and the questionnaire were used to investigate general perceptions, learning experiences, and feelings about the course. Others, such as the written documents required in their assignments, including e-mails, web-board messages, comments and emoticons, were used to flesh out the data from the participants' reflective journals and the questionnaire. The duration of the data collection, including the preliminary and the main study, consisted of two, fifteen-week semesters. With the use of Nvivo, the researcher was able to compare and contrast this raw data with evidence of how the student participants actually collaborated in the two (preliminary and main studies), 15-week VLE courses.

3.6.1 Participants' Reflective Journal

In language learning research, as well as teacher education, journals, for examining and reflecting on ones' thoughts, feelings, and experience, have become important instruments used to support introspective methodological approaches (Nunan, 1992b). These journals may be kept by learners, by teachers, or by researchers. They may focus on teachers and teaching, learners and learning, interaction between learners and teachers, or teaching and learning. Learners' journals, for example, can "give us a learner's voice" (Bailey and Nunan, 1996:199), including feedback on classroom practices, their learning processes and strategies, and opinions.

The use of learners' journals in the current study was based on three rationales. First, journals, as a reliable alternative to interviews (Corti, 1993), explore personal experiences of language learning in an e-learning environment. The journals add depth and breadth to existing data. Through them, other collected data, from the questionnaire, for instance, or actual performance, can be crosschecked and verified.

The second rationale on which the use of learners' journals was based, rests on the work of Mackey *et al.* (2005) who point out that journals have a greater flexibility over time and space than data collection points from interviews. Data, which was collected at points reflecting the varied schedules of participants, was reinforced by journal entries.

The third rationale for the use of journals was based on one of the course objectives, which was to give the students an opportunity to reflect on their learning experience. It was hoped, too, that this reflection would help to alleviate their feelings of isolation. By using the journals as an additional communication channel to let the teacher know their experiences, it was further hoped that they would be motivated to be more actively involved in the course. Also, having the students do the tasks, lessons, and so on, and then having them reflect on the

experience of doing them in their journals, would help to connect them to their own learning experience. This would not only allow them to see the connections between the content of the curriculum and their response to that content, but hasten their own development toward autonomous learning, and toward taking responsibility for that learning in an e-learning environment.

Nunan (1992b:120)'s summary of advantages of the use of diaries and journals, based on teacher education research by Porter *et al.*(1990), seems pertinent because most of them can be applied to this study of language learning in a VLE:

1. Students can articulate problems they are having with course content and therefore get help.
2. Diaries promote autonomous learning, encouraging students to take responsibility for their learning.
3. By exchanging ideas with their teacher, students can gain confidence, make sense of difficult material, and generate original insights.
4. Keeping journals can lead to more productive class discussion.
5. Students are encouraged to make connections between course content and their own teaching.
6. Journals create teacher-student and student-student interaction beyond the classroom.
7. By matching training methodology with second language teaching methodology, they make a class more process oriented.

As is the case with any form of self-reported data, journal studies have been the subject of a number of criticisms. One of the concerns with journal-based research is that keeping a journal requires a commitment on the part of the participants to frequently and regularly provide detailed accounts of their thoughts about learning. Given time constraints and other priorities, this is often a significant burden to the journal keeper. By making the keeping of a journal an integral part of the learning process, connecting it to the learner's own experience, and using it as a tool to connect teacher and student, this study lessened the stressful effects of the exercise on the students, and tried to deal with the obvious criticism levelled at self-reporting mechanisms being used as data sources.

Another possible criticism is that what participants write in their journals and what they actually do in the classroom do not always match. To offset this - the criticism of data collected from self-reported information - and the disconnection between the journal reporting and the actual classroom performance, this study added another dimension. The researcher observed classroom performance and kept detailed records allowing comparison of journal entries and classroom performance.

Students were asked to keep a journal three times within a semester (weeks 5, 8, and 11) in Korean rather than in English because the learners' journal data were not used for linguistic analysis. In the preliminary study, students kept a reflective, free-style written journal about their learning experiences and reflections on their process of learning in an e-learning environment. In the main study, on the other hand, students were asked to respond to the same content as in the preliminary study, with the addition of the four leading questions which were designed based on the results from the preliminary study. These leading questions (see details in Table 3.10 Interventions, section 3.5.9.2) were introduced to clarify the experience and perception of collaboration in a content-focused instructional experience. Even in the main study in which the researcher provided a structure for students to follow (e.g., using these leading questions), the researcher was still able to access the phenomena under investigation from a viewpoint other than the researcher's own.

The number of journal entries made it difficult for the researcher to identify and validate patterns in the data. Nvivo, a software program designed to assist researchers in textual analysis, was used to identify patterns in the large amount of data contained in the journals.

3.6.2 Questionnaire

The 'questionnaire' technique is a widely-used means of collecting data (Cohen et al., 2007). Questionnaires are defined as "any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers" (Brown, 2001:6). They can be used to collect not only non-observable phenomena (e.g., beliefs, perception, motivation, attitude and opinions) but also observable phenomena (e.g., factual information) more conveniently than by direct observations (Gall et al., 2007).

Questionnaire item types can be closed or open ended. A closed-item question is far more specific and restricts the possible answers which the researcher may be looking for; whereas an open-ended question includes items to be answered by respondents in any manner they see fit (Dörnyei, 2003). A closed-ended form leads to answers that can be easily quantified and analysed in a straightforward way. Open-ended questions are flexible to allow the researcher to capture the views of respondents. Open-ended questions can be used to determine the categories for closed-form questions. A preliminary test can be conducted in an open-form with a small number of respondents. Their responses can be used to design and develop the categories for closed-form items. Open-ended questions can identify crucial information that otherwise might not be elicited. They can also be used to address additional or complementary issues that form an integral part of the study's purpose.

The questionnaire used in this study was developed from students' journal entries and was validated using an iterative process. The researcher and the supervisor repeatedly tested versions of the questionnaire by comparing the resultant questions with themes (see section 3.3.1 and 3.6.1) and refining each version to produce the final questionnaire used in the study.

Themes of *collaboration* (see section 4.1) were identified from entries students made in their journals in the preliminary study. A questionnaire (see Appendix A) was later developed during the main study, using Nvivo to group and specify nodes (i.e. parent nodes and child nodes) from these original 'themes' identified in the preliminary study. The preliminary study (see section 3.5.8) took place a semester previous to the main study (see section 3.5.9). To increase the number of student respondents, the questionnaire was administered to students in both the preliminary and main study. These results were then triangulated by using data from the questionnaire, from the students' journals in both studies, and the on-line monitoring – e.g. LMS records - results.

The questionnaire was designed with two parts: rating scales (i.e., Likert scales) as closed-ended and open-ended questions. Rating scales consisted of 15 statements and 7 questions all of which were related to students' experiences, feelings and factual information in the course with five ranges of responses from 'strongly agree' to 'strongly disagree' or from' very much' to 'rarely' in the first section. The second part of the questionnaire is composed of three open-ended questions in order to gather possible further explanations or opinions. The content of the questionnaire was determined by the results of the journal data and e-learning course observation. It focused on students' motivation (Q1, Q2, Q15, Q16, Q21, Q22), factual information about collaboration (Q3, Q4, Q17), students' evaluations of collaboration (Q5-Q14, Q18-Q20), and comments on the course (Q23-Q25). Questions and statements in the questionnaire are very explicit. Closed-type questions were first used to elicit statements about general feelings about the course, followed by the factual information. The questionnaire ended with an open-ended question. This order of questioning, it was hoped, would make respondents feel more comfortable about completing the questionnaire.

In order to collect information that could be collated and compared, a post-questionnaire was given to the participants. This method, it was felt, would have a number of advantages over individual interviews. It would allow for the gathering of more data from more individuals; it would certainly be more economical given the distance-learning nature of the course; though conducted in a short, and manageable time frame, it would, in fact, produce very substantial and useful longitudinal information.

The use of Internet surveys has undergone rapid change. From asking respondents to answer by e-mail, or to e-mail attachments, such surveys are now commonly carried out by routing respondents to a web site where the questionnaire has been uploaded (Cohen et al., 2007). The questionnaire in the main study took the form of a web-based survey which was delivered via the course website after the 15-week course. It remained uploaded and accessible for three weeks. Respondents accessed the survey voluntarily. As a double check, the researcher thought it would be useful to apply the SPSS data analysis to responses in the preliminary study as well as the main study. An e-mail was sent to the students who had participated in the preliminary study to elicit these responses. When the t-test results were tabulated, there were no statistically significant differences (see Appendix C). A total of 60 from both the web-based survey and the e-mail were collected. The data from the survey questionnaire was used to cross-check and validate the students' journal entries and assignments, and the recorded tabulations in LMS of the students' feedback, comments, and exchanges.

There are potential problems related to the analysis of questionnaire data. Mackey *et al.* (2005:96) indicate that "one concern is that responses may be inaccurate or incomplete because of the difficulty involved in describing learner-internal phenomena such as perceptions and attitudes. This may be the case if the questionnaire is completed in the L2, in which lower

proficiency in the L2 may constrain the answers." In the case of participants who are English

second/foreign learners, as in this study, asking for responses in the native language, Korean in

this case, would serve the purpose of getting more information, but not, obviously, be a

measure of English proficiency. To compensate for this weakness, in this study, the

questionnaire was written both in English and Korean to ensure rapid and complete

comprehension. In the open-ended questions, in particular, respondents were allowed to write

their responses in Korean. In previous attempts, when this researcher insisted on getting

responses in English, students would often simply leave such questions blank. Using cross-

checking research techniques, (e.g. quantitative -LMS data analysis; and qualitative - journal

entry analysis), this study attempted to establish both validity and reliability. To further

strengthen findings, two colleagues were used to check the data analysis and confirm the

Korean-to-English (see section 3.7) translations.

3.6.3 Observation in an E-learning Environment

In observing feedback, comments and exchanges made by students and an instructor on web

boards, the researcher would further elaborate or comment to elicit and generate supplemental

data. Using LMS tabulations, observation was also used to collect and analyse data. Hence, in

this study, observation was used as a method to both generate and collect data. Although, face-

to-face observations are not possible in a VLE, the LMS software did allow the recording and

comparison of learners' behaviour. Such behaviours, such as the duration of accessing the

course, the frequency of accessing other learners' work, the number and frequency of

assignment submissions could be captured by the LMS and used to validate self-reported

(journal entries) data. Observation allows for comparison of what people do and what they say

they do (Robson, 2002). What learners actually said in their journals may differ from what they

did in the classroom. Observation data were used to validate or corroborate (or refute) the

information obtained in students' questionnaires, their journals and their analyses of written documents.

3.6.4 Written Documents

With the participants' consent, all the documents in the course were collected. These consisted of participants' assignments, e-mail exchanges with learners and instructor, Q & As, and feedback. They submitted assignments in written or recorded form, following task types assigned every week on the web board. This information provided the data which was then used to reveal any discrepancies between what was written by the respondents in the questionnaires and journals, and their actual performance. This data allowed the researcher to examine learners' understanding of collaborative learning, as well as their understanding of content and language. Other electronic communications, such as e-mail, enquiries (Q & As), instructor's and peers' feedback were saved in the LMS and used to support the findings. The related types and the amount of data collected are presented in the following table (see Table3.11).

Table 3.11 Summary of data collected

Types of Data	Occurrences
Written assignments	1041
Peer-peer feedback	565
Instructor feedback	376
Enquiries (Q& As)	105
Messages	139(received: 83/ reply : 56)
E-mail	105(received: 54/ reply:51)

3.6.5 Triangulation

Triangulation is "the inspection of different kinds of data, different methods, and a variety of research tools" (Van Lier, 1988:13). The triangulated technique employed in this study was an endeavour, as Cohen *et al.*(2007:141) articulated it: "attempt to map out, or explain more fully,

the richness and complexity of human behaviour by studying it from more than one standpoint." In this study, the main methods used were qualitative, with quantitative methods used in a supporting role. Triangulation is the attempt to arrive at the same meaning by at least three different independent approaches (Johnson, 1991). It is one of the most commonly used and best known ways of checking for validity since it helps to add depth to the analysis; and it can potentially increase the validity of the study. The aim of triangulation is to gather multiple perspectives on the situation being studied (Burns, 2000). It also prevents the researchers from relying solely on initial impressions while, at the same time, helping to correct for observer biases and enhancing the development of valid constructs during the study (Goetz and LeCompte, 1984 cited in Johnson, 1991). Various techniques were employed in combination over a lengthy time period so that data obtained in different ways and from diverse sources could be compared and contrasted. Following guidelines suggested by Johnson (1991), the researcher was able to triangulate for exactness, and to bring together all the information that pertains to research questions.

In this study, a questionnaire, journals, an e-learning classroom observation and document analysis were used. First, the post-questionnaire was used to investigate not only learners' views but also factual information on collaborative learning. Second, a free-format journal by students was employed to reflect their feelings about content-focused language learning processes in a virtual environment. Meanwhile, the teacher's journal focused on the evolution of the course since it was introduced in 2004, and how interventions were made during the main study. Third, data recorded automatically as learners used the LMS were used to investigate features of the learners' collaboration. Data gathered via the LMS included looking at frequency of access of other learners' assignments, peer feedback, and learner-learner and learner-teacher interaction. The actual performance of students was recorded and

evaluated through written document data analysis; this played a pivotal role in demonstrating collaboration. This methodological triangulation would to some degree prove the concurrent validity of this research.

3.7 Validity and Reliability

Manicas tells us Einstein advised that:

> if you want to find out anything from the theoretical physicists about the methods they use, you should pay attention to the principle: Don't listen to their words, fix your attention on their deeds
>
> (Manicas, 1987:242)

The concepts of validity and reliability in qualitative research have been developed in various ways (Cohen et al., 2007; Maxwell, 2002; Nunan, 1992b). In many instances, different terminology (e.g., credibility, transferability, dependability, and conformability) has been used (Lincoln and Guba, 1985). Cohen *et al.* (2007:105) propose that in qualitative data, "validity might be addressed through the honesty, depth, richness and scope of the data achieved, the participants approached, the extent of triangulation and the disinterestedness or objectivity of the researcher… Reliability can be regarded as a fit between what the researcher records as data and what actually occurs in the natural setting that is being researched."

Maxwell (2002:40) claims that "Any account of validity in qualitative research, in order to be productive, should begin with an understanding of how qualitative researchers actually think about validity." He also proposes that "Validity is not an inherent property of a particular method, but pertains to the data, accounts, or conclusions reached by using that method in a particular context for a particular purpose (p.42)."In language learning and teaching, validity and reliability depends on the aims of researchers and the scope of study (Nunan, 1992b).

To counterbalance the limitations of using any one methodological approach, this study used four different methods to collect the data in order to triangulate and to guard against bias

(see section 3.6.5). It allowed the research questions to be examined by more than one method, and these differing perspectives, combined, provided mutual confirmation. A questionnaire and students' journals were employed to elicit information from the students about perception, experiences and behaviours in a virtual learning environment which could be compared and cross-checked with the findings from documentary analysis and records from the LMS.

To establish reliability and validity, the current study employed two research approaches, grounded theory and action research. A grounded theory approach was used in the preliminary study, providing valuable insights into the strengths and weaknesses of the use of the reflective journal. Action research and grounded theory approach methodologies were used in the main study. Combing inductive (grounded theory) and deductive (action research) approaches allowed results which support understanding of the phenomenon of collaborative learning in a VLE. As a result, curricular changes were made to support the validity and reliability of the study. For instance, four leading questions were fashioned and subsequently included in the later versions of students' journals to prompt students to comment on elicited themes. Lessons learned from this helped the researcher to develop a questionnaire, administered in the main study, which drew more in-depth and rich data from the student participants.

In addition to four different methods to collect the data mentioned above triangulation - the cross-checking of data by comparison of the qualitative and quantitative data - and the use of colleagues, trained in ESL and on-line teaching, to verify translation of students' Korean-to-English citations were used to further the validity and reliability of results.

In order to ensure process validity, which indicates the adequacy of the processes used in research (Gall et al., 2007) including data collection, analysis and interpretation, and

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whether triangulation of data sources and methods was used to guard against bias, this study presented detailed descriptions of how this course was modified and what interventions were introduced.

3.8 Ethics

Ethical considerations are paramount in all research. A balance must be struck between the demands of scientific research and the pursuit of truth, and the rights and concerns of research subjects. Each research undertaking is different. It is essential that researchers obtain participants' informed consent. Diener and Crandall (1978:34) define informed consent as "the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decisions." Informed consent examines four aspects (Cohen et al., 2007): competence, voluntarism, comprehension and full information. Competence of participants' mutuality refers to the discrepancies in knowledge bases that might occur when participants are minors. In the case of research involving children, permission must be sought not only from the young people themselves but also from adults responsible for those children. Voluntarism refers to the fact that participants can take part (or not) in the research free from any coercion. Comprehension means that participants fully understand the nature of the research. Full information implies that consent is entirely informed. However, Ruane (2005:21) points out that it is not necessarily clear "how much information is enough." Providing information may affect the results as, she argues, too much information may result in respondents becoming bewildered.

Ruane's comments played an important role in the way consent was sought for the current research undertaking. Consent was sought via an individual e-mail to all participants only after the questionnaire, in order to ensure that students were not put under any extra psychological pressure, and to reduce any influence on their performance and behaviour during

the course (see Appendix B). In questionnaires used in the current research, participants were not provided with detailed information about the study in order to ensure the information did not influence their behaviour and responses.

Maintaining anonymity and confidentiality are means by which the privacy of participants can be assured. Anonymity in the current study was achieved, principally, by not using the names of the participants or any other personal means of identification. In order to protect the participants' privacy, the research data and all the names in this study were translated to coded references. Aronson and Carlsmith (1969, cited in Cohen *et al.*, 2007:65) claim that "the very impersonality of the process is a great advantage ethically because it eliminates some of the negative consequences of the invasion of privacy." This study did not make public any connection between information and participants' names to further fulfil the promise of confidentiality. In addition, the post-questionnaire in the study was voluntary and anonymity was guaranteed in writing.

Considering the students' view as participants, researchers should take into account the effect of research on participants, respect for their dignity as human beings, honour their contributions to research knowledge and protect them from avoidable harm (Gall et al., 2007; Hitchcock and Hughes, 1989). Cohen *et al.*(2007:61) underline that ethical problems may often be caused by "thoughtlessness, oversight or taking matters for granted." The balance between the researcher and the students as the subjects, and ethical issues, was an ongoing process to be taken into consideration in the interest of both the researcher and the students in this study. Furthermore, each intervention resulted in weekly discussions between the researcher and the supervisor. Thus, each intervention was very carefully considered not only in terms of whether it furthered the aims of the research, but also in terms of its effect on the students' learning, and the aims of the course.

Cohen *et al*. (2007) conclude that methodological and ethical issues are closely interlaced in qualitative research. In the choice of methodology for this study, the researcher took into account the effect of this research on participants. Journals, for example, are employed not only to collect in-depth and dense data but also as a tool for the students to reflect on their language learning experience in an e-learning environment. These journals served a further purpose of creating a line of communication, and enhancing rapport between the teacher and the students. Hitchcock and Hughes (1989) indicate that establishing good relationships which involve the development of rapport between researchers and their subjects (i.e., a teacher and students) can initiate feelings of trust.

3.9 Summary

The purpose of this chapter has primarily been to discuss grounded theory and action research approaches and their application in either examining in-depth or gaining an in-depth insight into collaborative language learning and changes in learners' motivation and attitudes in an e-learning environment. The four different research methods for data collection were designed with the intent of showing that, by using rich and dense data, qualitative and quantitative approaches could be combined to attain valid results.

Efforts were made in the study to ensure that there was informed consent, anonymity, and confidentiality in accessing, analysing, interpreting and sharing the data findings presented in Chapter 4.

IV. DATA PRESENTATION AND ANALYSIS

In this chapter the data obtained from students' journals and observation made using LMS, and the post-survey will be discussed. Results from the preliminary study and the main study have been merged (see sections 4.1 and 4.2). Note: As mentioned above (see section 3.6.2) there were no statistically significant differences when SPSS, t-tests were done on these two, separate data bases.

4.1 Data Analysis: Learners' Journals

Data analysis was done using the Nvivo program, which helped the researcher to identify thematic, conceptual categories. The categories, in turn, were developed, integrated, and connected to produce theory. This is, in fact, the basis of the grounded theory approach as explained in the *Methodology* chapter (see section 3.3). As suggested by Coffey and Atkinson (1996), data from the students' journals, open-ended responses in the questionnaire, and the collected materials from the students' documents (i.e. assignments, messages, and feedback) in the LMS were analysed.

An approach to research which involves attempting to prove or disprove a theory using experimental methods did not seem appropriate for a study whose aim was to investigate collaborative behaviour in a VLE. The researcher therefore utilized an open-minded, imaginative approach, employing both grounded- and action-research-based techniques. The data analysis involved organizing, categorizing and reflecting on the data in terms of making it possible to classify and identify patterns, relationships and themes in order to understand the phenomena and to conceptualize theory. The process of data analysis and interpretation led to

theory generation. For example, coding data, writing memos and sketching diagrams or models, was repeated over and over, to produce categories.

This study was guided by an analytical approach which was based on grounded theory (Strauss and Corbin, 1990) using three coding methods: open coding, axial coding, and selective coding. A summary of these approaches is shown in Table 4.1. These three coding methods occur recursively rather than linearly.

Table 4.1 Three Coding Methods (Gibbs, 2002:167)

Open coding	Axial coding	Selective coding
The text is read reflectively to identify relevant categories;	Categories are refined, developed and related or interconnected;	The 'core category', or central category that ties all other categories in the theory together into a story, is identified and related to other categories;
(example) Examining, and comparing data; conceptualising data, leading to identification of concepts; adding new data; refining concepts.	(example) Integrating/re-integrating data and constructing categories.	(example) Identifying the core category, relating it to other categories, validating their relationships, and further refining and developing them.

The data from students' journals were coded, using a qualitative data analysis methodology program, Nvivo 8 which supports the storing and manipulation of texts or documents; and supports the creation and manipulation of codes, known in Nvivo as nodes (Gibbs, 2002).

Students' journals were written records of learning experiences, feelings, and reactions that they had during the course. Nvivo was used to analyse these journal entries and select and group them into data that can be coded into various nodes. Nodes can be names or labels for a concept or idea about data. Coding text at a node is the process of establishing a relationship

or connection between a node and one or more passages of text. Nvivo provides the following types of node:

- Free Nodes: 'stand-alone' nodes that have no clear logical connection with other nodes-they do not easily fit into a hierarchical structure.

- Tree nodes: nodes that are catalogued in a hierarchical structure- moving from a general category at the top (the parent node) to more specific categories (child nodes).

Free nodes can be like lists and tree nodes show a hierarchical structure like a tree. In this study, free nodes were created in the open coding stage and those nodes were integrated and elaborated as the parent node and child nodes in the next two stages, axial and selective coding, using relevant categories or concepts. A detailed explanation of the process will appear in the following sections.

4.1.1 Coding

4.1.1.1 Open Coding

According to Strauss and Corbin (2000:6), open coding is "…the process of breaking down, examining, comparing, conceptualizing, and categorizing data." This process is used in the present study to identify and develop categories. By inspecting the data closely and thoroughly without presuming the analytic relevance of any theoretical hypotheses, this process generates ideas. During the open coding, it was crucial to, as suggested by Strauss and Corbin (2000), code data 'line by line' asking questions to determine similarities and differences:

> What is the piece of data an example of?
> What does this piece of data stand for or represent?
> What category or property of a category does this piece of data indicate?
>
> (Strauss and Corbin 1990:62)

For example, as is shown in Figure 4.1, if the text is '…제 생각과 다른 학우들이 올려 놓은 것과 다른 것이 있나 열람도 해보고 거의 비슷한 생각을 가진 것도 참 재밌다 생각했고요… (…I accessed other assignments to compare with my own work. They had a similar opinion to mine. It was so interesting, I thought…)' which was highlighted in the journals, then the node was called 'Confirming knowledge' and 'Extended construct knowledge'. These two separate nodes in the open coding stage were later merged into one, called 'Expanding and confirming knowledge'. As this process – parent node producing child node, blending into merged nodes (as in the foregoing) – evolved, the original 54 nodes reduced, naturally and without any effort on the researcher's part, to a more manageable number of thirteen. The actual text was an example of a more general phenomenon, and the node title was therefore more of a general idea or concept. In Figure 4.1 below, on the left is an actual student journal entry and on the right coding stripes with node titles. The researcher identified themes and sub-categories, (e.g., types of collaborations, sharing, behaviours, feedback, and revisions made due to exchanges), and the Nvivo program was used to compile and classify, organize, these into parent and child nodes, and highlight (see differently coloured stripes on the right) examples of these from all the students' journal entries. Thus, Nvivo, helped the researcher to look at this large amount of raw data, and categorize it into different themes (nodes).

Figure 4.1 Displaying coding and coding stripes

Student's journal   Coding stripes
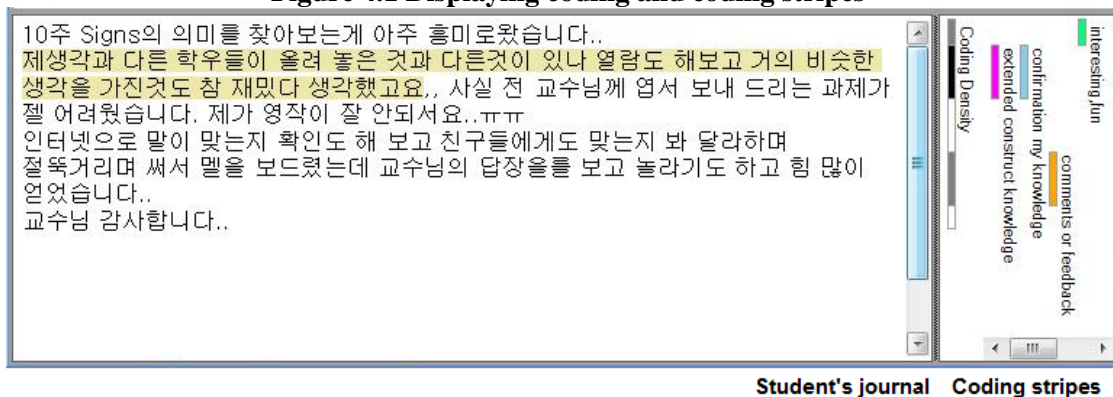
4.1.1.2 Axial Coding

Axial coding (Strauss and Corbin, 1990) or theoretical coding (Glaser, 1978) are both methods of integrating analysis through interconnecting causal relationships between nodes or categories which appear in open coding. At this stage of this study, the thirteen core categories had been developed and integrated with the nodes from the open coding, as shown in Figure 4.2 (a). For example the node 'Effects of sharing assignments' became one of the core categories (Figure 4.2 (a) and, as with some of the other core categories, it was identified as a parent node, with a number of related child nodes (Figure 4.2 (b)).

Figure 4.2 Integration/interconnection of nodes: The thirteen core categories

(a)   (b)
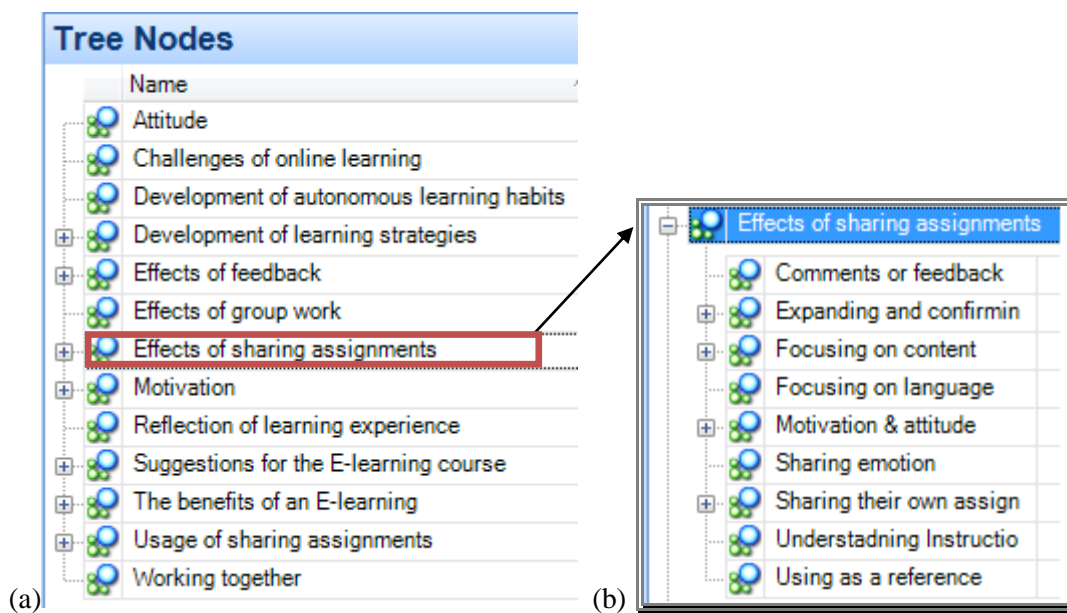
In addition, models such as the one below - Figure 4.3 - were created to help to visualize the nodal connections (parent and child nodes). For example, the model below was generated from Figure 4.2 and shows individual nodes created from the open coding in such a way as to help identify the nature of the relationships, connections and patterns.

'Effects of sharing assignments' is a parent node. This parent node was formulated from the surrounding child nodes. Child nodes related to the parent node (see Figure 4.3),

'Effects of sharing assignments' were numerous, and their relationship to the parent node, often complex and difficult to follow. The model, then, was developed to help visualize these child node connections to the parent node.

Figure 4.3 Model of nodes of 'Effects of sharing assignments'
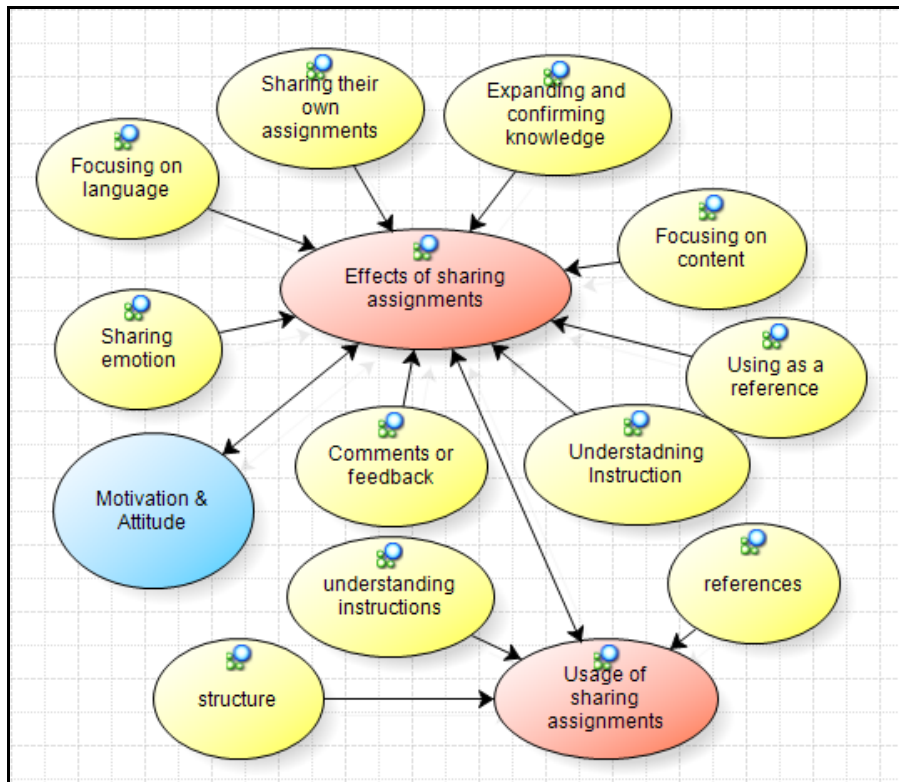
The above model (Figure 4.3) was generated from Figure 4.2, (Tree nodes, or Parent nodes). For example, the core, parent node, in the tree (Figure 4.2) 'Effects of sharing assignments' led to child nodes (e.g. 'Expanding and confirming knowledge', 'Understanding instruction'… and so on). In the model, this is pictorially represented with the big circle in the middle, labelled 'Effects of sharing assignments', and the nine child nodes surrounding this central (core) node. This process of working from tree nodes to child nodes to a pictorial representation helped to recursively refine and integrate terminology.

4.1.1.3 Selective Coding

The final phase, selective coding, involves integrating the analysis even further around the core categories. In the current study, a central concept was selected to act as a pivotal point, around which others can be brought together into a coherent whole. Selection of a core category was required to achieve the "tight integration and dense development of categories required of a grounded theory" as suggested by Strauss and Corbin (1990:121).

Examination of the journals revealed four core categories characterizing the learners' experiences and feelings in a virtual learning environment: a) Learning community, b) Technology, c) Learning strategies, and d) Motivation and attitude.

An overview of core categories based on the journal entries is shown in Table 4.2.

Table 4.2 Overview of core categories from journal entry

Core categories (parent nodes)	Subcategories (child nodes)	Sub-subcategories

Learning community	Collaboration	Working together
		   Inside the class
		   Outside the class

		Reading others' assignments
		   Effect
		   Usage
		      Using as a reference;
		      Understanding instruction;
		      Focusing on content;
		      Focusing on language;
		      Expanding and confirming knowledge;
		      Improving their own writing via a self-correction with comparison;
		      Others
		   Submission time
		      Personal schedule;
		      Confidence level;
		      Feedback

		Giving, receiving or exchanging feedback
Technology	Advantages	E-learning environment and Information technology Computer skills
	Challenges	

Learning strategies	Cognitive strategies	Note taking, repetition, memorization and translation
	Metacognitive strategies	Utilising time management skills Monitoring and evaluating their learning process
	Social/Affective strategies	Using Prior Experience Becoming aware of peers' feelings and thoughts
Motivation and Attitude	Motivation	Effect on study habits Effect on prior knowledge and experience Effect on task completion Effect on collaborative environment
	Attitude	Changing attitude

In the following section, each item mentioned under the core categories (parent nodes), e.g. 'Learning community'; subcategories or child nodes, e.g., 'Collaboration'; and sub-subcategories, e.g., 'Working together', 'Reading others' assignments', 'Giving, receiving or exchanging feedback', will be discussed in detail using actual examples from the students' journals.

The extracts from the data are presented in the students' original text, Korean, with an English translation. When there is no accompanying Korean text, the examples in English are the students' own words.

4.1.2 Learning Community: Collaboration

In the following section, each sub-section will discuss the three main features that surfaced in the subcategory (or child nodes) of 'Collaboration'.

4.1.2.1 Working Together

To complete the given tasks and understand the course content and language, some of students voluntarily chose a partner or formed a study group. Students were also encouraged to seek outside (friends or family or English colleagues) help.

4.1.2.1.1 Inside Class

Some students formed a study group, others worked in pairs in order to complete the given tasks, to exchange information, and to study English and the course content. Communicative technologies such as e-mails, messenger (Messenger®), or phone calls were generally used rather than face-to-face communication. Collaboration helped students to both focus on the academic purpose and perhaps, more importantly, to support and encourage one another (see section 4.1.2.3 Giving, receiving or exchanging feedback). Students referred in their journals to the effect of working together. In summary, two main responses were consistently cited; 1) I enjoyed group/pair work and 2) I felt as if we were studying physically together even though it was an online course. Although the majority of students worked individually because of the difference in personal time schedules and the difficulty of participating in a group, they generally did collaborate and claimed they felt a strong connection with others participating in the course.

(S8)
같은 전공에서 온라인으로 수업을 듣는 분들이 있어서 함께 과제를 해나가다 보니 진짜로 우리들끼리 여행을 가고 싶다는 생각도 하였답니다.
As I have done assignments with students in the same major, I have formed a strong bond with them to the extent that I would really like to take a trip with them.

(S14)
조를 만들어 과제를 했으면 좋았을 텐데 그러질 못했습니다. 시간적인 문제도 있었지만 서로 얼굴도 모르는 사이인데 통성명만으로 생각을 맞춰 과제 를 수행하는 것이 어렵게 느껴졌습니다. 제가 나이가 좀 많아서 그런것인지... 함께 과제를 푼 몇몇 학생들의 용기가 부러웠습니다ㅠㅠ
I wish I could do group work. I thought there might be some difficulties in adjusting my schedule to work with students I haven't met in person. I envy students' courage in forming a group and doing assignments as a group. ㅠㅠ*
*'ㅠ.ㅠ' is a code to show you are sad or unhappy in Korean, which is mainly used in technology meditated communication, i.e., computer chatting, cell-phone messages.

(S15)
…스터디그룹을 만들었다.
I formed a study group.

(S20)

함께 수업을 듣는 선생님과 각자 풀고 blog 를 통해 답을 맞춰보기도 했는데 눈에 보이진않지만 함께 공부한다는 느낌을 느낄 수 있었다.

I checked my answers with my classmates via a blog after doing a task individually. Even though I couldn't see her in person, I felt as if we were studying together.

(S34)

지난 주 과제인 조별과제가 이때까지 한 과제중에 가장 뜻깊고 재미있었다. S11 학우님과 몇일동안 메신저로 의논하면서 메신저를 사용할 수 없는 시간에는 전화연락과 메일을 주고 받으며 많은 의견을 교환했고, 그렇게 하여 조과제가 완성이 되었다

Last week's assignment was to do group work, which was the most exciting and meaningful. When we could not talk on the Messenger, we made phone calls and exchanged e-mails in order to exchange opinions and ideas about the assignment. For instance, I talked with S11 on the Messenger for a couple of days. Finally, we successfully completed the task.

(S42)

같이 수강하는 동기와 과제과 관련된 정보를 주고 받으며, 마치 함께 공부하는 것 같았다.

I exchanged information relevant to an assignment with my classmates. I felt as if studying together.

4.1.2.1.2 Outside Class

When it was not possible for a student to find a partner or participate in a learning group, assistance was sometimes sought from an expert or a more advanced learner of English who was not participating in the course e.g., a colleague, friend, or family member who helped the learners to understand the course material, provided translation, or modelled pronunciation for a recorded audio assignment. Those who did not study in pairs and groups did actually collaborate with a variety of others both inside and outside the class.

(S1)

남편이 잘못한 해석은 수정해 주었다.

My husband corrected and checked my work.

(S18)

처음 자기소개 녹음 숙제를 하면서 캐나다에 있는 아들에게 억양때문에 전화를 해서 문장을 읽어주고 한번 읽어보라 했고 그 억양을 배워서 연습하고 녹음 했다.

For the first recording assignment about self-introduction, I called my son who was in Canada to read aloud the sentences I wrote. I tried to mimic his accent and practiced it a lot before recording.

(S44)
전 아시는 분도 없고 학습도 느려서 같이 짜지는 못하고 나름대로 주변에 도움을 받아서 해봤어요..
Although I didn't join a group work because there was no friend to make a group and I am a slow learner, I did my work with others outside the class' help.

4.1.2.2 Reading Others' Assignments

Students reported that reading others' work was very helpful, effective, and motivating. It allowed them to see how others were understanding the course materials, as well as to make connections and establish rapport with their peers. The sub-subcategory, 'Reading others' assignments', consisted of: 1) effect (i.e., what kind of effects did reading others' assignments have?), 2) usage (i.e., how did learners use knowledge gained after reading others' assignments?), and, 3) submission time (i.e., how did reading others' assignments affect their decisions on when to turn in their own work?).

4.1.2.2.1 Effect

At the beginning of the course some students described negative effects resulting from their reading of others' work. For example, they confessed to embarrassment. They were reluctant, even afraid, to post their assignment in public due to their poor English proficiency. Some even mentioned that they felt less confident when they compared their own work with that posted by others.

(S1)
이 과제들을 수행하는 다른 사람들 글을 보니 절로 기가 죽는다. 다들 참 잘 하고 있는데 나만 뒤쳐지는 느낌이 들어 사뭇 우울했다. 영어 박사들만 모인 것 같다.
Reading others' completed work made me quite depressed because I felt I was the only one behind them. It seems that all of them are English experts except me.

(S22)
다른 수강생들은 너무나 프로들처럼 영작을 잘해 과제를 올려두어서 다른 수강생들의 과제를 하나하나 읽으며 점점 자신감을 잃었던 한주 였습니다.

This week I sort of lost my confidence about my English, when I read others' work. Their English assignments were well-written like professional ones.

(S39)
수강생들이 모두 보는 게시판인데... 혹 해석을 잘못해 웃음거리가 되지는 않을까하는 걱정된다.
The web board is viewable by all participants… I was worried what if my translation was wrong and my classmates would laugh at my English.

On the other hand, many students were encouraged to participate actively in the course and received some help by reading others' assignments in various ways (see section 4.1.2.2.2). The assignments posted on the web board seemed to provide stimulus to learners who were prompted to improve their work and motivated to finish the assignment because others had already finished. This competition seemed to stimulate a sense of good will amongst the students. This good will, in turn, allowed the students to begin to compete in a good natured way.

(S3)
누구에게 물어보기 힘든데 도움이 많이 되는 것 같다.
It seems like it is very helpful (to find answers on the web board), especially when there is no one around me to ask for answers.

(S7)
게시판에 글을 올리는 다른 학습자들을 보면서 조금 더 적극적으로 참여 해야겠다는 생각을 항상 했다.
I was encouraged to participate more actively in learning, when I found that some students post up their homework earlier.

(S11)
많이 보고 확인하는 만큼 영어 실력도 조금씩 조금씩 시나브로 늘어 갈 것이라는 믿음을 가진다.
The more I checked (my work) and read others' work, the more I believe that my English will improve little by little.

(S19)
얼굴 모르는 그들에게조차 나는 어떤 감정을 가졌기에 지기 싫어했을까?
What made me compete with people whom I have never met before?

(S26)

감탄할 만큼 잘해놓은 과제를 보면 내가 한 과제가 비교되어서 스스로 반성도 했다. 그리고 가능하면 내 과제를 열어본 누군가에게도움을 줄 수 있도록 좀 더 잘하려고 애썼는데..
When I read excellent assignments posted by other students, I compared them with mine and reflected on my own work. And I try to hand in flawless homework, so that peers will use my work as their reference just like I did.

(S32)
다른 수강생의 과제물과 비교를 하게 됨으로써 더욱 자극 받게하여 노력할 수 있었던 걸 같다.
When I compare my work with others', I become competitive and study more and harder.

(S38)
과제가 이해가 안되고 힘들다 싶을 때 마다 다른 수강생들이 한 과제를 보면 많은 길잡이가 되었다.
Whenever faced with difficult tasks that were hard to understand, I used others' work as a guideline.

(S45)
짧은 영어 실력이지만 나름대로 평가를 해보는 눈도 생겼다. 그래서 인지 정말 멋지게 과제를 제출하는 몇몇 학우들을 찾아 볼 수 있다. 부러움의 대상들이다. 나도 그렇게 하고 싶다.
Although my English is not good enough, I could evaluate peers' work. So I found several classmates who submitted very good assignments. They were the target of envy. I want to do it like them.

Harasim (1995) clearly makes the case that students learn better when working in a group-learning environment, than when working alone; anxiety and uncertainty are reduced. This study confirmed Harasim's finding. For example, even though some students, like S13, did not really participate, he was consistently reading others' work. This study essentially revolves around Harasim's finding concerning the benefits of a learning community. Students such as S13, are proof of the positive effects of reading collaboration in a VLE.

(S2)
처음에는 영어만 있는 외국의 사이트를 보면서 어찌해야 할 지 걱정만 앞섰지만,…. 다른 사람이 토론방에 올린 자료를 보니 차츰 할 방법이 떠올라 나름대로 정리하여 올리게 되었습니다.
At the beginning when I was required to get certain information from English websites, I was at a loss what to do with the materials in English. But now, I am getting to know how to do it after reading others' assignments.

(S13)

정작 토론을 하지는 못했지만 다양한 수강생들의 생각을 알 수 있어서 재미있었다.

Although I didn't participate in discussion, I enjoyed reading others' opinions and came to know their various thoughts.

Although they were embarrassed and nervous about making mistakes or letting others view their poor English, with time, interestingly, they adapted to the new environment and even developed positive attitudes.

(S17)

처음에는 매우 부끄러웠지만 조금씩 적응을 해 나가고 있습니다.

At the beginning, I felt so embarrassed. But gradually, I have become accustomed to doing it.

(S18)

처음에는 내 과제와 다른 사람의 과제가 공개되고 서로 코멘트를 달 수 있다는 것이 낯설고 솔직히 거북하였는데..

At the beginning, to be honest, letting others read and give comments on homework made me uncomfortable.

(S23)

처음 강좌가 시작 되었을 때는 내가 한 과제가 공개되는 것에 대해 부담스러웠다. 하지만 그 생각은 잠시였고 별로 신경 쓰이지 않았다. 나는 영어강사도 아니고 외국인도 아니기에 당연히 영어를 잘할 수 없고 또한 지금 이 강의를 듣고 있는 학생들도 나와 비슷한 입장일 것이다. 모두가 배우는 입장이기 때문에 미숙한 점이 있고 서로의 과제를 참고하면서 그 미숙함이 채워진다면 더욱 좋을 것 같다.

At the beginning, I felt uncomfortable with the idea that my work is open to other students. But the uncomfortable feeling did not last long and it does not bother me any more. I am not a native speaker or an English teacher. So, it is natural that I am not good at English. Not only I but also peers taking this course would be in a similar situation. All of them are learners just like me and we are not good at English. It would be great if sharing assignments helped us become better English learners.

(S35)

자신이 과제를 열심히 준비를 하였다면 다른 학생들이 자신의 과제를 보는 것에 별 불만은 없을 것 같다. 자신이 준비한 만큼 다른 학생들이 준비를 해 준다면 좀더 핵심적인 요소들을 빨리 파악이 가능할 것이다.

If each student prepared their work well, I think sharing with other people wouldn't be a big deal. If they prepare their work as much as I do, it would be possible for every student to get the essential points of the materials quickly.

As indicated earlier, over time, students worked harder and spent more time in

preparation in order to convey a better impression among their peers.

(S16)
다른 학생들에게 도움을 주고 싶다. 내가 받은 것 처럼.
I would like to help them as I get help from them.

(S3)
실수를 줄이려는 마음에 올리기 전에 여러 번 본다.
To reduce errors, I read and check my work several times before submission.

(S37)
학우들이 평가를 한다는 생각이 들면, 하나라도, 한 의미라도 바로 올리려는 욕심에 더 열심히 하게 된다.
Whenever I think peers can evaluate mine, I put every effort in completing tasks with the intention of providing correct English, even if it is only a word.

This last statement from S37 is another example of the strength of influence that peers'

comments can exert.

4.1.2.2.2 Usage

Reading other students' work prompted students to learn from one another; they made use of

others' work in the following ways: 1) using as a reference, 2) understanding instructions, 3)

focusing on content, 4) focusing on language, and 5) expanding knowledge and evaluating

their own work.

1) Using as a Reference

Students used their peers' work as a reference or as a model to revise their own work. They

read others' work before they started doing their own work. In this way, they sometimes found

solutions to their own writing problems by comparing the work of other students with their

own.

(S18)
어떤 형식으로 과제를 했는지 보곤한다.

I would look at how they did.

(S21)
올리기 전에 내 앞에 사람 두명 것을 보니, 다 나하고 다른 스타일이네!..
Before uploading my work, I read two students' in front of me. What a different style!

(S30)
Money Management 라는 사이트를 보니 대충 감은 잡겠는데 도무지....할 수 없어서
차례차례 옮겨적고 모르는 단어찾고 이어서 해석하고다보니 밤을 새워버렸습니다. 다음
날은 안되겠다 싶어서 다른 사람들 것을 참고하니 훨씬 쉽게 할 수 가 있었습니다. 이 곳 저
곳을 찾아보며 잘 보곤 고마운 맘을 다 댓글 달지도 못하고 말았습니다.
When I read articles in 'Money Management', I could understand some of it, but I couldn't do my
homework. So I copied it one by one (on my notebook) and looked up new words and translated
them into Korean. I stayed up all night doing the task. The next day, I decided to read others'
work as a reference. It was much easier for me to do. Although I got a lot of help from others'
work, I couldn't give "thank you" comments on all of them.

(S37)
나름대로 평가를 내릴 수 있고, 약점을 알 수 있어서 효율적인 공부인 것 같다.
I can evaluate my work and get feedback from others so that I come to know my weakness. So it
seems to be effective learning.

(S41)
게시판 과제를 일찍 올리면 과제물의 형식이나 내용이 맞는 것인지 확실하지 않아 다소
어렵고 불안하지만.
It is a bit difficult and challenging to submit homework early because I can't be sure whether my
content and forms are right or wrong.

2) Understanding Instructions

When students had difficulty understanding the explanations, even with the help of the video
instructions - the instructor had inserted a streamed video with details of how to complete the
assignments -, they found it useful to review the responses of their peers.

(S4)
교수님께서 올려놓으신 것을 이해하지 못할때는 다른 분들의 것들로 이해하고 게시판에
글을 올렸다.
Sometimes when I did not understand the task, I read others for a reference. With their help I
completed the task and posted it up on the board.

(S32)
과제에 대해 잘 이해가 되지 않을 때 참고했습니다.
I read others as a reference, whenever I had difficulty understanding the task.

(S47)

첫 주에는 과제를 어떻게 해야 하는지 알 수가 없어서 처음으로 올라온 다른 학생의 과제를 참고하였다.

In the first week, I referred to others to do homework, because I had no idea what to do with it.

3) Focusing on Content

Students were able to improve their own efforts by comparing and contrasting their work

with that of others who had taken different approaches to the assignments.

(S3)

같은 주제에 대해서 다른 수강생들은 나와는 다른 시각으로 접근하고 있었다.

Peers had a different approach to the same topic.

(S4)

대부분의 결과에서 Magenta 가 나오는 분들이 많았습니다. 저와 비슷한 취향이 많았었나 봅니다.

There were many 'magenta' in the test. Many students seem to have a similar taste to me.

(S16)

모험적인 여행 또한 관심이 있었던 나는 모험에 대해 쓰신 학생 분들의 글을 보고, 동감하는 부분 또한 많았다.

I could totally relate to some students who wrote about 'Adventurous Trip' which I was interested in.

(S31)

여행준비 list 를 올리는 것은 다들 비슷한 내용이었지만 그래도 한 가지씩 특별한 준비물이 있는 학우들도 눈에 띄었다. 특히 이치실(?)을 챙기는 학우가 기억난다.

The travel lists of most students are almost the same. But some put a special item on their lists. I remember that one of them put dental floss on the list.

4) Focusing on Language

Students read others' assignments, noticing how they had used new vocabulary, syntax,

grammar, idioms, and so on, and then incorporated these learned lessons into their own

writing.

(S9)

같이 수업 듣는 학생들의 단어를 보면서 나와 비교해보았습니다.

I compared words peers used with mine.

(S12)
영어 시험에 나왔던 단어들을 많이 보게 되었고 그 때는 수동적으로 외울려고 해서 잘
외워지지 않았던 단어들을 쉽게 배울 수 있었던 것 같습니다.
I noticed some words that often appeared in the English test in peers' works. So I learned them
more easily than I used to do passively.

(S27)
다른 사람들의 예문을 보고 좋은 참고가 되기도 하고, 좋은 예문을 더 찾는 습관을 갖게
되었다.
There were many good examples (in English). So I form a habit of looking for good examples.

(S32)
Let me put it another way.(다른 방법으로 생각해보자.) Take your time.(천천히 하세요.) Let's
take a break.(쉬자!) Take care.(조심하세요.)가 원우들의 게시글에 여러 번 게시되었다.
The expressions that appeared often in classmates' assignments are: Let me put it another way.
Take your time. Let's take a break. Take care.

(S36)
travel style 질문에서 overpack 과 underpack 의 의미를 몰라서 알게되기까지 수강생들의
답변과 여러 사이트를 뒤져야 했다.
In the questionnaire about travel style, I didn't know what 'overpack' and 'underpack' mean. So I
searched for the answer from others' works and many websites.

(S46)
'Are you being helped?'에 대한 내용은 게시판 Expression 4 번 게시물을 보고
감탄스러웠습니다. 어찌 이리 많은 표현을 알 수 있었을까? 하고,,, Could you wrap it up for
me? 의 뜻과 'bind it' 'saggy'라는 표현이 확실하게 학습되었습니다.
I was very impressed when I read the contents about 'Are you being helped?' on the web board.
How did (s)he know so many related expressions? I certainly learned the meanings of 'Could you
wrap it up for me?', 'bind it', and 'saggy'.

(S47)
눈에 띄는 단어들만 속독했다.
I scanned and found only these words I was familiar with.

S47, and others, remembered and used what they had read on the board to improve not
only their vocabulary and expressions, but also to stretch their own ways of expressing
themselves.

(S13)

문장을 만들 때에도 역시 재미를 염두에 두고 다른 학생들이 읽을 때, 의미가 금방
파악이 되고, 기억에도 오래 남도록 하기 위하여 문장을 길게 늘이는 등 여러 가지
요소를 가미했습니다.
When I wrote sentences in English, I tried to make it easy for others to understand. The sentences
I wrote were complex and meant to be fun so that the readers would remember them for a long
time.

Some students mentioned specific usages of English, grammar, vocabulary, or

expressions in their journals.

(S12)
take for ~granted 가 들어있는 문장에 대한 설명들이 큰 도움이 되었다.
It was really helpful for me to have explanations about the sentence with 'take ~ for granted'.

(S43)
일상에서의 단어들을 많이 알 수 있게 되었습니다.
I have learned many words which are used in everyday life.

As always, there were those who focused on content, and those who were drawn

to form. Some students focused on the content in the target language, others compared

and matched expressions and similar words or usage with ones in Korean.

(S24)
남편 생일 파티로 컨셉을 잡고, 해외 구매 대행 사이트에서 여러번 쇼핑을 해본 터라
그리 어렵다는 생각은 안들었지만 식품은 처음 구입해보는 거라 많은 표현들을 배우게
되었죠. 단위 자체가 한국이랑 많이 달라 조금 난해한점이 있었지만 재미있는
경험이었습니다.
My party concept is about my husband's birthday. As I have a lot of experience of doing internet
shopping through an overseas purchasing agent, I thought it wouldn't be difficult. But I never
purchased food items on the internet so that I learned many new expressions. I had an interesting
experience even though it was a bit difficult because measurements were very different from the
ones in Korea.

5) Expanding Knowledge and Evaluating Their Own Work

The work of other students was used as a foundation on which to build more complex and

more tightly focused responses. Also, they used sharing assignments as a tool for improving

their own assignments through comparison with others' work.

(S9)
정말로 많은 자료에 놀라웠고,
I was surprised at there were a lot of information posted.

(S10)
내 과제를 다시 한번 검토 및 self-피드백 할 수 있게 하는 좋은 학습 습관을 길러주었다.
항상 다른 사람에게 모범 힌트를 제공하는 첫번째 게시물 작성자에게 너무 감사하다.
I could confirm and review with self-feedback to my own work. It was a good learning habit for me. In particular, I am so grateful to the first poster who always provides a model.

(S15)
어떤 학우가 과제 제출란에 숙면에 대한 8 가지 대책에 대해 쓴 글을 본적이 있었는데
사실 많은 도움이 되었다.
I read eight tips for a sound sleep from a classmate's assignment. It was very helpful.

(S21)
외국 홈페이지에 들어가서 서로 다른 부분을 해석해서 올려놓은 것을 보면서 내가
해석하지 않아서 알지 못했던 부분까지 공유 할수 있어서 좋았다.
Sharing was good because some students translated into Korean different parts of English materials on English web sites which I did not understand.

(S28)
내가 잘못하고 틀린 부분도 알게되어 고칠수도 있었던것 같다.
I think I could spot errors and mistakes in my work and could correct them.

(S33)
저번 과제가 idiom 을 배우는 과제였는데, 내가 독해를 했는데 말이 되지가 않는 것이다.
분명히 이런 의미가 아닌 다른 의미일 텐데 추측을 할 수가 없어서 그냥 과제를 올린
적이 있다. 그런데 다른 학생의 과제를 보니 아하!! 이런 의미인지를 파악을 할 수가
있었다. (많은 과제를 내가 다 했으면 당연히 최상의 공부였겠지만) 다른 학생들이
자신들의 과제를 올려서 내가 공부하지 않은 부분을 쉽게 보고 익힐 수가 있어서 그 점은
매우 효과적이고 좋은 것 같다.
The last assignment was to learn some idioms. I could not comprehend the meanings of some idioms, but I just posted my incomplete work on the board. Later, I found out the real meanings of them. It could be absolutely the best study if I could finish all assignments of my own. I could learn some parts that I didn't understand by reading others' assignments. It was very useful and effective.

(S36)
van accessible (handicap parking) 은 고민하다 다른 선생님의 자료를 참고해서 내용을
정리해 제출했다.
I did not know how to translate 'van accessible (handicap parking)' into Korean. I just summarised the contents from peers' work as a reference.

Students used peers' assignments as a reference to compare with their own work and confirm them. Most students reported that reading one another's work helped their understanding of course materials and allowed them to expand their knowledge.

(S7)
이해가 되지 않는 부분은 다른 학우님들 과제가 올라올때까지 기다려서 했다.
I was waiting for others to post up their works, when I was faced with a part that was difficult to understand.

(S29)
되도록이면 다른 학우들의 내용과 중복되지 않게 새로운 내용을 쓰려고 했다.
I try to add new content to my assignments to avoid overlapping with others' work.

(S40)
재학생의 숙제를 보면서 어떻게 하면 차별감을 드러낼지..
When I read others' work, I thought about how to differentiate my work from others'.

4.1.2.2.3 Submission Time

When students submitted their assignments depended partly on their own personal time schedules, but also on their confidence levels, which sometimes led them to deliberately delay their own submissions until they had reviewed what the other students had handed in.

1) Personal Schedule

As mentioned above (section 4.1.2.2.2), students took their other commitments into account when managing their schedules. For instance, part-time students tended to submit their assignments during the weekends.

(S41)
일단 직장인이라 매우 늦게 끝나는 편이라서 마음은 항상 게시판에 빨리 올리고 싶지만 평일은 거의 학습하기가 어렵다.
I really wanted to submit my homework earlier, but I couldn't do it because I am a full-time worker. Usually I do not have time to do homework on weekdays.

(S25)
주로 영어공부를 하게 되는 시간은 일요일 오전인데 이 시간에 공부를 하는 데는 두 가지 이유가 있다. … 두 번째는 개인적인 사정이지만, 일요일 오전 시간 나태해지기 쉬운데,

아침에 일어나서 진하게 내린 커피를 마시면서 하는 영어숙제는 한 주를 마감하고 다시 시작하는데, 힘을 준다.

I usually study English on Sunday mornings for two reasons: … The second reason is a somewhat personal one, on Sunday mornings, I tend to become lazy. But while taking the course, I try to get up early and do homework over strong coffee, which is a nice way to wrap up a week and gives me enough energy to start a new week.

2) Confidence Level

Confidence seems to affect the time of submission of their work. Some students confessed that their language competency meant they had to work harder and longer on the assignments, and that led to late submissions. Other students were just less confident about presenting their work early. Assignments submitted earlier by advanced learners encouraged slow learners to complete the tasks. This helped to create an environment where students feel that they are not alone but are part of the community.

(S2)
다른 사람들은 벌써 올렸는데 나도 오늘은 마무리를 해야겠다.
Some students already uploaded their assignments. I've got to finish it today.

(S20)
퀴즈 결과를 게시판에 제일 먼저 올리고 나니 기분이 너~무 좋았습니다. 참 단순하고 바보같다 아닙니까? 마지막에 올릴 때 보다 먼저 올리는 것이 더 기분도 좋고 또 다른 사람들의 글을 여유있게 볼 수 있어서 더 좋은데 늘~ 마음먹은 대로는 안 됩니다.
I felt so good to be the first one to post up the result of quiz on the board. I am so silly and simply, ain't I? It makes me feel good when I post it early rather than late and have time for reading others without being in a hurry. But it is not easy.

(S1)
영어를 잘 못해서 일찍 내는 것은 좀 망설여진다.
I hesitate to upload mine early because I am not good at English.

(S13)
과제에 대한 이해도가 좀 낮은 편이라 다른 수강생들의 과제를 전반적으로 보면서 금번 과제에 대해 이해하는 편이고
I had difficulty understanding the task. That is why I read through others' and then was able to complete my work.

(S22)

솔직이 남의 과제를 도움받아 겨우겨우 과제를 뒤늦게 수행하고 있다.
To be honest, I have managed to do my work by reading others' assignments.

3) Feedback

Feedback seemed to influence the time it took for students to submit assignments. Some students submitted their assignments earlier than the due date because they were keen on receiving comments from others. Others delayed submitting so they would have time to read previous submissions, reflect and change their own work.

(S10)
첫주엔 뒤늦게 과제를 제출했더니 물론 답글도 없었다. 그래서 가능하면 일찍 올리려 했고, 그러면 다른사람들에게도 도움이 되고 나 또한 달리는 댓글을 많이 볼 수 있게 되었다.
I uploaded my first week's work a few days later than the due date. Of course, there was no comment. After that, if possible, I tried to submit my work early in order to get many feedback comments. It would be helpful for peers as well as for me.

(S25)
주로 영어공부를 하게 되는 시간은 일요일 오전인데 이 시간에 공부를 하는 데는 두 가지 이유가 있다. 첫 번째, 여러 사람이 올린 과제를 보고 많은 참고를 할 수 있다. 그냥 강의만 듣고 과제를 이해를 못하게 되는 경우가 있는데 그럴 때 다른 사람의 과제를 보고 가닥을 잡기도 하고 과제자체를 보면서 여러 가지 아이디어를 얻을 수 있다.
I usually study English on Sunday mornings for two reasons: First, I can refer to homework posted by peers. Sometimes I had difficulty understanding the lesson. In that case, I read others' assignments to finally get to grips with the lesson and get many good ideas.

4.1.2.3 (Giving, Receiving or Exchanging) Feedback

Receiving feedback from the instructor and from their peers created for some students a sense of community, of learning together. The sharing of comments on one another's work encouraged them to work harder and to take greater satisfaction in doing well.

(S3)
제가 글을 올리고서 다른 수강생이 저의 글에 댓글을 달아 주었을 때는 그 사람 누군지 찾아가서 절이라도 올리고 싶을 정도 였습니다.
When there were comments on my work, I wanted to find the person and say thank you.

(S15)

내가 올린 과제에 즉각적으로 누군가가 공감하는 글을 적었을 때 온라인상의 대화이긴 해도 같이 수행하고 공감하는 듯 한 감정으로 용기가 2 배가 되고 나도 그 누구에게 용기의 메시지를 주고 싶기도 하고 감정교유적인 이 학습방법이 이제는 익숙해지려 한다.만약 혼자 그 과제를 수행했다면 두꺼운 벽하나에 떠들어 대고 있는 모습일것 같다.

When someone gave some feedback on my work, it encouraged me a lot even though they are online comments. So I want to give comments on others' work in the hope of giving courage and emotional support to them. Now I am getting used to this method of the course. If I did the given tasks alone, I would feel as if I was talking to the wall.

(S21)
온라인상에서도 다른 사람과 교류가 가능하도록 게시판이 오픈되니 좋은걸.
It is good to communicate with others on the web board.

(S33)
누군가에게 '보기에 너무 좋네요', '잘했네요', '도움이 된다',등등의 칭찬 덧글을 받아서 매우 기분도 좋고 보람있는 주 인 것 같다....간단한 메모인데도 모르는 사람들이 내 글을 읽고보고 좋다 라고 칭찬을 해주니 참으로 기분이 좋고 신이나는 과제 수행이 된듯 하다.
I am quite happy and feel rewarded because I got feedback from others such as 'You did a good job', 'It looks so good', and 'It is helpful.' Although they are simple comments, I felt so good with their compliments. They made my day.

Some students, like S11 and S23, said how good they felt after receiving the teacher's comments. Rovai (2000) emphasizes that the online instructor creates an environment where learners feel the social presence of others by encouraging and facilitating interaction by everyone and by providing immediate feedback, particularly to distressed learners.

(S11)
교수님 댓글을 보는 재미도 쏠쏠하고 기다려진다.
I like reading the teacher's comments and even expect to see more of them.

(S23)
week 5 에서 처음으로 교수님께 칭찬 comment 받았다. 아~ 바로 이 기분. 다음 과제를 더 잘하기로 마음먹었다.
I received a compliment from the teacher for the first time in week 5. 'Ah, I've got the feeling…' I decided to do well in the next homework assignment.

The comments and feedback were taken seriously, and students made changes related to the comments and feedback they had received.

(S28)

게시판에 글을 올리고 난 뒤 덧글이 올라왔는데 그 중 'Four times' 대신 'Quadruples'로 표현하여 덧글을 달아주신 S6 씨의 글을 보고 한참을 생각해보았습니다. 좀 창피했지만 용기를 내어 직장에 계신 외국어선생님께 여쭤봤더니 '좀 더 고급스러운 표현'이라고 말씀해 주셨습니다. 시간이 흐르면서 이해가 되기 시작했습니다. 그러한 덧글을 달아주신 분께 감사드리고, 또 고민했던 단어는 기억이 잘 된다는 것을 느꼈고 '덧글' 또한 학습의 일부분으로서 참으로 중요하다는 것을 깨달았습니다. '덧글'을 올리려면 그만큼 그 사람의 글을 읽고 때로는 영어 한 줄 답변하기 위해 표현, 단어들을 사전에서 찾아야 하니까요.

In the feedback on my work, S6 suggested a word 'quadruples' instead of 'four times', which gave me food for thought. I felt embarrassed to ask a native speaker about it in my workplace, but when I asked him about the expression, he said that it was a 'more formal expression'. I thank the person for giving me the feedback because I memorized the word by pondering that word. I realized that giving feedback as a part of learning is important. If you are required to give comments on other's work, then you have to look up the expressions or words.

Lack of confidence in their English language competency levels made it difficult for some students to provide feedback and comments in English.

(S39)
참으로 많이 공부한 사람들도 많다는 생각을 하였습니다. 본 내용들에 대하여 짧은 멘트를 쓴 곳도 있지만, 아직도 부족한 실력과 부끄러움으로 다 하진 못했다.
Indeed, there were many students who studied very hard. I wrote a short comment on others' work as I read. But I couldn't give comments on all of them because I am still not good at English and a little bit shy.

(S7)
다른 수강생들의 내용에 코멘트나 의견을 영어로 덧붙인다는 것이 쉽지만은 않다.
It was not easy to give comments or opinions on peer's work in English

From S19's example, and others, it could be concluded that sharing their writing led eventually to students wanting and expecting to receive feedback. S19 actively sought comments from others on her writing.

(S19)
저는 재미있는 sign 을 발견해서 세가지 올려 놓았습니다. 근데 반응이 별로라 저만 재밌었나봐요~
I found interesting signs and uploaded them on the board. But there were not many responses. It seemed that I was the only one who found it interesting~.

Getting to know one another better, forming emotional bonds, made students want to know their peers on a deeper level. Emotional connections provided a way of forming learning

communities. Exchanging comments created 'a bridge' among some classmates even though they had not met during the course.

> (S19)
> 다른 학생들을 어떻게 썼는지 가장 궁금한 것이 자기소개 부분이다.
> 'Introducing yourself' is the most interesting assignments as I really want to see what others say about themselves.

> (S7)
> 학기말 얼굴보며 이야기 나누기로 약속할 정도로 온라인에서 많이 친해졌다.
> By the end of the semester, some of my classmates and I have become so close to each other to the extent that we meet offline.

> (S8)
> 다른 사람들의 생각과 관심을 알 수 있는 계기가 되었다.
> It gave me an opportunity to take an interest in and pay attention to what other people think.

4.1.3 Technology

The use of technology in the delivery of the course was, for some, an effective learning tool, allowing some to even face and overcome their fear of the computer. A few, however, were challenged by the reliance on technology.

4.1.3.1 Advantages

4.1.3.1.1 E-learning Environment and Information Technology

Students, over time, began to use information technology, which was the foundation of the E-learning experience, to research assignment topics and help improve their English. This led to other ways of learning and had a cumulative effect as the course progressed.

> (S44)
> 인터넷을 통해 많은 관련 자료를 찾을 수 있었다.
> I could find a lot of relevant information on the internet.

> (S15)
> 여러가지 생활에 유용한 정보 및 지식을 주는 영문 사이트를 검색하는 법도 터득할 수 있었고…

I mastered how to look for variety of useful information and knowledge on English websites.

(S30)
현재는 정보의 시대이긴 하지만 많은 정보중에서 정확하고 꼭 필요한 내용을 찾기는 쉽지 않은 것 같습니다. 지금 저는 영어수업을 듣고 있긴 하지만, 더불어 이러한 일들에 대해 정확히 체험해 봄으로써 써핑 실력도 많이 향상될 수 있을 것 같습니다.
Although we live in the information age, it is not easy to find the much-needed and accurate information among a sea of information on the Internet. Since I am taking the English course, I think my Internet surfing skill will improve a lot by experiencing it.

(S41)
영문 자기소개서를 처음 작성해 보는 것이라서 매우 부담스럽고 어려웠다. 사전 자료 조사는 NAVER 검색에서 자기 소개서 예문들을 검토하여 참고하였고, 비즈폼 http://www.bizforms.co.kr/ 사이트에서 영문자기소개서를 몇 가지 다운받아서 여러 가지 예문을 검토하였다. 그러나 문장 난이도가 너무 높아 그리 많은 도움은 되지 못했다.
It was very difficult and challenging for me to write a self-introduction in English, because I have never done it before. I searched for some samples of self-introduction in English on websites. I also downloaded some examples from the website (http://www.bizforms.co.kr/). But it was not that helpful because those sentences were too advanced.

(S38)
Make & Get 의 관련어구 찾기,… shopping 사이트의 comments 를 다 뒤지고 다님.^^ 덕분에 The Match Made In Heaven(천생연분) 이라는 원더풀한 표현을 건졌음.
Looking for verbal phrases with 'Make & Get',… I searched all reviews in all shopping sites Thanks to them, I found a wonderful expression "The Match Made In Heaven."

(S17)
웹사이트의 검색으로 인해서 정말로 음악으로 인해 치료를 경험한 사람들의 이야기를 일곱가지 들었다. … 평소 알던 유명인의 기적같은 이야기들을 접해 볼 수 있어서 좋았고, 영어 기사도 스스로 해석해 볼 기회를 가져서 좋았다.
By searching websites, I found seven real stories of people who have really been cured by music therapy. … It was good to read miracle stories of the celebrities in English and to translate these articles into Korean by myself.

(S27)
미국 원문 사이트를 통해서 각종 상식도 풍부해져서 1 석 2 조다.
Studying through English websites made me to learn various common sense. That's 'Killing two birds with one stone'.

The use of technology to respond to assignments was, as much as possible, built into the curriculum. In week 8, the internet technology was embedded into the curriculum by asking the students to use an e-card service to send the instructor an e-card.

(S45)

엽서를 메일로 보내는 과제는 '우와! 참 멋지다!' '참으로 역동적이다!' 라는생각을
하였습니다.

When I found out that the assignment was to send e-postcard, I shouted, "Wow! That's great!"
and "it's indeed dynamic!"

(S2)

속담들을 더 많이 찾기 위해 인터넷을 활용하여 다른 뜻이라던가 또다른 비슷한
표현들까지 찾아보아서 과제 외 활동을 통해 좀더 넓은 공부가 되었던거 같습니다.

When I was doing the assignment to find proverbs, I searched the Internet to find as many
proverbs as possible and even to find other meanings or similar expressions. I have studied more
widely than required by the assignment.

(S4)

네이버에서 여행지에서 보내는 내용과 관련된 영어문장을 찾아보기도 하고, 일반적인
인사말에 대해서도 고민하고, Grand Canyon 의 날씨를 검색하기도 하면서 엽서를
작성하였는데, 결국은 아주 간단한 내용만을 담을 수 밖에 없어 아쉬웠다.

The assignment was to send an E-postcard in English to someone that I know. To do this, I
searched websites for sentences I could use for a travel postcard. I thought about what I should
say for a general greeting. I even looked for the weather in the Grand Canyon so that I could
mention the weather on the postcard. However, I ended up writing a very simple content.

Some students commented positively on the fact that online learning was not

constrained by considerations of time and place.

(S26)

특히나 얼마전 부터 지금까지 계속 열흘 몸이 아파 오프라인 수업을 못 갔었는데 그래도
이렇게 온라인 수업은 집에서 할 수 있어 간간이 수업도 듣고, 그나마 잠시 정신을 차리고
이렇게 과제도 제출할 수 있으니까 좋은 것 같아요..

For a couple of days, I couldn't make it to off-line classes because I have been sick. However, I
could log onto online class whenever I feel better and could finish my homework.

4.1.3.1.2 Computer Skills

Students are likely to learn and use other computer skills to enhance those necessary for the

online learning experience. For example, they downloaded each lesson to an mp3 player so

they could listen to it as often as they wanted. A majority of students reported that they used

an electronic dictionary or web dictionaries.

(S42)

강의내용을 mp3 로 저장해서 여러 번 듣는다.
I downloaded the lesson in mp3 format and listened to it several times.

(S12)
발음을 모르는 단어들(gastroenteritis. intolerance. Appendicitis. precautionary 등..) 은
네이버사전에서 발음듣기로 여러 번 들었다. 녹음하려고, 쓰고, 소리내어 읽어보고,
녹음하고 또 듣고…계속 반복했다. 그래서인지 비교적 빨리 단어를 습득할 수 있었다.
I listened to pronunciation of new words (i.e., gastroenteritis, intolerance, appendicitis,
precautionary and so on) using a web dictionary several times. For the recoding assignment, I
wrote and read the script aloud several time. Then after recording it, I listened to it. I repeated the
process several times before getting a satisfactory result. Maybe that is why I could memorize
words quickly.

(S37)
그림을 올리는 방법을 몰라서 어쩔수없이 (해봐도 도저히 안 됨) 글귀로 올렸는데 학우의
댓글을 통해서 새로운 컴퓨터 작동법도 알게 되고 (이것이 바로 교류하는 학습방법이란
것을 몸소 체험할 수 있었다.)
As I didn't know how to upload a picture (I tried to do it but I couldn't.), I just wrote it on the web
board. I learned how to do it from peers' feedback (That is the very collaborative learning method
by experiencing.).

(S16)
영타의 속도도 조금 늘은것 같아 나름 혼자 뿌듯하다.
I feel so good because I am able to type in English a little faster.

    Students reported that they have learned how to record in various ways, and their sense

of achievement was enhanced while completing these difficult recording tasks.

(S39)
다른 프로그램을 이용해 녹음하는 법을 배워서 해야 했다. 영어 공부를 하면서 컴퓨터까지
배워가는 요즘이다.
I have to learn how to record my voice on a computer using other programs than the one provided
on the board. I have learned English and how to use the computer as well.

(S5)
처음으로 컴퓨터를 사용하여 녹음하는 방법을 터득해야했다. 목소리가 작게 되었지만
처음 해보는 과제가 신기할 뿐 이였다.
For the first time, I learned how to record through a computer. Even though my recorded voice
was very low, it was just amazing.

4.1.3.2 Challenges

While the E-learning environment led to an easy and interesting learning experience for some students, others found it trying and difficult. For a few students, the new experience of reading and absorbing information directly from the computer monitor was challenging.

(S9)
아직도 인쇄매체에 더 익숙한 세대인지라 모니터 상 화면을 보면서 하는 수업이 아직까지도 익숙하지가 않습니다. 그러니 자연히 학습 속도도 느리고 당연히 시간도 많이 들게 됩니다. 인쇄된 글을 보고 넘기는 것이나 모니터 상 자료를 보는 것이나 넘기는 것은 같을 터인데도 제겐 익숙해지질 않습니다.
Still I am familiar with print media rather than reading a text on a monitor like this course. So the learning speed is slow and required a lot of time. I know that reading a text on a monitor is almost like reading the printed text, but I didn't get used to reading texts on a monitor.

(S46)
Read Signs은 이해가 됐는데 다른 사인을 찾는것이 쉽지 않아서 과제를 올리지 못했답니다. 너무 미숙해서 영어사이트 접속을 해서 찾는것이 전 힘들더라구요..
I understood 'reading signs' but it was difficult for me to find more signs (on websites). That is why I couldn't finish my homework. I am not good at internet searching, so it is difficult for me to find something on the Internet.

S44 did have difficulty using the recording software. However, she proved to be quite able to adapt and to learn how to use mp3 to complete the recording assignment.

(S44)
음성녹음을 해야 하는데 과제함에 바로 녹음기가 있다는 사실을 저는 정말 몰랐습니다. mp3 에 녹음을 한 파일을 업로드 하려고 마지막 제출일자에 과제함을 열고 많이 놀랐습니다.
I had not known a recording program was provided on the web board until I clicked the board to upload my homework. I didn't expect there was the recorder on the web board. I used mp3 for recording.

Even those students having the most difficulty with the recording technology were pleased with themselves for even trying. Guessing that it would help them with their speaking practice, their attempts to use the recording technology increased their motivation to try harder.

(S11)

녹음하면서 발음에 신경쓰고 소리내어 계속 읽어보다 보니 저절로 외우게 된것 같아 좋았다.^^ 앞으로도 계속 이런 과제가 있었으면 말하는 도움이 될것 같아 좋을것 같다.

While reading aloud the script with careful pronunciation for recording, it seems that I memorised it naturally. It would be helpful to improve my speaking skill if I could do this kind of assignment continuously.

(S5)
또 녹음 숙제 ㅠㅠ 그래도 이번이 세번째라 과제 마치는 시간이 전에 비해 줄었다.

Again a recording assignment ㅠㅠ* This is the third time I have done a recording assignment. It took less time than the previous one.

*'ㅠ.ㅠ' is a code to show you are sad or unhappy in Korean, which is mainly used in technology meditated communication, i.e., computer chatting, cell-phone messages.

4.1.4 Learning Strategies

Learning strategies are defined as "specific actions, behaviours, steps, or techniques - such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task - used by students to enhance their own learning" (Scarcella and Oxford, 1992:63). O'Malley and Chamot (1990:44-46) classified learning strategies, depending on the level or type of processing involved, into three categories: 1) cognitive strategies "operate directly on incoming information, manipulating it in ways that enhance learning"; 2) metacognitive strategies are "higher order executive skills that may entail planning, monitoring, or evaluating the success of a learning activity"; and 3) social/affective strategies represent "a broad group that involve either interaction with another person or ideational control over affect".

In this study, learners applied different strategies. The less advanced students would, for example, read others' assignments before posting their own responses. Others would go over course materials a number of times, exchanging feedback with others on the bulletin board and through e-mail to better understand assignments. The data show that students continually developed their learning strategies during the progress of the course. For example,

learners began to improve in self-discipline and to develop their time management skills. They noted improvements in their English and became aware of the importance of learning actively rather than being passive recipients of knowledge. In addition, through evaluating their learning processes, they became aware of the influence collaboration had on their motivation to be successful language learners.

4.1.4.1 Cognitive Strategies

4.1.4.1.1Note Taking, Repetition, Memorization and Translation

Throughout the course, students continued to develop a variety of learning strategies: some made notes while reading their peers' assignments; others used English pop songs to understand the materials; still others used the feedback they were given; some listened to English radio programs or watched educational programs; and some students kept a diary/journal in English.

> (S23)
> 보통 수업 정리를 토나 일요일 하는데. 평소에 메모해 둔 것이 있어서 좋았다.
> Usually I do assignments on Saturday or Sunday. It was good to take notes of the lessons during the weekdays.

> (S2)
> 지속적인 나만의 영어 다이어리…이번 강의를 시작하고 한 가지 좋은 습관이 생겼다. 첫 주 과제이었기도 했던 영어로 메모하기! 짧은 영어로 나의 한 주 계획이나 한 달 일정을 적는 것이다.아주 짧은 영어단어지만 단어를 잊어버리지 않게 하는 것 같아서 좋다. 다이어리에 적힌 영어메모들을 보면 영어를 완전 잘하는 것처럼 보인다.
> Keeping English diary of my own…I got into a good habit after taking this course. It is to keep a memo in English, which was also the first week assignment. I could not forget those words. When I read these English memos, I feel like I am good at English.

> (S42)
> 매주차 '나만의 강의록을 만들기'는 내 공부 비법이다.
> I made weekly 'lecture note on my own'. This is my secret studying method.

> (S41)

Chickenpox 을 주제로 symptom of chickenpox, medical advice, folk remedies 을 자신만의 문장으로 만드는 과제였다. 나에게 가장 어려운 과제 중 하나였는데 도저히 작문이 안돼서 참고사이트의 내용을 항목별로 재정리하는 수준으로 만족해야만 했다.
The assignment was to write symptoms, advice and remedies about chickenpox in my own words. It was really difficult for me to do that. So, I was just satisfied with only arranging the content by categories.

(S37)
과제를 하면서 이번에도 역시 팝송가사가 떠올랐다. 영어는 멀리하면서도 우리나라 가요보다는 팝송을 좋아해서 그런 것 같다. 영어공부를 할 때 팝송을 이용해서 하는 것이 어쩌면 나에게 맞는 공부법인지도 모른다는 생각을 하게 되었다.
Again, I used some pop song lyrics for my English task. Generally, I do not like studying English, but I like listening to English pop songs rather than Korean ones. I realized that, when I study English, to use pop songs might be a good way.

(S18)
운전할 때 가끔은 FM 라디오 EBS 교육방송을 틀어놓는 경우가 예전보다는 더 늘었는데
When I am behind the wheel, I tend to turn on the radio for an English radio station.

Some students matched vocabulary items in the two languages, Korean and English, and practiced and learned how to express Korean words and phrases in English.

(S21)
평소에 남극을 꼭 가고 싶었는데 이번 기회를 통해서 'Antarctica'란 단어와 꼭 가고 싶은 곳이라는 표현인 "must see" destinations 도 알게 되었다.
I really want to take a trip to the South Pole some day. Through this week's lesson, I come to learn the words like "Antarctica" and "must see destinations."

(S19)
That's a rip-off! (이거 바가지네), 내가 평상시에 잘쓰는 말인데 영어표현으로 알게 되어 좋았고...
That's a rip-off! This is the expression that I often use (in Korean). It is good to learn it in English.

Some students still seemed to be influenced by what they used to do in their earlier school years such as focusing on linguistic features such as grammar, pronunciation, and vocabulary rather than on the way language is actually used. Some students relied on memorization and translation.

(S22)
지문을 스스로 읽고 외울려고 노력했다

I tried hard to read the materials on my own and memorized them if possible.

(S35)
쉽고 완벽한 문장들을 외우는 것이 나만의 영어학습 방법 중 하나.
One of my methods of studying English is to memorize simple and complete sentences.

(S18)
무작정 듣기부터 연습했습니다... 단어를 찾고 해석을 하였지요.
I just practiced listening at first…then looked up words in the dictionary and translated them into Korean.

(S46)
전체를 해석하기에는 어려움이 있어 주요한 문장을 중심으로 해석하며 내용을 이해해 갔다.
It was hard to translate all the materials in Korean. So I focused on translating the main sentences in order to understand the contents.

4.1.4.2 Metacognitive Strategies

4.1.4.2.1 Utilising Time Management Skills

Internet Communication Technology (ICT) was an integral part of this course; students had to familiarize themselves with the technology. The data show that this then influenced the way students allocated their time. Students planned their time around specific details of each lesson. They seemed to complete their assignment on weekends, for example. And they soon learned to use their spare time effectively and efficiently.

(S25)
주로 영어공부를 하게 되는 시간은 일요일 오전인데 이 시간에 공부를 하는 데는 두 가지 이유가 있다. 첫 번째, 여러 사람이 올린 과제를 보고 많은 참고를 할 수 있다. 그냥 강의만 듣고 과제를 이해를 못하게 되는 경우가 있는데 그럴 때 다른 사람의 과제를 보고 가닥을 잡기도 하고 과제자체를 보면서 여러 가지 아이디어를 얻을 수 있다. 두 번째는 개인적인 사정이지만, 일요일 오전 시간 나태해지기 쉬운데, 아침에 일어나서 진하게 내린 커피를 마시면서 하는 영어숙제는 한 주를 마감하고 다시 시작하는데, 힘을 준다.
I usually study English on Sunday mornings for two reasons: First, I can refer to homework posted by peers. Sometimes I had difficulty understanding the lesson. In that case, I read others' assignments to finally get to grips with the lesson and get many good ideas. The second reason is a somewhat personal one: on Sunday mornings, I tend to become lazy. But while taking the course, I try to get up early and do homework over strong coffee, which is a nice way to wrap up a week and gives me enough energy to start a new week.

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(S39)

time management 가 가능해졌다는 것이다. 시간이 날 때마다 관련 기사들을 찾고 읽고
메모하는 버릇이 생겼다. 허나 3 주와 비슷한 건강에 관한 것이었지만, 더 많이 읽고 더
많은 단어를 찾아야 했으며 더 많은 시간이 소비가 되었다

Taking this course helps me manage my time efficiently. I have developed a habit of reading
relevant topics and writing down memos in my free time. For example, the topic 'Health Care'
was so demanding that I had to spend a lot of time reading and looking up new words.

(S15)

조금이라도 미리미리 과제를 나누어서 한꺼번에 몰리는 부담감을 줄였다.

I try to log on to the lesson and do homework whenever I have free time so that I don't have to do
all the homework all at once.

4.1.4.2.1 Monitoring and Evaluating Their Learning Process

Students reading of their peers' work helped them to self-correct their own work. Some

students evaluated what they had done and how well they had done it in a practical and critical

manner during the course. They noted improvements in their English and were aware of the

importance of learning actively rather than being a passive recipient of knowledge. They

tended to evaluate their learning process as effective when they felt they learned a new word

or how to express their thoughts and feelings in English.

(S16)

사이버 강의로 영어 수업을 듣는 것도 처음이지만 이번 강의는 사이버 강의라는 점 외에도
여태까지 접했던 수업과는 많이 다른 새로운 수업이라는 생각이 든다. 무엇보다
자기주도적 학습이라는 점에서 다른 수업과 많이 다르다. 찾아보고 다른 학생들과
공유하고, 또 써보고 읽어보고 듣고 하는 등의 다양한 활동들을 하야 하고, 하지 않으면
수업이 진행될 수 없게 되어있는 수업이라는 점에서 처음에는 '귀찮은 수업이다'라는
생각을 한 것도 사실이지만 단순 암기 위주나 수동적인 여태까지의 수업과 달라서 내가
하는 만큼 많은 것을 얻을 수 있을 것이라는 생각이 든다. 많은 시간을 할애하여 과제를
해내야 했다.한 학기가 지나면 영어 실력이 한층 나아지리라는 기대를 갖게 하는 것이
사실이다.

Even though it is first time I have taken an online course, I find it quite new and different from
other classes that I have taken so far. In particular, unlike other traditional classes, this online
course promotes students' self-directed learning. My first impression on this course is that the
various required tasks such as searching for information, sharing it with peers, writing, reading

and listening seemed to be 'annoying' in the sense that if I do not complete these tasks, I can't move on to the next lesson. However, unlike a traditional class which requires students to passively memorize the lesson, I could learn a lot from my active participation in learning. I spent a lot of time doing the assignments. When I finish the course, I hope my English ability will have improved.

(S2)
매주 조금씩이지만 공부해 온 것들이 어느 순간 갑자기 머리에 떠오를 때, 지식이 내 것이 되었음을 느낀다.
When I remember every little thing that I have learned, I realized that finally knowledge has internalized.

(S35)
영어강좌를 접하며 실제 강의 시간은 짧지만 혼자 영어 공부하는 법을 배울 수 있는 방법을 스스로 자연스럽게 터득하는 것 같다.
Although the actual teaching time of the course is relatively short, it seems as if I come to learn naturally how to learn English by myself.

(S40)
규제와 통제, 제약이 없는 온라인 강의는 나태해지기 쉽지만, 반대로 스스로 공부하는 방법을 알려주기도 한다.
Although an online course might bring out laziness on the part of students because of less regulation, control and constraints, this online course helps me learn how to study by myself.

(S45)
여행을 위한 다섯가지 팁을 찾으면서이전보다도 더욱 즐거웠던 것 같다. 그 이유는 단순히 영문을 해석하는 것이 아니라 여행의 의미에 대해 생각해볼 수 있고, 여행시 꼭 알아야 하는 내용에 대해 알 수 있었기 때문이라 생각된다.
I enjoyed searching for five tips for travelling more than before. The reason was that this assignment did not simply ask me to translate materials into Korean but gave me the opportunity to think about the meaning of travel and to learn information that I should have for travel.

 (S1)
읽어보면서 모르는 단어들이 나와도 그냥 읽어가며 넘어가서 문맥에 맞춰 뜻을 유추해보기도... 결국은 몰라서 사전을 보긴 하지만 그래도 전에 비하면 나아진 게 아닐까 .
If I come across unknown words, I read several times to guess its meaning in context without looking them up in the dictionary. Even though I had to look it up in the dictionary eventually, I feel like my English is getting better.

(S3)
처음에 문장을 시작할 때는 어떻게 시작을 해야 하는지 난감했지만 단문으로라도 시작하여 계속해서 수정을 해가며 써보니 제법 그럴 듯한 문장들이 나왔고 그전에 모르던 표현들도 많이 익힐 수 있었던 시간이었다.

At first, I did not know how to write a sentence in English. But when I wrote a simple sentence and kept revising it, I found that the sentences that I have written in English seem to be quite okay. I have also learned expressions I haven't known before.

(S18)
이번에 adventure travel 과 ecotourism 에 관해서 새롭게 알게 된 것이 참 기억에 남는다. 9주차 과제를 하고 얼마 안가서 한 신문 기사를 보게되었는데 ecotourism 에 관한 내용이었다. 어찌나 반갑던지 사람들에게 "내가 과제로 냈던 거야~~"라고 말하고 싶을만큼...보람도 느끼고 공부했던 것을 실제로 쓰게되고 보게 되니까 너무 좋았다.
I could remember really about the content, 'adventure travel and ecotourism' which I had learned in the course. Soon after posting up my assignment for week 9, I read a newspaper article about ecotourism. How glad I was! I wanted to tell everyone around me that "I wrote about the same topic like this for my homework." It's rewarding. I felt good that I read what I have studied in real life.

4.1.4.3 Social/Affective Strategies

4.1.4.3.1 Using Prior Experience

Students tended to use their prior knowledge to understand the content and devote their energies to understanding the form of the language being used. Using their prior experience and knowledge helped to reduce their anxiety and to encourage themselves in taking wise risks so that they were motivated to learn and use English in real life situations. For example, when the subject interested them or the content was relevant to their prior experience or had a connection with a real life situation, they tended to choose relevant topics they were interested in so that they linked their experience in their real life with their learning. S22, because she had knowledge of ecotourism and adventure travel, had a keen interest and easily understood the article.

(S22)
한비야님 세계일주 여행 책을 읽으며 현지인들과 어울리며, 자연스럽게 문화를 익히는 체험을 동경 해왔던터라 adventure travel 과 ecotourism 중에 서슴지 않고 ecotourism 을 선택하여 글을 쓸 수 있었습니다.
As I was reading a book about travel around the world written by Han Biya, I did not hesitate to choose ecotourism as my assignment. Because I miss to have an experience, getting together with local people and learning naturally culture.

(S9)

내 전공분야(음악치료)와 너무 연관이 되는 것 같아 선택했다.

The reason I chose this is that it is closely connected with my major (music therapy).

(S34)

complaint,과제는 공부를 더 하게 만들었다. 사실 가끔 내가 산 물건에 대해서 이런 경험이 있었기에 생소한 것은 아니었다. 사이트에 들어가서 외국사람들이 쓴 것을 보고 우리랑 비슷하다는 생각을 하였다. 사람 사는 곳은 어디나 비슷한 것 같다.

The 'Complaint' task made me study more. In fact, I had similar experiences about things I bought, so that I felt familiar with this task. I read complaints about the product (in 'reviews') which foreigners wrote (in English) on the site. I thought they were just like me. People are almost same regardless of where they live.

(S16)

질병들은 생소한 단어도 많은데, 요사이 사무실에서 감기로 아픈 사람들이 많다. Flu 로 주제를 정해야겠다.

There are a lot of unfamiliar words about 'diseases'. Lately, there are many people who caught cold in my office. I will choose the topic 'Flu'.

(S18)

'stretches' 비행동안 기본적인 스트레칭! Minimize Risk, Dress for Comfort, Use a map, 작은 행동이지만 공부를 하면서 다시 한 번 생각하게 되었고 꼭 필요한 것들이라 어려웠지만 재미있었습니다.

'Stretches' basic stretches for the flight! Minimize Risk, Dress for comfort, and Use a map, these seem to be small movements but I thought them over while I was studying them. Although this reading material was difficult to study, it was interesting because it was essential.

(S13)

내 생활에서 얻어진 것들과 연관시켜 과제를 하려고 했다.

When I do my homework, I tried to connect it with something that I personally obtained from my life.

4.1.4.3.2 Becoming Aware of Peers' Feelings and Thoughts

Exchanging feedback, the students discussed their emotions, and they began to help and

encourage one another.

(S1)

같은 동기생들끼리 서로 격려하면서 하는 것이 저에게는 많은 도움이 되기도 합니다.

Encouraging each other was very helpful to me.

(S4)

131

게시판을 보니 다들 과제가 많아 힘들다고, 매일 영어공부만 한다고... 나만 그런 것
아니네... 다행이다..

Most students said on the web board, "It is really challenging and stressful, because there is a lot
of homework to do. Almost every day I have to study English." Thank God, I am not the only one.

(S15)

지금까지 그랬듯이 게시판에 먼저 올라온 분들의 과제를 참고하는 것은, 과제를 진행하는
데 매우 큰 도움이 되었습니다. 혼자 공부한다는 느낌보다는 함께 한다는 느낌에 더욱
그러했던 것 같습니다.

It is very helpful for me to refer to others' work, when I do my homework. It gives me a feeling
that I am studying together with my classmates, not doing it alone.

(S6)

한참 찾다가 다른 사람들은 괜찮았나 하는 생각이 들어 질문 응답 게시판을 한번 보기로
했다. 그런데 거기에 나와 똑같은 질문이 있고 공지사항을 보라고 되어 있다. 아~ 안되는
것이 나만 그런 것은 아니구나.

When I had a problem with homework, I clicked in 'Question and Answer' to find answers to my
problem. There were already same questions posted on it. I felt I was not the only one to have
problems with homework.

(S47)

다른 분들이 한 과제를 보면서 더 즐거웠다...., 자신의 취향대로 골라서 어떤 이유에서
구입하는지를 읽으며 공감도 했다.

I had a lot of fun as I read peers' works.… Some chose items with reasons. When I read them, I
can relate to them.

4.1.5 Motivation and Attitude

Arbaugh (2000) found that students were dissatisfied because of the lack of social interaction

and collaboration in online learning. This dissatisfaction with online learning can be seen in

high rates of attrition for online students (Chyung, 2001). Furthermore, Tsai *et al.* (2008)

stress that students are satisfied with an online course, when they feel a sense of community

and this has a direct and positive influence on students' participation and interaction. In the

main study, 67 students registered for the course. Of the 67, ten of those never actually

participated, never submitted any assignments, nor exchanged any information on the

available messaging venues. Of the remaining 57, two submitted acceptable English scores –

TOEFL, TOEIC, MATE (see Tables 3.4 and 3.5 in section 3.5) and so did not need the credits from the course. Of the other 55, 47 students completed the course and an attrition rate is just 14 %, which lends supports to the comments from most of the students completing the course that they had a positive learning experience.

4.1.5.1 Motivation

4.1.5.1.1 Effect on Study Habits

Students were so motivated that they did extra work on their own, interacting with family members, friends, and their peers to learn and improve their language learning. The data indicate that students developed the habit of studying English regularly.

(S9)
영어를 매일 또는 일주일에 주기적으로 며칠씩, 규칙적으로 공부를 하게 되어 뿌듯하다.
I am very satisfied with the fact that I developed the habit of studying on a regular basis every day or several days a week.

(S34)
이 수업에 많은 시간을 투자했고, 매일 매일 영어만 하는 것 같아서
I invested so much time in this course. I feel as if I am studying English almost everyday.

(S12)
이 과제를 소화하기 위해서 평균 일주일에 7 시간 내지 10 시간을 투자하는 것 같습니다
To complete this task, I had to spend 7 or 10 hours a week.

(S22)
습관적으로 영어 게시판 다른사람들의 숙제한 것을 보면서 리플달기도 하고 하여간
이제는 하루에도 여럿차례 사이트를 열어보는 취미가 생겼네요...ㅎㅎ
Habitually I give some comments on others' work on the bulletin board and log on to the course several times a day... Ha ha

(S6)
이제는 완전 영어에 중독이다. 이번 주는 어떤 강의가 올라올까...하고 기다려진다.
Now, I am addicted to English completely. I can't wait to see what is coming up this week.

4.1.5.1.2 Effect on Prior Knowledge and Experience

When assignments were connected with their experience or their prior knowledge, students seemed naturally to be more interested in assignments, as mentioned in the above section (see section 4.1.4.3.1). Topics which were relevant to students seemed to make it easier for them to engage actively, even enthusiastically, in the language learning experience.

(S27)
자신의 성향이나 내 자신에 대해 알아간다고 할까요. 그런게 흥미를 많이 끌었습니다
I would say that I am getting to know more about myself and my disposition through this course, which interests me a lot.

(S20)
난 Chickenpox 에 대해서 공부하였다. 어릴때 생긴 수두 자국이 아직도 얼굴에 상처가 되어 남아있다. 워낙 어린시절에 겪은 수두라 그때 어떤현상들이 일어났었는지 궁금했었다.
I studied about 'chickenpox'. When I was young, I had suffered from it, which left scars on my face. But I was too young to remember (symptoms). I wondered what symptoms it had.

(S42)
이번에 베트남으로 졸업여행을 가게 되었는데 이번 영어 공부를 하면서 연관 지어 많은 도움이 되었고…
I am planning to go to Vietnam on my graduation trip this semester. Studying English with this topic was a great help to me.

(S44)
관심이 있는 주제를 읽을 수 있고… 그것을 정리하라고 하니… 관심있게 적극적이게 읽게 되더라구요.
I become more active and interested in lesson when I was required to read the materials that I am interested in and to summarize them.

(S7)
영어라고 하면, 매번 문법, 단어 사전찾아 암기하기로 스트레스 받아 하다가 흥미로운 주제로 놀이하듯 영어로 표현해보니 과제하는 시간이 즐겁습니다.
Studying English used to give me stress because it reminded me of grammar, looking up words in the dictionary and memorising vocabularies. Nowadays, studying English is like playing a game with English in interesting themes, and the time spent doing assignment is fun.

Students acknowledged the importance of understanding culture in language learning. S45 expressed the view that the information he learned was useful in terms of applicability and practicality for a real life situation.

(S5)

시차에 대해 적응하는 팁들은 아주 유용했다. 여행에 대한 실질적인 도움을 많이 얻었다.

The tips for adapting to jet lag were very useful. I got a lot of practical help for travel.

(S45)

하나의 언어를 배우는 것은 그 나라의 문화를 이해하는 것과 함께 가야 한다는 것을 느낄 수 있었으며, 실생활에서 활용할 수 있는 것이어서 더욱 도움이 되었다고 생각한다.

I felt learning a language is to go along with understanding culture. It was more helpful in that I can use it in real life.

S10 focused on the content, travelling, of which he had a lot of experience. He wanted to share his experience with other students in spite of what he felt was his poor English ability.

(S10)

Travel tips 사이트에서 찾는 것은 물론이고 나름대로 그동안 여행 다니면서 겪은 시행착오들에서 얻은 산지식들 중에서 공유하고 싶은 말이 참 많았는데... 언제나 그렇지만 짧은 영어 실력에 밤새우기가 일쑤인지라...아쉬웠다.

I wish I could share a lot of tips from my experience which I obtained from trial and error through travelling around, and information from web sites on travel tips. As usual, I stayed up all night (to do assignments) because of my poor English… I felt my work left a lot to be desired.

4.1.5.1.3 Effect on Task Completion

As the course continued, students' confidence grew. This was particularly evident after a

student had completed an assignment to his or her satisfaction.

(S17)

'서당개 3 년이면 풍월을 읊는다'더니 7 주정도 했더니 영어 실력이 조금은 는 것일까?! 처음에 자기소개서 영작을 할 때는 한 줄도 못쓰겠더니, 이번에는 자신감도 조금 붙고 막힘도 덜했다. 내 자신이 대견스러워 흐뭇했다. 영어의 새로운 표현을 배우는 것은 늘 신기하고 재미가 있다

As the old saying goes 'The sparrow near a school sings the primer (=Practice makes perfect)', my English ability has improved within 7 weeks! At the beginning, I couldn't write even one sentence in English in my self-introduction. This time I had a bit of confidence and experienced less difficulty in doing assignments. I was so proud of myself. To learn new expressions in English is always interesting and amazing.

(S19)

막막한 것이 나의 생각을 적어야 하는데 문장을 어떻게 만든단 말인가!! 그런데 어디선지 그냥 힘이 솟아나왔습니다. 해보는 거라고. 몇주간 공부를 하면서 약간의 용기가 생겼고 그동안 해 왔던 것에서 조금씩 문장을 만들 수 있을것 같은 생각이 들었습니다. 비록 문장이 제대로 맞지 않는 부분이 있을지라도 내 힘으로 만들어 보겠다는 생각으로 글 해석한 것을 바탕으로 나의 글을 만들었습니다. 모두 하고 나니 뿌듯함, 그리고 녹음 연습에 돌입. 단어 발음이 언제나 힘들고...사전에서 발음듣기를 몇 번이고 하고 나서 따라하려고 노력해 보았지만 그래도 이젠 녹음 연습도 한 시간 정도 하니 완성되었습니다. 아직 턱없이 미약하지만 처음보단 용기가 생겼습니다.

How could I write down my thoughts in English! But somehow I became confident and thought "just give it a try." After studying for a few weeks, I had a little confidence and courage and wrote down my thoughts in English one by one. Although some of the sentences were grammatically wrong, I made up my mind to do it by myself. At first I tried to figure out the meaning of English materials, and to make English sentences based on them. When I finished it, I was satisfied. Then I started to do a recording assignment. To practice pronunciation is always difficult. I listened to the pronunciation from the (electronic) dictionary repeatedly and practiced it. Finally I finished it within an hour. Even though my English ability is still very low, I have more confidence than at the beginning (of semester).

(S25)
무엇보다 다양하고 많은 학습경험을 통해 자신감을 얻어…
Most of all, many varied learning experiences gave me confidence…

(S29)
내가 경험한 만큼 영어에 자신이 붙었다.
Because of my experience in this course, I have become more confident in English.

(S28)
저번 녹음 때보다 잘하고 싶은 욕심이 생겨..
I really want to do a better job for the recording assignment than the previous one.

(S31)
과제의 내용 많든적든 저 혼자 스스로 무언가를 성취해 가려고 노력하는 모습들이 많이 성장하고 있다는것이......놀랍게 느껴집니다... 처음에는 단어찾는 시간들이 너무 길어지고. 문장하나 작성하기도 벅찼는데... 요즘은 점점 수월해져 감을 느끼고..나머지 주들도 기대가 됩니다....^
I am so surprised about my improvement and the fact that I managed to complete tasks by myself, whether a lot or a little. At the beginning, it took so much time to look up new words and to write in English. Now, it's getting easier. I look forward to the remaining weeks…^

As students practiced and became accustomed to writing in English, their confidence grew. The best examples of students' growing confidence and willingness to take risks using English are their journals. S36 assessed her English ability as 'improved' in the course. She

even wrote a short memo in English. S24 wrote her journal in English using the expression, "I have butterflies in my stomach," which she had learned from the previous week's lesson, she was so proud that she had been able to use the expression in context. For S41, the course allowed her to develop ways of communicating, particularly in English, in the multi-cultural environment, namely, Malaysia, in which she found herself.

(S36)
Today's beautiful day.~
I'm think that my English skill is increasing.
Thank you so much. professor!.

(S24)
Whenever I fill out a landing card, I have butterflies in my stomach because I have no idea what is correct or wrong. From these experiences, I learned many words. My heart is full of pride. Next time, I will try to speak simple English on a foreign airplane.

(S41)
…The internet connection line here is not so good. so I could not search the web as much as I wanted. And also I prefer reading paper instead of computer screen. There is no a printer here so it made my study a bit difficulty. But 2 weeks later, I will be at home.
Anyway, learning English helps you to communicate with people from other countries.
Here I am in the multicultural nation of Malaysia, I use English to speak Malaysians to understand their Islamic culture, religion and language.
That's why we have to learning English! It is an amazing language, right?

4.1.5.1.4 Effect on Collaborative Environment

Learning not only English but also computer skills tended to affect students' motivation. Most students found that the collaborative nature of the way the course was set up and delivered, encouraged and enhanced language learning, enabling them to want to engage in active and positive ways to share and learn from each other, to create a learning community.

(S1)
이렇게 영어 공부를 하는게 저한테는 잘 맞는다는 생각도 듭니다. 소극적이고 잘 나서지 못하는 편이라, 수업시간에도 혹시나 틀리면 어떻게하나 잘못하면 어떻게하나 고민이 많아 질문도 잘 못하고 적극적으로 다시 알려달라고 말하지도 못한체로 수업을 끝내고 마는 적이 많았었는데 이렇게 수업을 들으면 잘 몰랐던 것은 다시 반복하여 들을 수도 있고,

잘 모르는 것은 다른 학생들이 공부한 내용도 참고하면서 다시 생각해 볼 수 있는 기회가 되는 것 같기 때문입니다. 또 그래도 모르면 언니나, 친구들에게 보여주면서 어떤 이야기인지, 어떻게 해석해야 하는지 조언도 들을 수 있어 좋았던 것 같습니다.

It seems that an online course is suitable for me, because I am passive and introvert. Generally, in a traditional off-line class, I have difficulty asking questions with worries like 'what if I would be wrong, or make a mistake'. So I finished courses without asking some questions. However, in this course, I could repeat lessons, and have references from others' work and have time to think more, when I could not fully understand the lesson. If I hit a snag with homework, I get help from my sister or friends to finish my work.

(S47)
한 학기를 더 공부하고 싶다는 생각이 많이 든다. 틀에 짜인 교과서식 공부가 아닌, 영문사이트를 서핑하면서 공부를 하니 우선 재미가 있고, 호기심도 발동하고, 어렵지만 재미있는 경험인것 만은 사실입니다 . … 영어에 대한 단순 공포에서 약간은 자신감으로 반전 됐다는 것만으로도 대단한 발전이었다는 생각이 든다.

I feel like taking this course one more time. Even though surfing English websites for studying instead of reading a structured textbook is difficult, it is fun and piques my curiosity. It is true that I had interesting experiences during this course. Simply, my fear about English turned into a little confidence in English. That was great progress, I think.

(S42)
수업이 살아있는 것 같아 너무 흥미롭다.
It is so interesting because the lesson seems to be interactive.

The collaborative environment, i.e., exchanging feedback and comments between teacher and learner or learner and learner and reading peers' assignments, also had a significant influence on students' motivation, as the above section 4.1.2 evidenced.

(S29)
바로 받을 수 있는 평가와 코멘트, 정말 좋다. 자주 원격강의실에 들어와봐야지…
I felt good to receive teacher's and peers' comments. I will log on to here more often.

(S31)
다른 학생들의 답글, 그리고 조언 해주시는 교수님… 여기서 그만두는것은 예의도 아니며 스스로도 지는 감정을 가질것 같다.
Feedbacks from peers and the teacher on every assignment… These are things that made me think that I shouldn't drop out of it. If I do, I become a loser and it would be disrespectful to my peers and the teacher.

4.1.5.2 Attitude

4.1.5.2.1 Changing Attitude

Students showed a remarkable attitudinal shift during the course, going from negative to positive as the course progressed. S33 mentioned that she was soon looking forward with excitement and enthusiasm to completing the assignments. S9 experienced a change from at first feeling that the assignments were burdensome, to seeing how it was actually good practice and helped her to improve her English. And even though giving feedback was not compulsory, S20 put a lot of effort into this approach as it was helping her to improve her own writing and speaking of English.

(S33)
이번학기에 영어강좌는 나에게 생활이 되었다. 한주동안 과제를 뿌듯하게 끝내고, 매주 월요일엔 이번엔 어떤걸 배울지 설레는 맘으로 들어와 보는 나를 보면서.. 내가 많이 달라졌다는것을 또 한번 느낀다.
The English course in this semester has become second nature to me. I realized that I have changed a lot since. After completing the tasks proudly, I log on to the course every Monday with a feeling of excitement about what I will learn this time.

(S9)
평소에 말하기를 잘 안하다보니 오히려 녹음과제가 나올 때 아! 이번엔 연습 좀 하겠구나..는 생각이 들어서 은근히 기대가 될 때도 있고.. 과제라는 것이 항상 부담스러운 것만은 아닌 것 같다.
Usually, I don't practice 'speaking'. So I quite look forward to doing recording assignments with this thought, 'Ah! I will practice a bit this time'. The assignment wouldn't be always a pressure.

(S20)
요즘 리플도 영어로 달기 위해서 많이 애를 쓰고 있는데, 저에게는 리플 한 문장 다는 것에도 엄청난 시간이 소요됩니다.
Although I need to spend so much time to give some comments even only one sentence on others' work in English, I try to do it as much as possible.

Some of the comments made it clear that some students experienced a shift in their perception of language learning. Their previous experience of language learning in formal classroom settings was based on a grammatical or linguistic approach; and through this course,

they came to appreciate the advantages of actually using the language as a way of learning and

improving their English.

(S13)
그동안 "영어공부"라고 하면 실생활에 도움이 되는 영어보다는 주로 문학, 문법.
독해등이었다... "영어"라는 것이 공부해야할 "과목"이 아닌, 그것이 사용하는 "언어"라는
생각을 하게 된 것 같다. 조금씩 수업을 들으면서 지금까지와는 다른 방법으로 영어 공부를
하고 있는 것 같다.
When I thought about "studying English" in the past, the first thing that came to my mind was
grammar, literature or reading comprehension (in tests). Now, I think English is not "the subject
for studying" but "the language for using". While taking the course, I study English in different
ways.

Once their perception of and attitude toward English had changed, using English

in real life situations became easier for students. The more adventurous language

learners sought out opportunities to expose themselves to English, such as reading books,

articles in English, writing in English, keeping a diary in English, taking English courses

more, and accessing English websites to research topics on their further information.

(S3)
영문 서적이나 관련 article 을 찾아 읽어볼 생각이다.
I am planning to read books and relevant articles in English.

(S29)
영어일기도 써보려고 나름 노력했다.
I made an effort to keep a diary in English if possible.

(S31)
다이어리 정리를 할때 영어로 메모를 시작했다.
I started writing a memo in English while I was arranging my daily schedule.

(S38)
영화 한편을 반복해서 보는 거였다. 나도 모르게 대사를 외우게 되고 구어체를 배울 수
있었던 것 같다.
I watched the same movie repeatedly. In the process, I managed to memorize dialogues and
colloquial expressions.

(S9)

요새 사회적으로 관심이 많아진 cosmetic surgery.. 어떻게 표현되어 있나 살펴보았고 의외로 그림을 보듯이 화면을 보고 한눈에 내용을 파악할 수 있었다. 영어 웹사이트는 왠지 어려워보여 잘 들어가지 않았는데 한마디로 대담해졌다... ㅎㅎ 이제 잘 들어갈 수 있을 것 같아.. 자신감이 생겨 외국 대학 홈페이지도 보고 했었다...

Recently, cosmetic surgery seems to be focus of attention. I found many expressions regarding cosmetic surgery on the Internet. Surprisingly, I could easily understand the content with the help of pictures. Normally, I didn't access English websites because it looked so difficult to understand. But now I become brave. Ha ha! Now I could access (English) websites with confidence and accessed websites of overseas Universities.

(S22)
영어에만 전념해서 하고 싶은 생각이 든답니다.
I want to devote myself to studying English.

(S8)
5 학기 내내 수강신청 하고픈 심정입니다.
I feel like taking this course over and over again for a whole five semesters.

Most satisfying to the instructor of this course, however, was the reading of the many students who expressed their determination to grow and be successful in their use of English.

(S23)
내 생각을 영어로 자유로이 표현할 그 날까지 이 악물고 하리라.
Until I can express my thoughts freely in English, I will never give up on it.

(S25)
나라고 못할까
Why not me… (I can do it.)

4.2 Questionnaire

This section attempts to analyse and present the data resulting from students' responses to a number of statements and questions, categorized as emotional (e.g. motivation and attitude), factual (e.g. number of times reading others' assignments), students' evaluation of collaboration, and content of questionnaire.

4.2.1 Summary

The questionnaire, given in December, at the very end of the data-collection period, consisted of 15 statements, 8 questions, and three open-ended questions, divided into four different content areas. The first of these relates to students' motivation and attitude (statements 1, 2, 15, 16, 21, and 22); the second to factual information about collaboration (questions 3, 4, and 17); the third to students' evaluation of collaboration (questions 5 and 18-20, statements 6-14), and the fourth (open-ended questions 23-25) to the content of the questionnaire to strengths and weaknesses of the course as an open space. Twelve statements out of 14 in the questionnaire are deliberately positively phrased so that the responses obtained can be analysed straightforwardly and systematically in one direction. The results from the negatively phrased two statements (16 and 21) are used to cross-check and validate the students' responses to the positively phrased statements.

The results of this thesis focus on the main study (i.e., what is the amount of collaboration and how, exactly does that collaboration take place, and what are the outcomes or consequences?). However, because the LMS software was used in the preliminary study to look at and identify themes and interventional practices in the main study, much of the data from both the preliminary and main study can be compared to determine if there were any statistically significant differences.

The following data was collected from students in both the main study and the preliminary study (see section 3.5). Twenty-three students out of 47 (48.9%) in the main study and 37 students out of 50 (74%) in the preliminary study responded to the questionnaire. A statistical test (SPSS t-test) from the SPSS software was used to evaluate the differences in means between the two independent groups. The probability level for statistical significance is $p < .05$ the standard for the applied linguistics field (Hatch and Lazaraton, 1991). The significance of the statistical results, therefore, is noted for probability measures of 0.05 and

less. The results indicated that there were no significant differences between the preliminary and the main studies (see Appendix C). The only exception to this was the responses to statement14 - *I enjoyed giving some comments on other students' assignments* (p=.03) (p<.05). The results for statement 14, indicated that students in the main study enjoyed 'giving some comments on other students' assignments' more (p=.03) than those students in the preliminary study.

One explanation of this is that interventions, meant to encourage learners to collaborate actively (e.g., exchange comments rather than just read others' assignments), were made in only the main study. Because this is, in fact, the only exception, the researcher felt confident using the data from both studies (preliminary and main) to maximize validity and reliability.

Overall, the results of the questionnaire suggest that the course provided a positive impact on language learning and students' attitudes and motivation. For example, statement 1 *I enjoyed this course* from the emotional category in the questionnaire showed that 51.7 % among sixty respondents responded as strongly agreeing.

Figures 4.4 and 4.5 present a summary of the results in the form of a pie-chart (see Appendix D for a detailed summary of the questionnaire results).

Figure 4.4 Students' motivation and attitude: The average percentages of 13 statements (1, 2, 6-15, and 22)
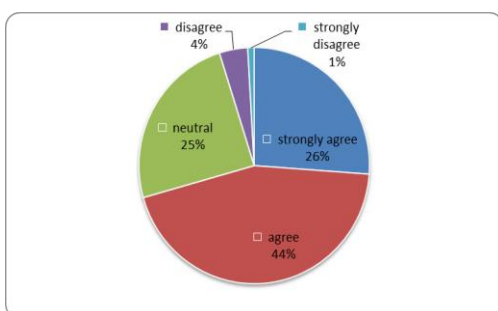
Figure 4.5 Perception of collaboration: The average percentages of three questions (18-20)
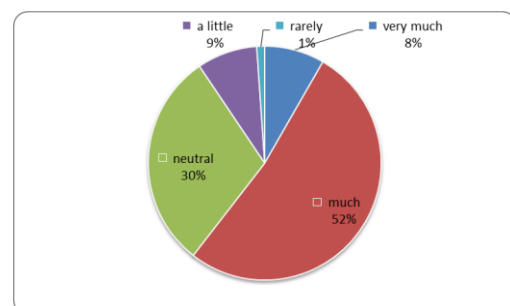
The pie charts show the compilation of the average percentages of the responses to the 13 statements (1, 2, 6-15, and 22) and the responses to the questions (18-20). Twenty-six percent of the students strongly agreed, 44% agreed, 8% were influenced very much, 52% were influenced much; that is, almost two-thirds of the students' responses were positive, or strongly positive.

4.2.2 Attitude and Motivation

Statements about students' attitude and motivation toward this course were first examined by having them indicate their attitude and motivation on a five-point rating scale (statements 1, 2, 15, 16, 21, and 22). In response to the general statement about how they enjoyed this course, the mean was 1.7 out of 5, meaning, in general, that they enjoyed the course. In statement 2 *I am less afraid of using English after this course* regarding the perceived reduction of anxiety of using English after the course, the response was 2.1. This is a positive indication, suggesting that they had more confidence in using English after completing the course, 18.3% strongly agreed and 51.7% agreed. In response to how much they agreed whether reading others' assignments makes them feel less anxious and more relaxed while competing the tasks, the mean was 2.3, indicating positive agreement; 71.6% of students agreed and strongly agreed with the statement (S15). When asked if they would have liked this course better without submitting their assignments in public (S16), 55% of the students disagreed and 16.7% strongly disagreed.

When asked whether they might have given up on this course if they were not allowed to read others' assignments, twenty percent of the students agreed or strongly agreed, while 51.7% of the students disagreed or strongly disagreed (S21). This indicates that one-fifth of the students were considerably influenced to complete the course because they were allowed to read others' assignments. Though this is a substantive number of students who were influenced

to complete the course, it should be noted that for twice as many students this was not a factor influencing whether the students remained in the course. In relation to contact with classmates (S22), on a five-point scale the mean of the result was 2.8, indicating mildly positive agreement.

Table 4.3: A summary of means, standard deviations and percentages related to students' motivation and attitude (1, 2, 15, 16, 21, and 22)

	Mean	Std. Deviation	Valid percent				
			Strongly agree 1	agree 2	neutral 3	disagree 4	Strongly disagree 5
(S1)I enjoyed this course.	1.7333	.86095	**51.7**	**25.0**	21.7	1.7	0.0
(S2)I am less afraid of using English after this course.	2.1333	.72408	**18.3**	**51.7**	28.3	1.7	0.0
(S15)To read others' assignments provided less anxiety and a more relaxed environment to complete given tasks as my own assignment.	2.2500	.83615	**13.3**	**58.3**	20.0	6.7	1.7
(S16)I would have liked this course better without submitting my assignment in public on the web board.	3.8000	.81926	0.0	8.3	20.0	**55.0**	**16.7**
(S21)I might have given up this course without reading other's assignments as a reference.	3.4667	1.12697	5.0	15.0	28.3	**31.7**	**20.0**
(S22)I hope to keep in touch with one or more of my classmates.	**2.7500**	1.05163	11.7	28.3	40.0	13.3	6.7

4.2.3 Factual Information about Collaboration

Questions 3 and 4 indicate that, on average, 76.7 % of the students read more than six assignments by other students per week. Interestingly, in the last week of the course, reading more than ten assignments by other students was 2.5 times more common than in an average week. This figure indicates that, as time went by and the advantages of actively participating became apparent to them, students gradually engaged more frequently and actively in reading others' assignments.

Table 4.4: A summary of means, standard deviations and percentages related to Factual information about collaboration (Q3, Q4, and, Q17)

	Mean	Std. Deviation	Valid percent		
			1-5	6-10	More than 10
(Q3)Think about last week, how many times did you read other students' assignments last week?	3.2667	.82064	23.3	**26.7**	**50.0**

	Mean	Std. Deviation	Valid percent		
			1-3	4-6	More than 10
(Q4)How many other' assignments did you usually read in a week?	2.8667	.72408	33.3	46.7	**20.0**

Q17) How did you choose in which order to read others' assignments?		
	Mean	**Std. Deviation**
1. Name of student	**3.93**	1.245
2. Comments by instructor	**1.64**	1.043
3. Comments by learners	2.87	.944
4. Accessing frequency	2.76	1.233
5. Randomly	3.66	1.418

From Table 4.4 above, the most cited reason for choosing in which order to read others' assignments was 'comments by instructor'; the least was 'name of student'.

This is very much in agreement with previous work in this area. According to Hyland and Hyland (2006)'s review of the literature, several studies clearly indicated the preference students showed for a teacher's feedback rather than that of their peers.

4.2.4 Students' Evaluation of Collaboration in Content-Based Instruction

Students were asked to participate in three collaborative exercises. Those three collaborative exercises consisted of: sharing of journals (with the instructor); their responses to assignments; and commentary on each other's work. These sharing exercises were looked at by the instructor after the current study was completed. At that time the instructor developed a survey consisting of statements and questions to elicit students' evaluation of collaboration.

Table 4.5: A summary of means, standard deviations and percentages related to students' evaluation of collaboration (S6-S14, and Q5, Q18-Q20)

	Mean	Std. Deviation	Valid percent		
			Alone	**Group**	**no preference**
(Q5) How do you prefer to do assignments (given tasks)?	1.3500	.63313	**73.3**	**18.3**	8.3

	Mean	Std. Deviation	Valid percent				
			Strongly agree 1	**agree 2**	**neutral 3**	**disagree 4**	**Strongly disagree 5**
(S6)I learned things through others' assignments on the web board that I would not have figured out by myself.	1.7333	.68561	**40.0**	**46.7**	13.3	0.0	0.0
(S7)To read other's assignment on the web board gave me better understanding for learning content (material).	1.6833	.67627	**43.3**	**45.0**	11.7	0.0	0.0
(S8)To read other's assignment on the web board gave me better understanding for learning English.	2.0500	.79030	**28.3**	**38.3**	33.3	0.0	0.0
(S9)As I read others' assignments, I focused on content.	2.2667	.60693	**5.0**	**66.7**	25.0	3.3	0.0
(S10)As I read others' assignments, I concentrated on English.	2.1333	.79119	**20.0**	**51.7**	23.3	5.0	0.0
(S11)I enjoyed reading others' comments on my work.	1.7500	.72778	**41.7**	**41.7**	16.7	0.0	0.0
(S12)I enjoyed reading others' comments on their works.	2.0333	.68807	**21.7**	**53.3**	25.0	0.0	0.0
(S13)To receive other's comments encouraged me to contribute to others' work as well.	2.0333	.88234	**30.0**	**43.3**	20.0	6.7	0.0
(S14)I enjoyed giving some comments on other students' assignments.	2.6167	1.00998	**15.0**	**28.3**	40.0	13.3	3.3

	Mean	Std. Deviation	Valid percent				
			very much 1	**much 2**	**neutral 3**	**a little 4**	**rarely 5**
(Q18)How much did reading other students' assignments affect your own work?	2.3667	.86292	10.0	**43.3**	**31.7**	11.7	3.3
(Q19)How much others' assignments affect your language learning?	2.5500	. 75838	10.0	**50.0**	**33.3**	6.7	0.0
(Q20)How much others' assignments affect your content learning?	2.3333	.68064	5.0	**63.3**	25.0	6.7	0.0

In statement 6 *I learned things through others' assignments on the web board that I*

would not have figured out by myself, 86.7% of the students agreed that reading others'

assignments allowed them to learn things which they would not have been able to understand by themselves. Also, this collaboration provided a better understanding of both language (66.6%) and content (88.3%), as the findings of statements 7 and 8 in the Table 4.5 show. According to the results of statements 9 and 10, a similar percentage of students (71.7%) focused on either language or content.

Regarding the preference for group work in question 5, 73.3% of the students preferred to work alone with the tasks. Not surprisingly, the number of students (18.3%) who expressed a preference for working in a group was similar to the number of those who actually did work in groups during the course.

With regard to the statements (11-12) concerning comments, an average of 79.2% of students generally enjoyed reading comments on their own work (83.4%), and reading comments on peers' work (75%). The statement, *I enjoyed reading others comments on my work* (S11), was agreed with by 83.4% of the students. Whereas, interestingly only 43.3 % enjoyed giving feedback on others' work (S14). In statement 13 *To receive other's comments encouraged me to contribute to others' work as well*, receiving comments affected students' contribution positively (73.3 %).

Results from questions 18-20 showed that reading other students' assignments affected their evaluation of learning of both language (60%) and content (59.3%), as well as their evaluation of improvement of their own assignments (53.3%).

4.2.5 Opinions of and Comments about the Course

All respondents were invited to add comments on the statements and questions in the questionnaire as well as on the strengths and weaknesses of the course. The responses to these open-ended questions are summarized below, with the more interesting and enlightening comments quoted in detail.

4.2.5.1 Comments

Students commented on four categories within the collaboration environment; 1) reading others' assignments; 2) creating a learning community; 3) receiving feedback; and 4) group work. They pointed out that reading others' assignments and giving feedback were very helpful and effective in completing the course and believed that it helped them to achieve a sense of autonomous learning. A few students suggested creating a learning community in order to learn from each other and continue to stay in touch even after the course ended. Some students suggested that it might be a good idea to have at least one compulsory group work exercise.

> 과제 공개 및 코멘트는 원격강의에서 정말 필요한 요소인것 같습니다.굳이 장소를 교실로 제한하지 않아도 수업이 가능했으며 자기주도적 학습을 실현할 수 있는 케이스가 될 수 있다고 강하게 확신할 수 있었습니다.
>
> It seems that factors such as sharing assignments and comments in the online course are really necessary. I am strongly sure that this course was the case for achieving self-initiative learning.

> 대학과 대학원 생활을 포함해 이렇게 적극적인 수업은 처음이었다. 신선했고 의도가 좋다고 생각한다. 특히 사회생활에 접어들면서 학교라는 사회에 어느정도 벗어나니 학습에 게을러지기가 쉬웠는데 기대이상의 과제량과 제출기간이 정해져 있어 적당한 학습의 압박도 오히려 긍정적인 효과가 되어 더 열심히 할 수 있었다. 영어에 두려움이 있는 학습자들에게 흥미를 불러일으키는 꽤 괜찮은 수업이었다고 평가한다
>
> This is the first time to have such an active class in my school year including college and graduate school. I found the course is refreshing and good, because I have been sort of lazy about studying since graduating from school. However, proper pressure from a lot of homework and deadline had a positive effect on me. I evaluate this course as fairly good because it evoked interest in learners who are anxious about English.

> 시간과 공간상의 제약이 따르므로 지금처럼 온라인 상으로 수강생간에 지속적인 교류를 하는 것은 좋겠다. 예) 커뮤니티, 카페 개설 등을 통해 생활 영어 학습자료나 방법 공유
>
> I wish we could continue to have ongoing communication via online as we do now because time and place constraint. ex) sharing learning materials and methods through a learning community or opening a blog, and so on .

> 그룹과제를 한번쯤 필수로 진행하는 것도 괜찮을 것 같아요.
>
> I think that it would be good to have at least one compulsory group work task.

4.2.5.2 Strengths

Students pointed out several advantages to studying in this kind of environment. Most students found the interaction with their fellow students and with the instructor appealing and useful. Despite this kind of environment lending itself best to the autonomous learner, it was the interactive nature of the shared assignments and peer feedback that students found most appealing. The real-life scenarios were mentioned as one of the strengths. These interested students because they could apply what they had learned in practical and everyday situations. The real-life exercises helped students to improve both language skills and the content knowledge. Another advantage or strength pointed out by students was the lack of time and place restrictions in an e-learning environment.

게시판에 학습결과를 올림으로써, 다른 사람과 공감하는 학습이라는 참신함이 좋았고, 먼저 해놓은 학습자의 오픈과제로 의견을 주고받을 수 있다는 것은 우리나라에서 잘 볼 수 없는 수업방식이어서 꽤 흥미로웠다.
It was very refreshing and fairly interesting in that students uploaded their learning products on the web board as a way to develop a sense of belonging with other students. I hadn't read others' assignments and exchanged comments on them before. It was a very inspirational experience for me.

과제의 대부분이 직접 searching 을 하여 그 내용을 바탕으로 작성해야 하는 특성이 있어서 학생들의 자발적인 수업참여를 자연스럽게 유도하는 수업 인 듯 합니다.
Most of the project was to be accomplished by students who should search for the content in their own way. It is likely to naturally induce student's voluntary participation in class.

실생활에 유용하게 사용할 수 있는 표현과 내용를 통해 자유롭고 즐겁게 영어공부를 할 수 있게되고 영어공부 뿐 아닌 다른 지식에 대해 부가로 얻을 수 있어 좋았다. 우선 재미있었어요....이제 영어사이트에 들어가는 게 조금도 두렵지 않습니다.교수님 리플도 힘이 됐고요.
Useful expressions and real life contents encourage me to learn English and make it fun. Also, it is good for me to study English as well as to get other additional knowledge. To begin with, it was wonderful ... Now I am not afraid of accessing English websites. The teachers' feedback was very supportive.

시간,공간제약없이 온라인으로 학습한다는것이 마음이 편했고 다른수강생들의 의견이나 과제물이 공개되어 혼자하는 공부가 아니라 함께 하고있다는 느낌으로 공부할 수 있어 좋았다.

I was comfortable studying in an online learning environment because there is no time and space constraint. When I read other's assignments and comments, I felt like I was not alone but studying together (with other students).

특히 녹음과제, 쓰기, 듣기등이 골고루 편성되어 좋았습니다.
It was good to have various tasks such as recording, writing, and, listening and so on.

학우들과 교수님의 관심있는 피드백이 제일 좋았고... 몇년간 격어보았던 온라인학습은 말그대로 원격강의만 했던것이지 이런 상호작용이 없었다. 진심으로 영어에 재미가 생겼다.
The best thing was receiving feedback from the teacher and peers. Other online courses I took for years were literally online courses with no interaction of this kind. I really had fun studying English.

4.2.5.3 Weaknesses

Students noted some weaknesses about this course and these can be categorised as; (1) teaching and learning styles, (2) technical issues, and (3) difficulties faced when attempting to form groups.

4.2.5.3.1 Teaching and Learning Styles

As part-time students, they found it hard to juggle this course with all their other classes, and still be able to work and have some kind of social life. There were students who enjoyed working on the assignments on their own, while others would have preferred the instructor to deliver the lessons in lecture mode.

사회생활에 바쁜 학습자들이 많은데 다들 전공수업을 듣고 따라가기에도 시간이 부족한 것이 사실 일 것입니다. 때문에 항상 시간에 쫓기는 학생들에게 과제가 타이트한 편이라고 생각했다. 한편으로는 그것을 각오하고 진학한 사람들이라 다들 정말 열심히 하시는 모습에 존경스러운 마음도 들어 스스로 분발하는 계기가 되기도 했다. 기존에 볼 수 없었던 적극적인 학습방식과 내용은 아주 마음에 들기는 하나, 과제량에 있어서는 30%정도 감소시켜주는 것이 부담이 줄어 더 알차고 즐거운 학습이 될 수 있을 듯 하다.
Many students have a busy social life and school life taking all major classes. In fact, they do not have enough time to keep up with all of them. So, many tasks were challenging for those students. On the other hand, I respect students who are determined to study hard despite all these hectic schedules and they inspired me to study hard. I am content with active learning methods and

content which I haven't seen before. But reducing the number of tasks by 30% would make it more effective and fun to learn by reducing pressure on students.

선생님이 강의하는 내용을 조금은 더 늘려줬으면„„예를 들어 영어에 대한 어떤 노하우 같은것.
I wish there were more lectures by the teacher…for example, something like tips for learning English.

4.2.5.3.2 Technical Issues

One student wished there had been at least one interactive speaking exercise. There were also

the expected comments regarding technical difficulties. Interestingly, because of these

technical challenges, students expressed a wish to be able to meet face-to-face; they got as

close as they could by making use of Messenger® and other online communication tools.

참고 사이트들이 잘 연결되어 있지 않아 몇번 우왕좌왕했던것 같은데.
There were a few dilly-dallying situations because reference websites were not properly linked.

한가지 아쉬운 것이 잇다면 회화쪽이 약한데 말하는 부분이 녹음이 아니고서는 할수가 없었던 부분이라 아쉬었습니다.
I am not good at speaking (in English). Unfortunately, there was no speaking task except a recording task.

4.2.5.3.3 Difficulties Faced When Attempting to Form Groups

Many students had a hard time either forming or getting into a group, so it was suggested that

the instructor, perhaps, should simply assign members to groups.

교수님이 팀구성을 해주면, 그룹으로 과제를 하기가 좋을 것 같습니다.
If the teacher assigned us to a group, then it would be easier for us to do a group work.

그룹으로 과제를 하는것이 더욱 많아졌으면 좋겠다. 혼자서 하는 것보다 그룹으로 하는것이 훨씬 도움이 많이 되었다. 나중에 강의가 다 끝난후에 느꼈던 부분인데 그룹으로 하는 것이 참 많은 것을 느끼게 해주고 영어공부에 도움이 되었다.
I hope there is more group work. I think that group work rather than individual work helps me a lot. After finishing the course, I realized that I had learned a lot from the group work and it was helpful for studying English.

There was another suggestion given by students, both in the beginning stages of the course and, again, near the middle stages of the course, that students thought it would be a good idea to help them learn together on line, if they could meet in person.

온라인 학습이라 하여도 초기에 모두 모이고 중간정도에 한번더 모이는 것이 좋을듯하다. 만약 초기에 한번 만나서 그룹을 결성하거나 중간에 학생들 의지로 모일수 있는 기회를 제공받고 미팅을 한후에 그룹과제를 하였다면 더 좋은 성과가 있을법하다. 아무리 온라인상으로 열심히했다해도 한번도 안본 상대를 찾아 그룹과제를 하는것은 무리가 있었고 제대로 그룹과제를 하기 힘들었던 것이 제일 아쉽다.
It would be better to have an off line get together at the beginning and in the middle of the course even though it is an online course. If we met at the beginning of the semester or had a chance to meet each other in the middle of the course, we might perform better in group work. No matter how hard we try (with technological communication tools like Messenger® , e-mail and so on), it was a challenging to do group work without seeing each other, and it was difficult to produce satisfactory group work.

4.3 Analysis of Learning Management System Records

In the previous section (4.1 Learners' Journals Analysis), Nvivo was used to look at the raw data to identify the core categories, subcategories, and sub-subcategories. How participants constructed the learning experience, for example, was identified as a core category; how they responded to and used the technology became a subcategory, and how their motivation and attitude were affected became a sub-subcategory. This section then used those same categories to re-group the data. These new groups, in this section, became: written assignments, peer-to-peer feedback, postings to the bulletin boards, and a comparison of what students said in their journals and what they actually did in the course. The statistical data from the LMS (as defined in the section 3.5.7 on Learning Management System in the Methodology chapter) were also analysed to add information about the levels of collaboration. The data were used to code these levels of collaboration as belonging to one of four categories: The Level of Collaboration; Use of Technology; Ways of Collaboration; Effect of Collaboration.

4.3.1 The Level of Collaboration

All students, regardless of the frequency with which they read others' assignments, reported that having access to what others had written had a positive effect on their own learning experience. The quantitative measures of the overall collaboration level by each type of activity/document are summarised in Table 4.6; written assignments, peer-to-peer feedback, instructor feedback, enquiries, personal issues (i.e. absence or delay submission, and so on) as evidenced by postings of students on two different web boards. One board was for submitting students' assignments and exchanging feedback, and the other, the Q&A (Enquiry) board, was for asking questions and exchanging information between students and instructor. The collaboration level was established by analysing the statistical data resulting from the number of students posting assignments and messages during the course.

A total of 2,087 written assignments, postings (enquiries and answers) and feedback from the instructor and students were posted on the web board. These included 376 postings by the instructor as feedback, 1,041 were assignments, and 565 feedback messages/comments posted by students. On the Q&A board, there were 105 postings including questions and answers by the instructor or by students, as is shown Table 4.6. Messages and e-mails between the instructor and students or students and students were mostly students' personal issues (not relevant to data analysis) so these data were not included for data analysis: though they are obviously useful as an indication of the degree of social interaction that took place, which presumably helped them maintain their commitment to the course.

Table 4.6 A summary of each type of Data Collected

Type of Data	Example of each kind of data posted
Written assignments	1041
Peer-to-peer feedback	565
Instructor feedback	376
Postings (Enquiries and answers)	105
Total	**2087**
Messages (Memo)	139 (received: 83/ reply: 56)
E-mail	105 (received: 54/ reply: 51)

The change in the number of peer-to-peer feedback postings - as tracked only on the web board - as the course progressed, is illustrated below in Graph 4.1. The number of comments seemed to fluctuate throughout the course. There were many reasons for this fluctuation. For instance, because the tasks in week 5, 8, and 11 were of the same type, students, in the beginning of these exercises, did not feel it was necessary to give feedback. These tasks in week 5, 8, and 11 were based on similar types of exercises consisting of students being given example verbs from which they were to write words or sentences. They were also asked to find sentences which contained these example verbs from the course materials or from the information which they discovered themselves. At the end of these sets of exercises, when comparing and examining the number of feedback postings in these three weeks, the data showed that the comments increased, as illustrated by Graph 4.1(b). One possible explanation for this is that as students repeated a similar task through the three weeks, their confidence level rose and so they felt more comfortable collaborating. Week 10 showed the highest number of exchanges between students. This was the peak week in terms of the inter-student exchanges. It was expected that, because we had progressed through ten weeks of course work, and had worked together for that length of time, this incremental exchange rate would increase. This did not turn out to be true. Though the number of comments exchanged increased through week 10, suddenly, in weeks 12 and 13, there was a dramatic drop. As Graph 4.2 shows, the comments dropped from 138 in week 10 (the peak of students' exchanges), to 81 in week 12,

155

and 30 in week 13. There are two main reasons for this. In week 12, the instructor introduced another intervention consisting of a group project that involved many students interacting and collaborating via e-mail and Messengers®. Because students' exchanges were tracked only on the web board, these exchanges by e-mail and Messengers® were not included. They, in fact, replaced the web-board exchanges; hence, the dramatic drop in Week 12.

The dramatic drop in Week 13 was related to the fact that it was final exams' week. For obvious reasons there was much less activity on the boards during that week.

Graph 4.1 The number of peer feedback postings (1): from week 1 to 13

(a)

(b)
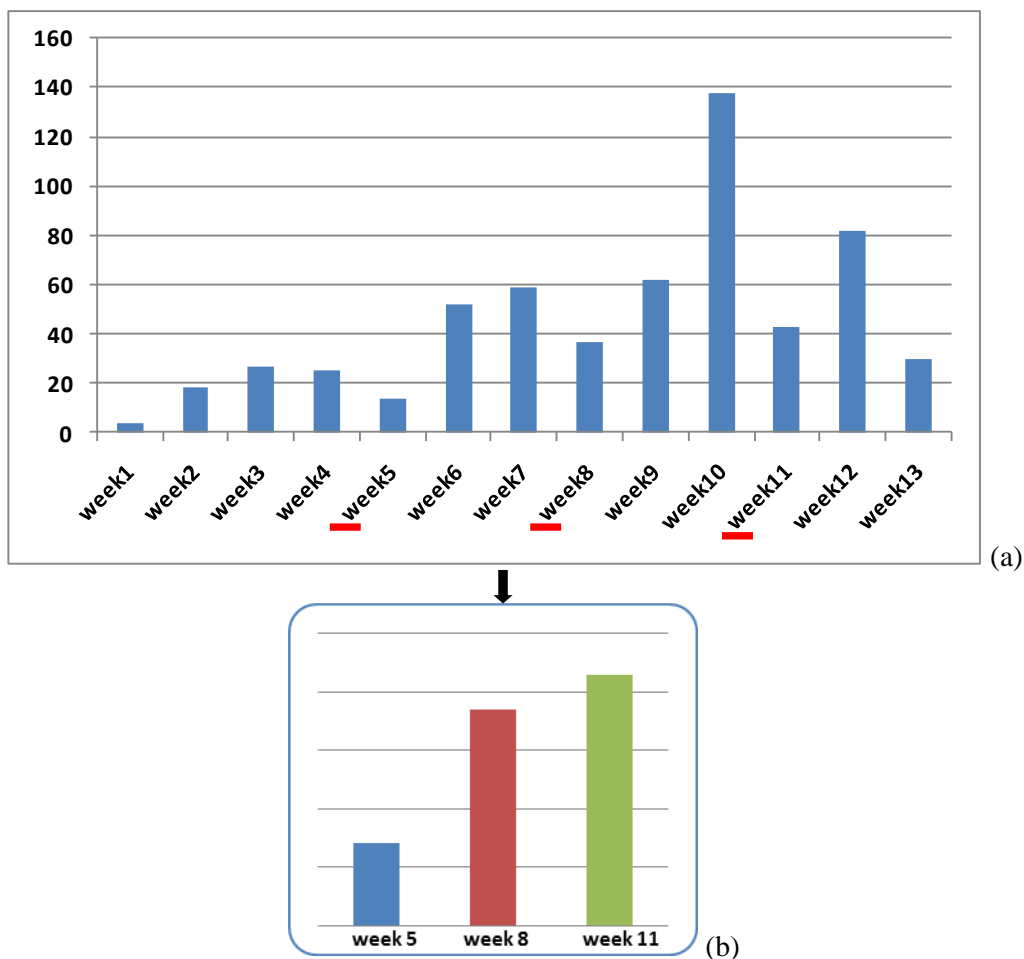
Graph 4.2 The number of peer feedback postings (2): from week 1 to 13 apart from week 5, 8, and 11
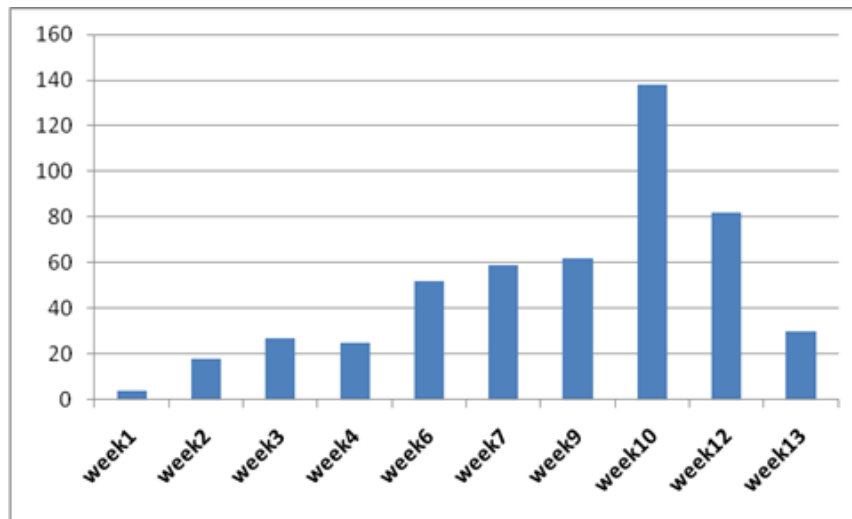
4.3.2 Use of Technology

This section will include discussions about: Using bulletin boards; Technical problems; and Use of new visual communication tools.

4.3.2.1 Using Bulletin Boards

The interactivity offered by bulletin boards, i.e., Enquiry (Q&A) web board, and the web board for submission of students' assignments is evidenced in the sample exchanges below. There were 105 posted messages comprised of 43 questions, 41 and 21 responses from instructor and students respectively. These numbers show the encouraging nature of interactivity. Students posting on the enquiry (Q&A) board were concerned mainly with assignment deadlines, and how and where they could submit late responses. Some examples of these posted questions include:

(S11 2008-09-15 00:07:58) the numbers of hits (42)
교수님, 과제 제출기간이 조금 지나서 제출이 막혔는데, 늦게라도 제출이 가능한건가요? (몇 분 사이에 업로드가 활성화가 안되고 다운로드만 가능하게 바뀌어서요..ㅠㅠ*) 제출 기한이 지나면 미제출로 끝나는건가요?

Instructor, the system blocked me to hand in after the deadline….Could it be possible to submit it even late? (There was a function change from uploading to downloading only in a minute..ㅠ.ㅠ*) After the deadline, is there no chance?

*'ㅠ.ㅠ' is a code to show you are sad or unhappy in Korean, which is mainly used in technology meditated communication, i.e., computer chatting, cell-phone messages.

(S29 2008-09-16 04:50:33) the numbers of hits (30)
교수님 저역시 제출기간이 궁금합니다. 추석연휴동안 컴퓨터없는 지방에 있다가 오늘 왔는데… 뒤늦게라도 제출이 가능한지요? 어느 곳에 제출하면 되는 지요? 이메일로 보내드려도 될까요?
Instructor, I have the same question: the submission period. I went to countryside with no internet access during the Thanksgiving Holidays. Would it be possible for me to hand in homework after the deadline? Where could I submit it? Is it okay to send it via an e-mail?

One of the posted queries was an obvious example of how collaboration and information exchange could lead directly to the assessment and improvement of curriculum and course delivery. A student, S36, asked if the score she received was correct (see the below). This posting received 44 hits. Because of this high number of hits, the instructor took a closer look at the way grades were posted. Because of S36's original question and high activity around that question, the instructor was alerted to there being a glitch in the program. She was then able to revise her practice in the posting of grades. This led to clarifying how grades were assessed, so improving the delivery of the course for both students and the instructor.

(S36 2008-10-29 21:44:41) the number of hits (44)
안녕하세요? 8 주차포트폴리오 과제와 9 주차 warmup [평가보기]점수가 ,,, 한 번 살펴봐 주시겠어요? 모두 정해진 날짜 이전에 제출했는데 '0'점이라고 표기되어 있던데요…. 맞..나..요?
Hi, could you check … my scores of both assignments week 8, portfolio, and week 9, warmup? I handed it in before the deadline but the scores are '0'… Is it co-rre-ct?

The web board (Note: messages and exchanges posted on the web board can be captured and analysed using LMS, and are, therefore included in the data analysis. The non-content commentary referred to above which was not included were, for the most part, e-mail messages, which are not accessible to LMS capture) allowed students to submit assignments as

well as to exchange comments. Students gave social comments unrelated to the actual content of the course. This helped, greatly, to create of a sense of community. The conversation cited below is an example of this. One student posted her assignment way before the others. Another student, S13, expressed her feelings about the early posting. Two other students also commented. S8 spoke of her envy of the early posting. S45 emphasised her difficulty with the assignment.

(S13 2008-09-09 15:46:20)
와~ 일등이시네요,., 부지런하신가봐요
Wow! You are the first one!, You seem to be diligent.

(S45 2008-09-15 00:02:12)
첫발을 띤다는 것은 참 어려운 일인데 잘하셔서 참고했어요. 저는 아직 코멘트까지는 너무 무리네요.
Although it is difficult to take a first step, you did a good job. I used yours as a reference. It is hard for me to give a comment on your work yet.

(S8 2008/10/18 23:57:32)
우와..멋져요..오늘 과제를 다 끝내셨네요..부러워요^^;;
Wow, fantastic. You have done it today.. I envy you^^;;

Other social commentary included S6's statement which encouraged peers with the quote from Bob Marley's song, "Don't worry, be happy."

(S6 2008-09-14 20:18:57)
"DON'T WORRY, BE HAPPY."...

(S22 2008-09-24 04:40:46)
그래요..과제도 너무 과하죠..^^
That's right. It seems that we have too many assignments..^^

Some students attempted to make a closer connection to the instructor. One student, S37, sent the instructor a Christmas card. Another, S20, writing in English, switched roles for a moment from student to instructor.

(S37 2008-11-18 01:47:46)

Dear Professor **.
Hi! Merry Christmas! Have a nice Christmas..and I hope everyone in your family has a good time! Hoping that your holiday is filled with many delights...
And then hoping too all through the year your days are happy and bright.
Happy holidays!
always thank you for you.
Merry Christmas! Boas Festas! Boldog Karacsony! Buon Batale! Feliz Navidad!
Frohliche Weinachten! Glad Yul! Joyeux Noel! Kala Christougena!
Srozhestvom Khristovym! 聖誕快樂! メリ‐クリスマス!
메리크리스마스!

(S20 2008-11-23 23:34:13)
Happy New Year! ... You too,,,,^ ^

The use of the bulletin boards, one web board for posting assignments, and another for asking and answering questions, helped to create a sense of community. Students continually posted thank-you notes and to respond to one another's posts. One student, S42, posted her feelings about the course. Two students replied a couple of days later. One student, S29, answered S42's message a week after she had posted. These exchanges, long after the end of the class, were clear indications of the students' sense of having become a member of a community.

(S42 2008-12-20 21:30:14 the number of hits: 23)
다른 어떤 과목보다, 신경이 많이 쓰이고 해야할 것이 많았던 과목이었습니다. 그래서인지, 정말 감회가 남다릅니다.ㅎㅎㅎ 마지막 과제를 끝내고나니, 막 석사를 취득한 기분마저 들려고 합니다. 과제를 수행해야했던 학생들도 힘들었지만, 그보다 과제를 내고 평가해야하는 교수님의 열정적인 노고에 박수를 드립니다. 수고 많으셨습니다!^____^
This course needed more effort and was more demanding than any other course. Maybe, because of that reason, I felt so proud of myself. Ha ha ha! When I finished the last assignment, I even felt as if I had completed a master's degree. It was difficult to complete the course. However, it was more difficult for the instructor to design and evaluate assignments. I would like to applaud the passion of my instructor. Thank you very much! ^____^

(S8 2008-12-22 08:25:07)
신경을 많이 써야했던 과목이라 그런지 과제 후 석사취득기분!! 정말 공감합니다.^^ 님 수고많으셨구 메리클쓰마스요.^---^
I definitely sympathized with you, "When I finished the last assignment, I even felt as if I had passed a master's degree." Thank you so much and merry Christmas. ^---^

(S29 2008-12-22 16:09:56)

저도 여러분들과 함께한 영어수업이어서 더 유익하고 재밌었던 것 같네요. 알찬 방학 보내세요^^

Me too! The course seemed to be more instructive and interesting because we studied together. Have a fruitful vacation.^^

(S29 2008-12-27 01:19:48)

모두들 메리 크리스마스!

Merry Christmas, everyone!

4.3.2.2 Technical Problems

Most technical problems occurred when students were given a recording assignment.

Students reported that they did not have much experience with using recording software.

Although detailed guidelines and manuals were provided on the website, they still faced

difficulties such as installing equipment (i.e. a microphone and a headset), adjusting the

volume, and using the recorder. S32, lacking experience in using a computer, raised a

question about how to listen to her recording. Another student replied to her, an example

of students sharing knowledge on their own initiative.

(S32 2008-11-02 04:28:02) the numbers of hits (20)

저 컴맹인데요. 너무 너무 궁금한 것이 있어요.녹음을 겨우 하긴 했는데 본인이 녹음한 소리는 어떻게 듣나요? 녹음이 제대로 전달이 된건지 안된건지 도무지 확인할 길이 없네요.알려주시길 바랍니다.

I'm computer illiterate. There are so many things that I am curious about. I managed to do a recording assignment. But how can I listen to my recording? I am not so sure if I recorded it properly or not. Please let me know.

(S9 2008-11-03 09:39:10)

재생버튼을 누르면 녹음한 목소리 들을수 있어요. 빨간색의 녹음버튼 옆에 재생버튼 .. 그거요~전 제가 녹음한거 들을때마다 아주…부끄럽답니다..

You can listen to your voice if you click the play button. The play one next to the red record button,… that's it. ~ Whenever I listen to it, I feel so embarrassed.

A recurring problem was the links on the website. The instructor had checked all the

links in the course but, as often occurs with links on any site, they get temporarily disconnected,

or the URL for the web page changes. S43 experienced this when she was unable to connect to

the course pages on the site. S11 replied promptly, explaining to S43 how to go first to the

main page with URL, from which she would be able to link to the subpages.

> (S43 2008-09-22 06:56:40) the number of hits 31
> 교수님, 이 사이트 접속은 어떻게 해야하나요? 강의 중에 나와있는 사이트로 들어가 봐도
> 잘 안 되는데요. 이 articles 를 볼 수 있는 사이트를 알려주시면 고맙겠읍니다.
> Instructor, how do I access this site? I had a trouble in accessing the linked website. I would
> appreciate it if you let me know the site address I can access.

> (S11 2008-09-22 10:30:17)
> Click http://kidshealth.org

The above number of hits on this student's posting indicated how many other students were

having the same problem.

4.3.2.3 Using New Visual Communication Tools

As the course continued, students figured out how to use emoticons as nonverbal ways to

communicate and express their feelings and opinions. Standard emoticons include icons

representing common emotions such as sympathy, encouragement, and envy. The default icon

is 😊 . The data did not include the default icon. There is a general consensus as to the

meaning of these emoticons.

The type of emoticon (or smiley)	Meaning
😊	Happy
😃	Very happy
😢	Sad
😠	Angry
😫	Difficult
😍	Wonderful
😲	Surprised
😎	Strange

Examples below show that students shared knowledge as well as giving one

another emotional support. The focus, in analysing the data, was on emoticons other than

the default icon - 🙂 - as this is so widely used. S2 used an emoticon (or smiley), 😔, is

used to express sadness. When S2 used it, she was communicating sympathy for S36,

who had the same problem as S2 with the particular assignment.

(S36 2008-10-29 21:44:41) the number of hits (44)
안녕하세요? 8 주차포트폴리오 과제와 9 주차 warmup [평가보기]점수가 ,,, 한
번 살펴봐 주시겠어요? 모두 정해진 날짜 이전에 제출했는데 '0'점이라고 표기되어
있던데요…. 맞..나..요?
Hi, could you check ... my scores of both assignments week 8 portfolio and week 9 warmup? I
handed it in before the deadline but the scores are '0'... Is it co-rre-ct?

(S2 2008-10-29 21:44:41)
😔 저두요...화요일날 점수보고 지금까지 계속우울합니다...9 강 들을 기운도 없어요
ㅠ.ㅠ*
Me too…I checked my score on Tuesday. I feel depressed… I don't have any energy for Week 9.
*'ㅠ.ㅠ' is a code to show you are sad or unhappy in Korean, which is mainly used in technology
meditated communication, i.e., computer chatting, cell-phone messages.

Another example was S22's comment on S13's posting. She talked about not

knowing what the idiom 'bogus' meant until reading S13's posting. She used the icon😎,

expressing her ignorance.

(S13 2008-10-14 00:01:54 the number of hits :43)
HI, I'm Anna, who ordered an anti-snoring pillow for my husband the other day at
www.ebay.com. According to what you say on your homepage, the pillow should have
been delivered within 24 hours after the order was placed, but actually it took more than two
days. And you didn't show any sign of apology. What's more, I found out that the
advertisement was all bogus, because it didn't work at all for my husband. He even snored
much more with that darn pillow. Therefore, I want a refund as soon as possible. If the
refund process takes more than two days, you'd better prepare to meet my lawyer one of
these days. No ifs, no buts, period.

😎 (S22 2008-12-12 13:40:46)
bogus 라는 표현을 허위과장 광고에 대해서 쓸수 있네요..^^좋은 표현 배우고
갑니다.^^
The word 'bogus' can be used in false and exaggerated advertisements..^^ I have learned a
good expression. ^^

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The use of emoticons to indicate empathy in this way was likely to help bring students closer together, again creating a sense of belonging to a larger community.

4.3.3 Forms of Collaboration

This section will include discussions about: Fixed Scaffolding and Adaptive Scaffolding. Fixed scaffolding took place when students were reading one another's assignments. This reading helped students to form their own approach to course materials and topics. Adaptive scaffolding took place when students exchanged information and helped one another to clarify their understanding of course materials and topics.

4.3.3.1 Fixed Scaffolding

Examples of a fixed scaffolding approach to learning follows. In the first example, S35's submission included three tips about how to combat compulsory shopping. After reading some of her peers' submissions, she revised and added three more tips.

> (S35 2008-10-11 18:26:21)
> …
> 1. Pay for purchases by cash, check, or debit card rather than credit card.
> 2. Make a shopping list and only buy what's on it.
> 3. Avoid discount warehouses.
> …
>
> (S35 2008-10-19 21:18:36)
> more advice...
> don't shop on the web. (from S17's)
> Slow and easy to shop. Because you will buying a lot of things. (from S22's)

S13, another student, also provided evidence of how reading others' responses allowed her to revise and add to her original submission. She elaborated on her original response, including a quote from another student's, S47's, work to support her revision. The additions are highlighted in bold.

> (S13 2008-10-14 00:01:54 the number of hits :43)

HI, I'm Anna, who ordered an anti-snoring pillow for my husband the other day at www.ebay.com. According to what you say on your homepage, the pillow should have been delivered within 24 hours after the order was placed, but actually it took more than two days. And you didn't show any sign of apology. What's more, I found out that the advertisement was all bogus, because it didn't work at all for my husband. He even snored much more with that darn pillow. Therefore, I want a refund as soon as possible. If the refund process takes more than two days, you'd better prepare to meet my lawyer one of these days. No ifs, no buts, period.

(S13 2008-12-14 13:00:17)
HI, I'm Anna, who ordered an anti-snoring pillow for my husband the other day at www.ebay.com. **Based on what I read on your website, I thought I made the right choice for him and all the reputations were good. But soon after I found to have made a wrong choice.** According to what you say on your homepage, the pillow should have been delivered within 24 hours after the order was placed, but actually it took more than two days. And you didn't show any sign of apology. What's more, I found out that the advertisement was all bogus, because it didn't work at all for my husband. He even snored much more with that darn pillow. Therefore, I want a refund as soon as possible. If the refund process takes more than two days, you'd better prepare to meet my lawyer one of these days. No ifs, no buts, period. **You will pay for this.**

: Of course, the complint is all made up, but I put some additional sentences to show I am really angry and to make it more pausible.

line from S47, which caught my eyes.
: .... so i'll send you these. Give me a call when you get this
I just want to return these....

The reason I picked up those lines above is that I believe it is really hard to return a product to the seller, because it takes your time and money. But S47 tries to do this when making complaint. I think it's impressive.

4.3.3.2 Adaptive Scaffolding

Four examples of adaptive scaffolding follow, showing how students exchange

information. The first and second examples occur when students are discussing each

other's responses to assignments. The third example occurs during group work. The

fourth adaptive scaffolding example occurs when two students construct knowledge by

exchanging comments about their responses to assignments and the actual course content.

Examples of the first kind of adaptive scaffolding are S13's remark: S13 expressed her opinion about S20's response to a particular assignment exploring the appropriateness of unmarried couples touching in public. This led to S20 attempting to explain on the web board her reasons for saying that it was acceptable for a man to pat a woman's behind on a first date.

(S13 2008-11-17 23:48:13)
In #2, patting her behind on a first date, I don't think it is acceptable, unless she fell in love with him at first sight or she is kind of gold miss eager to get married as soon as possible.

(S20 2008-11-17 23:54:45)
The man was trying to say something to her. However, she was looking ahead. So the man pats the woman's behind, and I think light is 'toktok'. That is all.~

A second example occurs in another discussion task. In Week 13, students engaged in a knowledge constructing exercise about positive or negative body language. Students had a lot of personal experience with this topic. One of the postings, from S27, mentioned a number of common examples of body language: touching, nodding, crossed legs, or non-smiling. She got 76 hits. Many students became deeply engaged, using their own experience to respond. S13 added some positive examples: warm and open smiling, preening behaviour, as well as a couple of negative examples. S21 and S18 added to what had been previously said about nodding and added their own examples of how they used these techniques of body language.

(S27 2008-11-26 23:36:02 the number of hits:76)
Psitive body language

- Touching another's arm or shoulder
At times when the person tells me an interesting story, I pat her shoulder or arm. I think over the person's story and still find it to be interesting. When I feel good, I often fold my arms with my friends', although it may be misunderstood in foreign countries.
- Nodding
At times in meetings and gatherings I often bow my head in assent when the person speaks.

Negative body language

- Legs crossed

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When being seated in a chair, I often cross my legs, although the habit is unhealthy because it may bend the shape of the legs. My son at times points out my bad habit. My God, I know it is a bad habit, but I feeling like doing it sometimes. I wish I could assume a good posture.

- Tight or no smile

I wish I had a more comfortable and warm expression on my face. At times when I am absorbed in thought, my face has a deadpan expression. If I am lost in thinking, then, it is likely for me to greet neighbors with blank eyes.Let us laugh!　Let us make the smiley face all the time!

(S13 2008-11-27 22:00:49)

[positive body language]

1. warm, open smile

As a natural phenomenon , I give a sweet smile at interesting person.

I smile without noticing it myself. I think that this gesture means I like the person. Although the person talk me boring story, I must be smile ~

2. preening behavior

It is a natural body language. When I met my friends, I was well dressed and

perfect make - up than usual going out . I think that it is etiquette and expression of good feeling for them. ^^

[negative body language]

1. tight or no smile

" no smile " is a contrary concept for " open smile "

I can not hide my mind for them whom I don't like.

It is hard for me to get rid of the body language.

Hm ....

2. arms crossed

It is my bad habit . I have a tendency to show too much pretend to people whom I do not like. I think I should be careful on this kind of thing and should get it corrected.

(S21 2008-11-28 20:08:38)

I often nod my head when I listen to my friend's talk. Although they talk to me for a long time. I showed my consent by nodding to them. Maybe this action is my good habit of listening. also, I nod my head when I understand a lecture of professor. so I chosen nodding.

(S18 2008-11-30 20:26:09)

Most people understand that smile means agree. So many people can think tight or no smiling face means angry or disagree. I do, too.

(S23 2008-11-30 20:39:41)

In many cultures, it is most commonly, but not universally, used to indicate agreement, acceptance, or acknowledgment. I use this gesture for "agree.”

(S29 2008-12-17 04:23:17)

I have a same bad habit, Legs crossed. and i also know it's unhealthy.^^

My mom always said to me, Don't sit on the chair with your legs crossed.

but i couldn't abandon that habit.

A third example occurs in a group work scenario. S34 made an enthusiastic appeal on the board to form a group. She received 97 hits. This indicates a significant point about how students collaborate in a virtual environment. They are interested in a group project. Two students accepted the offer and the interaction exchanges (see below) between S34, the founder of the group, and those students wishing to join are an example of the process by which a group is formed.

(S34 2008-11-03 11:09:11 the number of hits:97)
WEEK10 /TASK4 팀으로 같이해요~
안녕하세요? S34 입니다. TASK4 그룹 과제를 위한 팀을 만들고자 합니다. 다른 마땅한 게시판이 없어 이곳에 올립니다. (학습 Q&A 에도 올리겠습니다.) 3~4 명정도가 좋을것같습니다. 글 아래에 댓글(이름/이메일/메신져)을 달아주시고 메신져등록해주세요~
^-^ r***l@hotmail.com 입니다.
Let's work together as a Task 4/Week 10 Team~
Hi, I'm S34. I would like to make a group for the Task 4 assignment. I couldn't find a proper web board for it, so I post it here. (I will post it in Q &A web board as well.) The ideal number of team members will be 3- 4 people. Please contact me at r***l@hotmail.com with your name, e-mail, and messenger. Please don't forget to register messenger too.

(S8 2008-11-04 09:27:46)
S8/ y***g@naver.com/ y***g@hotmail.com 인데..네이트온은 안되나요?.>.<<
I am S8 (y***g@naver.com/ y***g@hotmail.com). Is NateOn alright?. >.<<

(S8 2008-11-04 09:30:16)
아..네이트온두 되네요?^^ 방금 네이트온에 등록하였습니당.
Wow, NateOn works?^^ I've just registered in NateOn

(S34 2008-11-04 10:01:26)
방금 msn 등록했습니다. 네이톤은 아이디가 없다고 하네요..제 네톤 아이디는
u***o@lycos.co.kr 입니다
I've just registered with msn. I don't have a NateOn account. My account in NateOn is
u***o@lycos.co.kr.

(S38 2008-11-04 12:53:23)
함께해도 되나요? 혹시 정원다 찼나요? 전 S38 이에요. n***9@naver.com/n***9@hanmail.net
May I join you? Have the groups been set up already? I'm S38
n***9@naver.com/n***9@hanmail.net

(S8 2008-11-04 13:16:52)

네이트온에 u***o@lycos.co.kr 등록하였습니다.^^

I have registered in Nateon with u***o@lycos.co.kr.^^

(S34 2008-11-06 09:53:58)

^^ S38 학우님~ 네이트온으로 등록하겠습니다~

^^ S38~ I will register messenger in NateOn.

(S34 2008-11-06 14:41:50)

S38 학우님~ 이글 보시면 전화주세요! 010-***-**06

S38~ please call me when you read it! 010-***-**06

(S34 2008-11-07 17:16:33)

S38 학우님~ 늦게연락이 되어 조인하지 못하여 아쉽습니다~ 담번에 꼭 같이해요~ ^-^

S38~ I am really sorry to say that you couldn't join the club because you contacted me late. Let's surely do it next time~ ^-^.

Further evidence of adaptive scaffolding occurred in the communications that took place after the group was set up. The group members used Messenger to communicate. They submitted their assignments (see Appendix E1) with a written version of their Messenger dialogues as an appendix (see Appendix E2) even though their conversation scripts were not required. Seventy–two hits on their posting assignment as a group work showed that their assignment drew more peer comments than any other assignment. They also received several social and evaluative feedback from peers.

(S8 2008-11-08 10:12:46)(group member)

하핫...대화내용 다시 보니까 부끄러워요..ㅋㅋ 우리 끝까지 화이띵해요^^;;

Hahah… The content in our conversation is making me blush..k k Go, our (team), till we finish it.

(S30 2008-11-08 22:36:06)

혼자하는 것보다 팀으로 하는게 더 힘들텐데... 넘 훌륭해보여요 두분^^

It would be harder to work with a group rather than do it alone… Amazing, you guys^^

(S42 2008-11-08 23:33:27)

너무 멋져요^^ 글구 알찬 정보감사해요.

So cool^^ And I'm grateful for the substantial information.

(S1 2008-11-09 00:15:30)

Your team hard work and a good job!!!!

(S46 2008-11-09 17:42:52)
열심히 하는 모습 부럽네요...
I really envy your hard working.

(S29 2008-11-10 00:37:26)
괴테하우스까지... 다녀오시고..부럽습니다.!
You even went to Goethe House… I envy you!.

(S8 20082008-11-10 09:58:54)(group member)
^^네~ 괴테생가 너무 멋졌답니다.^---^
^^ sure~ the birthplace of Goethe looks so fantastic. ^---^

(S34 2008/11/10 14:22:40)(group member)
^^ 계획만으로도 엔돌핀이 팍팍~ 즐거운 시간이였지요~
^^ Just planning gives endorphins to me all of sudden~ It was a good time. ~

Some students learned in an uncomplicated and straight forward manner by reading their peers' assignments. That is, they did not need to exchange a series of messages/comments to clarify their understanding of the assignment. Others constructed knowledge as they exchanged comments. For example, S41 searched for relevant information about 'Passover' and summarized it in her assignment (see Appendix F). S13 commented, giving her understanding of 'Passover.' S41 replied, showing appreciation of S13's comment, briefly mentioning her own understanding of 'Passover'.

(S13 2008-11-24-00:25:31)
'Passover' and 'Thanks giving Day of the Hebrews' interpreted with meaning which is same.

(S41 2008-11-25 00:19:28)
Thank you for your comment. But i know two days are some different origin and meaning. I want to find more information and share it.

However, often it was not simply one or the other. Students used both fixed and adaptive scaffolding approaches. An example of this combined approach is S29's posting. She posted the information she had come up with in her research on the website directly. In her revision, S29 included comments which clearly reflected the fact that she had taken the instructor's comments into consideration.

(S29 2008-11-28 12:18:45)
Nodding agreement : When nods are used to punctuate key things the other person has said, they signal agreement, interest and understanding. However, continual unconscious bobbing of the head usually indicates that the listener is tuning out. http://www.marcandangel.com/2008/07/07/25-acts-of-body-language-to-avoid/

(instructor 2008-11-28 19:40:00)
Excellent information! Now, I am looking for your comments or opinions...^^

(S29 2008-11-29 17:02:06)
nodding my head. and If I agree with someone, I will smile by he meaning of positive. On the other hand, if I do not agree with comment, I will take this action. I am doing my arms folded in front and yawning. Most people will take this action.

4.3.4 Effects of Collaboration

This section will discuss motivation and attitude (4.3.4.1); and using learning strategies

(4.3.4.2).

4.3.4.1 Motivation and Attitude

These are examples of how collaboration leads to students motivating one another and

influencing one anothers' attitudes in a positive way. One student, S46, after reading other

students' submissions wrote:

(S46 2008-09 -18 15:55:01)
Your answers look simple but very useful to me. I like this type of answers. I am trying to answer like you.

This kind of comment led to a rapid exchange of encouraging and positive comments

amongst the students. The students reading S46's comments were obviously affected in a

positive way. Some of the original exchanges are in Korean, but some students, for example,

S3, S22 , and so on, happily used English when they gave the comments.

(S46 2008-09-22 22:56:53)
와, 부럽네요.
Wow, I envy.

(S10 2008-09-25 00:34:45)
생각만 해도 기분이 좋아요^^ GO GO GO !
Just thinking about it makes me so good^^ Go Go Go!

(S3 2008-09-27 01:12:45)
I think that you are good parents. it's great expression that It is sad or it is when is glad or when need courage, friend who can be force beside. good parents is keep trying to be good parents as you.

(S22 2008-10-13 10:38:10)
I enjoyed working with you. Thank you all~~ I'll Never forget~~^^

(S43 2008-11-02 00:02:11)
네 ~~저도 과제 덕분에 많은걸 배우게되네요 ^^
Yes ~~ I have learned a lot thanks to doing assignments^^

(S25 2008-11-18-02:51:54)
I always interested in " Halloween day" !!
One of my friends lives in NewYork, so l have seen the pictures of Halloween day party. My friend disguised(like a make up) as a bunny. It looks so funny like your picture^^ Thanks for your homework. It makes me happy.^^

(S16 2008-12-03 18:18:11)
my gratitude is boundless. Thanks so much!!
Good work to the end!!!Thank you very much~~ I was happy to be with you~^^

(S10 2008-12-04 10:42:14)
I was learned many things in this class^^

(S29 2008-12-03 16:10:54)
You mean....All night talking? with candle! Absolutely I agree~without thinking twice.^^

(S5 2008-12-03 16:12:19)
You're right! It'll be pretty.^^ Good girl~!

This climaxed with S34 sending the instructor a screen capture showing the instructor how they were using other electronic ways of communicating (e-mail). This rapid exchange allowed students (see S21 and S30's exchange) to instantaneously create a community.

(S30 2008-11-22 03:11:42)
다이콘 아시에 관한 영상인데 재밌어요^^
This is a video clip about Daikon-ashi and it's interesting^^.

(S21 2008-11-23 03:49:46)
영상 재미있네요^^
The video clip is interesting^^.

4.3.4.2 Using Learning Strategies

This section consists of three parts: cognitive strategies, metacognitive strategies, and social/affective strategies.

4.3.4.2.1 Cognitive Strategies

Repetition, note taking, and translation are common indicators of the use of cognitive strategies (O'Malley et al., 1990). The following examples show how students used cognitive strategies when they read others' postings.

When the lesson was focused on language structure and word usage, phraseology, idioms and expressions, their comments focused predominantly on language itself. They attempted to pick up new expressions and increase their vocabulary. S2 chose one expression (*from under my nose*) and shared a comment on the web board that she was repeating and memorizing that idiom. S26 explained a word, 'pickpocket', she had learned with her response. S6 chose one expression, 'take your pick' to review as a repetition from a peer's posting. The following are some examples:

(S2 2008-09-23 11:11:09)
from under my nose 라는 표현도 재밌네요..ㅎㅎ
The expression 'from under my nose' is interesting.. haha

(S26 2008-10-03 01:28:54)
I didn't know what pickpocket means. Thanks for a new word! You must have been so scared at that time!

(S6 2008-11-11 23:18:12)
Take your pick. Thanks.

Translation was another obvious example. Some students attempted to help others to understand the material, which had been given in English, into Korean, an obvious use of a cognitive strategy. This led others to comment on those translations in English.

(S29 2008-10-23 23:02:23)
Thanks!! very useful.

(S10 2008-11-11 14:28:11)
You helped me…

The majority of students translated course materials into Korean and posted their responses to the assignments in Korean. This process of translation helped the students to better understand the course materials.

(S33 2008-09-23 03:29:46)
해석하는데 많은 도움을 준 과제였습니다.
This assignment was very helpful to translate.

4.3.4.2.2 Metacognitive Strategies

Monitoring of comprehension and evaluating information are central to metacognitive learning strategies (White, 1997; Oxford, 1990). In this study, students showed several examples of how they approached the use of metacognitive learning strategies to complete assignments.

The first example below shows that some students assessed others' assignments in terms of structure, vocabulary, expressions, and content in very general terms.

(S11 2008-09-10 16:08:45)
깔끔하게 잘하셨네요.^^어떻게 할지 난감했는데 참고되었습니다~
It's neatly done. What a remarkable job you did. ^ ^ I was at my wits' end, but now I know how to do it. I took yours as a reference.

(S40 2008-11-11 20:20:30)
Thanks for your good job~ it's really easy to see and understand.^^

(S5 2008-11-11 01:13:22)

앗… 이렇게 많은 내용이… 나만 모르고 있었나? 이런 유용한 정보를… S6 씨
수고하셨어요…
Uoops… What a lot of content!... Was I the only person not to know it? This is such useful
information. Thanks, S6.

(S30 2008-11-20 23:12:11)
People's imagination is different when they see words. I think words reflect people's inner mind.
During the English class, I experienced this several times. S6's answer made me imagine a very
cute image^^

What occasionally emerged through all these comments was ideas/suggestions about where,

how, or what improvements could be made.

(S22 2008-11-23 22:34:23)
Please add some example sentences, then it is easy to use…

(S8 2008-11-27 02:12:45)
이**선생님은 이 문제를 어떻게 생각하세요? 의견을 덧붙여 주시면 더 좋을 것 같아요^^…
Ms Lee, what do you think of this issue? It would be better if you could add your opinion (on your
current assignment)^^.

Students' postings were evidence that reading peers' works was helpful in order to

monitor what students already knew and learned. In week 10, there was a task which required

the students to post interesting pictures and signs. S38 uploaded a picture with words,

"Warning Koalas may bite & scratch." S25 learned from S38's posting that Koalas, though a

cute and playful looking animal, could actually scratch and bite. Another student, S5, when

reading a peer's posting, *Don't throw your cigarette ends on the floor. (The cockroaches are

getting cancer.)*, mentioned that the peer had used the same picture as S5 had used previously.

Also, S23 learned from others' postings more about how eyes, just like skin, can be sunburned.

S6 shared with others some information related to water quality in Europe she had learned

previously.

(S25 2008-11-06 15:33)
헉! 코알라가 물기도 하는 동물이었군요....ㅋ
Really! Koalas could bite people. Ha

(S5 2008-11-07 13:00:54)
담배꽁초 길거리에 버리지 말라는 표지판,ㅎㅎ 저랑 같은 것 찾으셨네요. 확
느껴지더라구요.
"Don't throw your cigarette ends on the floor. (The cockroaches are getting cancer.)" Haha. You
found the same sign as I did. I felt the meaning on the sign entirely.

(S23 2008-11-05 19:51:39)
I didn't know that eyes can get sunburned! good information~

(S6 2008-11-06 22:11:54)
물..특히 유럽은 석회질이 많아서 절대 금물^^ 사서 마셔야 건강을 지킬 수 있답니다.
Water… Especially in Europe, you should never drink it because it contains a lot of lime ^ ^
Buying water is keeping healthy.

4.3.4.2.3 Social/Affective strategies

Reducing anxiety and encouraging each other are core social/affective strategies (Oxford,

1990). In this study, students tended to encourage each other and express their feelings, which

helped them to create a learning community. The following examples show how students used

social/affective strategies. S39, a student who was quite creative in the ways she presented her

responses to assignments, received several positive comments. She took the time to reply to

these and was, therefore, instrumental in helping to build community. One student, S4,

expressed her surprise at the way S39 structured her answers, using the emoticon (or smiley),

. S39 again showed her enthusiasm and S4, expressed her enthusiasm as well.

(S15 2008-09-08 13:00:07)
참고하려고 클릭을 해봤는데 영어로 자유롭게 의견을 쓰고 계시네요. 부러워요..저도
본받아야 할 부분인데 아직은 영어로 자유로운 표현이 안되네요.
I clicked to read yours as a reference. You freely expressed your opinions in English. I'm green
with envy.. I'd like to do the same, yet I can't .

(S132008-09-09 15:47:55)
부지런하셔서 먼저 올리주신 모든 분들 것 참고 잘 하였어요. 감사합니다.^^
I referred to work uploaded earlier by diligent peers. Thanks.^^

 (S4 2008-09-10 15:00:50)
저랑 과제 방법이 틀린신듯~ 더 잘하셨어요 ㅠㅠ 부럽.. 다음과제에는 분발해야겟어요.

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The approach seems to be different from mine. You did a better job! ㅠㅠ* I envy you. I should put more effort into my next work.

*'ㅠ.ㅠ' is a code to show you are sad or unhappy in Korean, which is mainly used in technology meditated communication, i.e., computer chatting, cell-phone messages.

(S39 2008-09-11 11:37:46)
아뇨 ㅋㅋ. 영어 안한지가 15 년이나 되서ㅠ,, 사전찾아 끙끙되며 하나하나 해나가고 있답니다. 한학기 열공해보려구요^^
No. Ha ha, I haven't studied English for 15 years. I managed to do it one by one by looking up in the dictionary. I am going to study hard this semester.

(S23 2008-09-12 18:39:40)
발음이 참 좋으신 것 같아요!
Your pronunciation seems to be very good!

(S6 2008-09-14 20:20:46)
부럽~ 간결하게 심플하게 하셨네요..
I'm so envious~ You did it simply and concisely.

Some students added their gratitude and encouragement to the others' comments.

(S3 2008-09-06 02:37:38)
댓글 감사합니다^^ 저희 함께 열심히 영어 공부 해요~
Thanks for your comment.^^ Let's study very hard~.

One student, S17, encouraged herself with the comments to herself on other's posting.

(S17 2008-11-21 03:38:44)
그래도 3 시간은 잘 수 있으리라.. 좋게 생각하며~ 모두들 힘내서요~ 숙면하서요~
 I might be sleep 3 hours.. Think positively~ Cheer up, everyone~ Sleep tight~

(S17 2008-11-21 04:24:21)
아직도 못자고 있어요. 응원해주세요. 휴
I couldn't sleep yet. Please cheer me up. sigh

Another student, S12, used the agreement phrase, 'of course', to express her understanding

what she read in a peer's work.

(S12 2008-10-16 12:14:07)
맞아요!! 돈쓰는 일은 언제나 재밌어요ㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋㅋ
Of course!!Spending money is always fun. hehehehehehehehe

The examples below show how some students expressed empathy and attempted to make others feel less anxious and more comfortable, tried to make them feel like they were not alone, that they were, in fact, part of 'the community'. When S10 posted her complaint about buying a pair of shoes on line, several students responded with similar experiences, and expressed an in-depth understanding of S10's experience and feelings. Describing experiences and expressing feelings by choosing an appropriate emoticon, ' 🥴 ', led to some powerful messaging between students. S29, having had a similar experience, expressed her sympathy with the peer's experience.

(S10 2008-10-14 02:27:38)
they are real leather? I got these shoes this morning. The color was nice and fitted well. I put them on for dinner out. When I got back home, my husband and I were shocked to find out that my socks and feet are dyed red. Those shoes become discolored. I have never seen it in my life. How can I take the color out of my socks and feet????????????
I'm sending you these funny shoes. I want to refund! I want my money back, now!

(S29 2008-10-14 15:14:58)
저도 그런 적 있어요. 구두는 아니고 바지인데 흰색 운동화에 바지 색이 물들어 버렸던 적이 있었죠.ㅠ.ㅠ
I have had the same experience, too. In my case, it was pants. My white sneakers got dyed to the colour of the pants.

(S3 2008-10-14 18:42:22)
저두요.. 음식점에 식사하러 갔다가 신발을 벗어놓는데 왠걸~ 스타킹에 물이 들어있지 뭐에요? 얼마나 황당했던지 ㅠ
Me too. I took my shoes off at the restaurant. Oops! My pantyhose got dyed. I can't believe it.
**In Korea, some restaurants have tables in the room. We usually take our shoes off.

(S47 2008-10-15 02:16:54)
그런 경험들이 있으시군요….끄덕끄덕
You have had such experiences… nodding, nodding

(S34 2008-10-17 13:28:28)
가끔 청바지 색이 속옷으로 물드는 경우도...있어요..... ㅡ.ㅡ;;;
Sometimes my jeans dyed my underwear blue…ㅡ.ㅡ;;;

(S16 2008-10-21 01:15:07)
전 수영복이요. 물속에서 나올때마다 시퍼런물이 뚝뚝덜어졌으니…전 황당 그 자체.

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My case was a swimming suit. Whenever I come out from the pool, colourful water dropped from my swimming suit… I can't believe it!

😠 (S29 2008-10-21 01:55:34)
전 깨끗히 박박 닦아서 보냈어요. 물론 그전에 사진으로 찍고요. 제가 서점/ 무성의에 화가 났었죠.
I washed and sent the item. Of course I took a picture before. I was so upset by the careless attitude of the (online) shopping mall.

(S2 2008-12-05 13:05:12)
ㅠㅠ 쇼핑할때 주의해야 겠군요
ㅠㅠ* I should be careful when I do shopping.
*'ㅠ.ㅠ' is a code to show you are sad or unhappy in Korean, which is mainly used in technology meditated communication, i.e., computer chatting, cell-phone messages.

In this effort to continue to build a sense of community, the participants continued to carry on the conversation, to encourage one another to continue to improve their language learning. Others, not part of the group, sent feedback as well. The number of hits, 35, was higher than usual for an individual posting.

(S38 2008-11-21 16:22:22)
올리시느라 너무 고생하셨어요~~!!!
Thank you for your hard work~~!!!

(S20 2008-11-24 00:28:52)
The pictures are fun.^ ^

(S8 2008-11-24 08:13:00)
맞아요..올리시느라 너무 고생하셨어요. 우리조 화이띵!
Right! You really did a good job! Cheer up our team!!!

Language learning strategies are not single events, but rather a creative sequence of events learners actively use. They do not exist in isolation but interact and support each other to facilitate second language learning (Macaro, 2001). This result section, looking at students' collaboration in a VLE lends support to Macaro's findings. The following examples show how the three learning strategies – cognitive, metacognitive, and social/affective – focused on in this study were employed by students. When student S29, posted a message about eye contact

as a positive example of body language in the course material (e.g., cognitive), S3 quickly

posted her comment, adding to S29's example, and elaborating by giving her interpretation of

how this particular body language was used in her, Korean, culture (e.g., metacognitive). Then,

again, S29 replied with a thank note (e.g., social/affective).

(S29 2008-11-28 04:14:03)
…
Make Eye Contact
Looking someone in the eye is an easy way to let them know that you are confident. Because this
look is traditionally challenging, it sends the message that you are not afraid to stand up for your
goals. Try not to meet the eye for too long. Maintain contact for as long as you feel is necessary,
and then look somewhere else.
…

(S3 2008-11-30 20:36:43)
Eye is one of the most important nonverbal channels for communication with other people. Eyes
are the **window to the soul**. Comparisons with other mammals reveals that homo sapiens secretes
tears as an emotional response. Other terrestrial mammals do not express their emotions by
weeping.
출처: (reference)
http://www.1000ventures.com/business_guide/crosscuttings/communication_f2f_eye_contact.html
But in Korea, if someone is older than me, I don't look his/her eyes. It's kind of a polite manner to
the olders. Sometimes I have eye contact, but usually I have to keep my eyes down. Especially
when I'm in front of my parents-in-law.

(S29 2008-12-01 01:11:24)
Thanks! Yes, I agree. In Korea, eye contact is sometimes rude.

The results reported in this section not only support and extend Macaro's work. As the

above examples illustrate, virtual learning environments (VLEs) encourage and enhance

collaboration, even when students are engaged in the use of varied learning strategies.

V. DISCUSSION

5.1 Introductory Overview

In this chapter, the three research questions which were addressed in the methodology chapter will be revisited from the perspective of the data presented in the results chapter. The research questions focused on identifying the way in which a VLE provides opportunities for collaborative learning. The three questions investigated how the learners actually collaborated, how they constructed new knowledge, whether and how their attitude and motivation toward learning English changed, and what factors affected this.

The main research question is:

What opportunities does an e-learning environment provide for collaborative learning and what effect does this have on the learners as the course progresses?
This main question gives rise to the following 'sub-questions':

1. Do learners work collaboratively? If so, how do they collaborate? Does this change as the course progresses?

2. What motivation and attitude do learners have toward the course? Do they change as the course progresses?

3. Do learners orient towards language or content? How?

5.2 Three Forms of Collaboration

The first research question investigated whether learners in a VLE work collaboratively and, if so, what forms these collaborations took. For instance, how did individual students participate in the activities, what form did their collaboration take, and how did the patterns of

collaboration change as the course progressed? The findings in the results chapter indicated three different forms of collaboration. These three forms of collaboration were: reading, feedback, and discussion. Johnson *et al*. (1998) address these types of collaboration, calling them, *natural learning* (p.28). Their findings suggest that these collaborations occur in situations where students work together in unstructured groups and create their own learning environments. The collaborative process generally follows the same pattern. Advanced or confident students post their work early. Others, having a chance to read these early posts, go back and evaluate, and revise their own work.

Students in this study used a variety of different resources in order to reach the zone of proximal development which matched what van Lier (1996) showed in his ZPD learning model (see Figure 2.1 in section 2.2.2). Students seem to choose equal or more capable peers to work with in order to complete the given tasks and understand the course materials. They also sought help from friends, family, or English colleagues to support their scaffolding (see section 2.2.2) efforts. They formed a study group, including less confident peers, to exchange information and assist each other. Aslo, they used their background knowledge and experience related to content such as health care information or travelling information. These various ways of interaction and collaboration in this study clearly confirmed the lists in van Lier (1996)'s model.

It was also clear from this form of collaboration - reading (versus feedback and discussion, the other two forms of collaboration referred to above) - that students gradually created a sense of connection between themselves and other students, and between themselves and the teacher. This, in turn, encouraged them to access the web board, and post more often. Haythornthwaite *et al.* (2000) emphasize how important it is for learners to feel that others read their written works or comments in order to foster the sense of belonging to the community.

Students benefited from reading other students' assignments and, having time to reflect on what others had written, gleaned new information from their referenced sources. Weller (2002) points out that collaboration in second language learning promotes the development of reflection, active learning and a deeper understanding. Morita (2004) found that some of the participants in her study made use of their peers as a major source of support and guidance for their linguistic development, completion of assignments, and participation in classroom activities. In this researcher's study, students used peers' assignments as an important source of support and guidance in order to build up linguistic and content knowledge, to complete the given tasks, and to make contributions to the course. In addition, students built and expanded their vocabulary, expressions, and factual knowledge without the conscious intention to commit to memory, exhibiting 'incidental learning' as defined by Hulstijin and Laufer (2001).

As the findings (see section 4.3.3.1) show, reading others' assignments allowed students to revise and add to their original submissions, allowing them to elaborate on their original responses. This, referred to by Lantolf and van Lier as self-regulation (Lantolf, 1994; van Lier, 1996), could be considered, in the ZPD model, as scaffolding. Student S13 (See Appendix G) provides further evidence of how reading others' assignments allowed her to revise and add to her original submission. She elaborated on her original response, including a quote from another student's work. This support, or scaffolding, enables the students to perform independently tasks that previously they could perform only with the assistance or guidance of the teacher. This scaffolding, if encouraged appropriately, can create more opportunities for the students to produce more in-depth responses, enabling all participants to co-construct knowledge and learn from the collaboration.

This study also supports Hmelo-Sliver *et al*.,'s (2008) examination of how learners collaborate effectively in a group. They found that learners built on each other's ideas, processed the information they gathered, revised their own thinking, and used the new information to locate more informative resources. Students would read the early posts and use this new knowledge to understand course materials and search out other resources. This scaffolding strategy produced a more satisfactory and improved performance by learners.

Both citations (Hmelo-Silver et al., 2008; Johnson et al., 1998) were addressing findings from written collaboration. This study, which looked at not only written evidence of collaboration but other forms, including reading, only serves to support their previous findings.

The second form of collaboration, feedback, refers to exchanges between students and students, and between students and the teacher. The feedback tended to be general in nature, sometimes taking the form of social commentary. Mostly positive, the exchanges were encouraging and helped to reinforce understanding of assignments and course content. This positive, encouraging nature of this feedback, particularly in Asian cultures, has been commented on in previous research. Yildiz and Bichelmeyer (2003) indicate that public criticism is not considered polite in certain cultures.

Because an e-learning environment can have an isolating effect, the participating individuals felt a need to provide personal, friendly, and supportive feedback when exchanging with one another. When the feedback was between a student and a teacher, however, the nature of the feedback was somewhat different. According to studies by both Yildiz and Bichelmeyer (2003) and Hyland and Hyland (2006), students value teacher feedback more highly than peer feedback when they focus on course content or forms of language.

In this study, the result of question 17- *How did you choose in which order to read others' assignments?*- in the questionnaire tends to support the view that the teachers' comments were taken more seriously. They chose and read others' assignments, reading those which were commented on by the instructor first.

The examples (See Appendix H) below from students' journals, open-ended questionnaires and from the LMS records show how students exchanged feedback and understand the role of feedback. Students supported each other, not only academically and technically, but also in regards to emotional issues. The exchanges involving the question from S32, how to listen to her recording, and the follow-up answer from S9 in the examples, demonstrate scaffolded information and how it helped the students solve their problem and learn technical skills. This particular exchange exemplifies scaffolding which revolves around emotional issues, and is referred to as 'affective and motivational' scaffolding (Lajoie, 2005). Socio-affective support in the online learning environment is a fundamental element to the success of social constructive learning (Stacey, 1999). Student 33 in her journal explains the feedback she got, illustrating the importance of this kind of scaffolding.

> (S33) I am quite happy and feel rewarded because I got feedback from others such as 'You did a good job', 'It looks so good', and 'It is helpful.' Although they are simple comments, I felt so good with their compliments. They made my day.

It is interesting to note the gap in the satisfaction students reported between reading comments on their own work, and providing comments on others' work. This statement - *I enjoyed reading others comments on my work* (Statement 11) - was agreed to by 83.4% of the students, whereas, only 43.3 % enjoyed giving feedback on others' work (Statement 14).

A similar result occurred when students were asked about their satisfaction level regarding whether they enjoyed reading comments on their own work versus reading

comments on others' work. From Statement 11 (comments on their own work) and Statement 12 (comments on others' work) in the questionnaire, it is clear (high percentages on both counts, 83.4% in the former and 75% in the latter) that students enjoyed reading comments period; however, they enjoyed, with a slight preference, reading comments on their own work.

The findings of this current study provide a different perspective on some previous research which relied exclusively on exchanges or feedback of a written nature, not taking into account, oral exchanges, as in Skype or Messenger, or visual , as in emoticons (smiley), or more importantly, reading. For instance, Hrastinski (2008) acknowledges the limitations of using these written discussion threads as a way of evaluating the quality of the learning taking place. Mazzolini and Maddison (2003:252) also comment:

> Although the rate of student participation and the length of their discussion threads may be common intuitive ways used by instructors to judge the 'health' of their discussion forums, it is far from clear from this study that they are useful measures to judge the quality of the learning taking place there.

The importance of the reading component, for instance, surfaces with the 'lurker phenomenon'. In a recent CPsquare project entitled "Let's get more positive about the term lurker" (CPsquare Lurker Project, 2003), this phenomenon was discussed in some detail from a Communities of Practice perspective.

> They conclude that "(…) it is valid for participants to interact at different levels, depending on the context of CoP (or discussion) and their learning needs. However, concern was expressed that while non contributors may be meeting **their** learning needs, the wider group needs active participants to 'value add' for all members in order to support the long term sustainability of the community. It was suggested that expected roles and contribution levels….
>
> (Williams, 2004:2)

Williams (2004) introduces a neutral term *Read Only Participants (ROPs)* rather than using the passive term *lurker*. He emphasizes that ROPs are also actively following the course and learning even though a little contribution is made to the discussion.

We have looked at the first two forms of collaboration, reading and feedback. We will now look at the ways, in which students participated. Because of individual time schedules and the nature of learning in a virtual environment, the majority of students worked individually, rather than as members of a group. Other students went outside the formal confines of the course and elicited the help of persons beyond their course peers, including colleagues and experts, as well as family members in their thread discussions. The comments in these individual responses to the assignment were many, and enthusiastic.

Forty-three out of 47 participated in group discussions. Seven students went so far as to form a group on their own initiative, and work together. Though, still using the L1, they included the use of the web board and Messenger to encourage each other.

The post, from those individuals who formed a group on their own to respond, drew more hits (72), than any other response to the assignment. Other students, not part of the spontaneously formed group referred to above, not only worked together on assignments, but also asked the others to help them solve personal problems. Consequently, they became active, not just passive, recipients of their mutual exchanges. Though the teacher did attempt to provide various learning activities (other than just writing exercises), this kind of active participation occurred naturally during the course. Students, not always waiting for the teacher, often responded directly to one another regarding word and expression usage and meaning, content knowledge, and even technical (use of on-line technology) knowledge. Mesh (2010:167) emphasizes collaboration in second language learning.

> Learners feel supported by each other, which in turn produces the conditions for taking risks in the learning process. If learners have the opportunity to develop trust in each other, then challenges will become part of the culture of the group. They can share ideas and comment on peer's work in an environment of trust, empathy, collaboration and enjoyment. Learning is more meaningful when it is fun.

This study indicates that various forms of collaboration facilitate scaffolding within the learner's ZPD, and play a crucial role in helping students to build their knowledge base and learn how to cope with the on-line technical challenges. These collaborations also help learners to reduce their feelings of isolation and frustration.

5.3 Development of Collaboration

As the course continued, students learned new ways in which to collaborate. Though they may not have been cognizant that they were doing so, they eventually began to use both fixed and adaptive scaffolding (see section 4.3.3) learning approaches and various learning strategies (see sections 4.1.4 and 4.3.4.2).

On the whole, at the beginning of the course, the lack of collaboration by some students may have been due to technical difficulties (i.e. recording and posting assignments), and there was some indication that a few students were not able to get access to the course until the course was well underway. Learners read peers' assignments from the first week of the course but rarely exchanged feedback. The gradual development of reading collaboration was nevertheless evidenced by the results of the questionnaire. By the end of the course, hits on responses to their own work and responses to the work of others, showed that the reading frequencies of students (comparing hits at the beginning to hits during the last week of the course) had increased by a factor of 2.5 (see 4.2.3). It seems clear that reading peers' assignments provides 'scaffolded help' (Lantolf and Appel, 1994), allowing learners to obtain their ZPD and reach the state of self-regulation during the course. Wood *et al.* (1976) suggest the six ways in which this kind of 'scaffolded help' can be used to assist learners in various learning contexts: recruiting interest in the task, simplifying the task, maintaining pursuit of the goal, marking critical features and discrepancies between what has been produced and the ideal

solution, controlling frustration during problem solving, and demonstrating an idealized version of the act to be performed.

Sometimes, they worked with peers in the course or with an expert or a more advanced learner of English (e.g., friends, family member or colleagues who were not enrolled in the course). From week five onwards, they expressed more ease in performing the given tasks. The number of feedback posts was under 20 in week 1 and 2. At week 10 the posts hit the highest number, 138. After week 10, because of interventions by the teacher to fine tune the task instructions, peer to peer feedback dropped off; it remained, however, still higher at that time than during the first and second weeks of the course. From week 6, learners actively engaged in the collaborative learning process, sharing their ideas, expressing their opinions and exchanging feedback. Discussions or group work, which the researcher expected to be challenging, were completed quickly, and with surprising ease in the middle and end of the course.

Students created a dialogue where their fellow participants felt listened to, and encouraged to participate. They gave feedback directly in order to express reciprocal emotional and sympathetic responses. At first, it was clear that some students, new to VLE, were reluctant to give comments on others' work. The findings from students' journals show that even those students not benefiting from the shared group experience (those students working on their own), gradually began to benefit from taking part in the shared discussions. Although they were embarrassed and nervous about making mistakes or letting others view their poor English ability, with time, they adapted to the new environment and eventually, with practice, developed positive attitudes. As indicated earlier, over time, students worked harder and spent more time in preparation in order to convey a better impression to their peers.

As the teacher introduced new, and different ways of solving or responding to any given exercise, the collaborative ways in which students attempted to respond increased not only in number, but in ways of approaching solutions. In weeks 5, 8, and 11, though similar types of task were assigned, records from LMS show the amount of feedback by students continued to increase. It became evident that by adding different ways of learning, different ways of approaching the assignments, the collaborative learning process was greatly enhanced.

Previous research focused almost exclusively on writing (Hmelo-Silver et al., 2008; Curtis and Lawson, 2001; Nunes, 1999; Johnson et al., 1998). This researcher, along with emphasizing writing exercises as a way of learning collaboratively, placed equal emphasis on the reading of others' assignments and sharing comments in a public forum. This was often accomplished through interventions by the teacher. Sharing work in this way does potentially pose the risk of deliberate or unintended plagiarism and instructors should, of course, monitor and intervene when plagiarism, unintentional or deliberate, is suspected. During the main study this was done through instructor intervention (i.e., asking students to add a reference such as a URL or a studnet's name when they quoted directly). In fact, however, the incidence of students using others' material is quite rare in an on-line environment where all students can access and read each other's posts; this, in itself, in such environments, becomes a self-regulating measure preventing the plagiarism of each other's and outsourced references.

Interventions included giving some guidelines for keeping journals, task modifications, and suggesting, though not making it compulsory, how students might work in groups. Tasks were tailored to students' familiarity with peers and their levels of English. In this way students were gently guided to work in groups collaboratively, and to engage in discussions and group projects. They were soon actively participating and taking responsibility and ownership. Following Kamhi-Stein's (2000) example, the current researcher introduced interventions

encouraging students to interact socially. Nunes (1999) also addresses this kind of intervention explaining that it allows students to promote interpersonal relationships.

Learners, as they became more familiar with the course itself, and with their peers, were more readily able to share their feelings and ideas about the goals of the individual tasks. In particular, peer feedback became a key component in creating rapport and facilitating a sense of good feeling. The findings of Weasenforth (2002) and Kamhi-Stein (2000) confirm this, showing that social interactions, such as familiarity with classmates and sharing ideas and experiences, are of great benefit to the completion of assignments.

It is seen that as the course progresses, and students come to know one another better, the comments become less challenging and critical, and take on a more encouraging and positive tone. Familiarity and sharing encouraged students to be more positive. Other researchers have commented on this. Leahy (2008) indicates that this *tone down* (Leahy's term) feedback of learners is an attempt to maintain a positive rapport and create an equal-standing status.

As cited by Fleming and Hiple (2004), the study of Fleming *et al.* (2002) adds that these social, collaborative activities foster a sense of online community. Such an atmosphere encourages learners to contribute to discussions, engage in group work, and contribute to the formation of a community which includes both students and teachers. Students sometimes place an equal weight on messages posted by either the instructor or a student, and collaborate with each other, and with the instructor, not only for learning purposes but also to build and strengthen a learning community. According to Johnson (2007), the positive interpersonal relationships promoted by cooperative and collaborative learning are the heart of the learning community, and the establishment of these social goals reduces the chances of attrition.

It became evident, however, that the teacher needed to make continual efforts to try to keep each individual student engaged. The interactivity of the VLE made this easy to do, as it lent itself to having the advanced students posting early, and the other less advanced students learning from these advanced posts, and adapting their own responses. Furthermore, as Smaldino (1999:9) noted:

> Planning for interactivity is important. Not only does the instructor have to plan for interaction, but students may require training to participate actively in this type of virtual learning environment.

In this study, the teacher and active students (playing, in fact, the role of teacher) worked hard to help less active and confident students to become more comfortable with the kinds of exchanges and sharing of knowledge which would lead to the creation of community.

Figure 5.1 summarises the process of collaboration in the current study.

Figure 5.1 Collaboration Development Flowchart
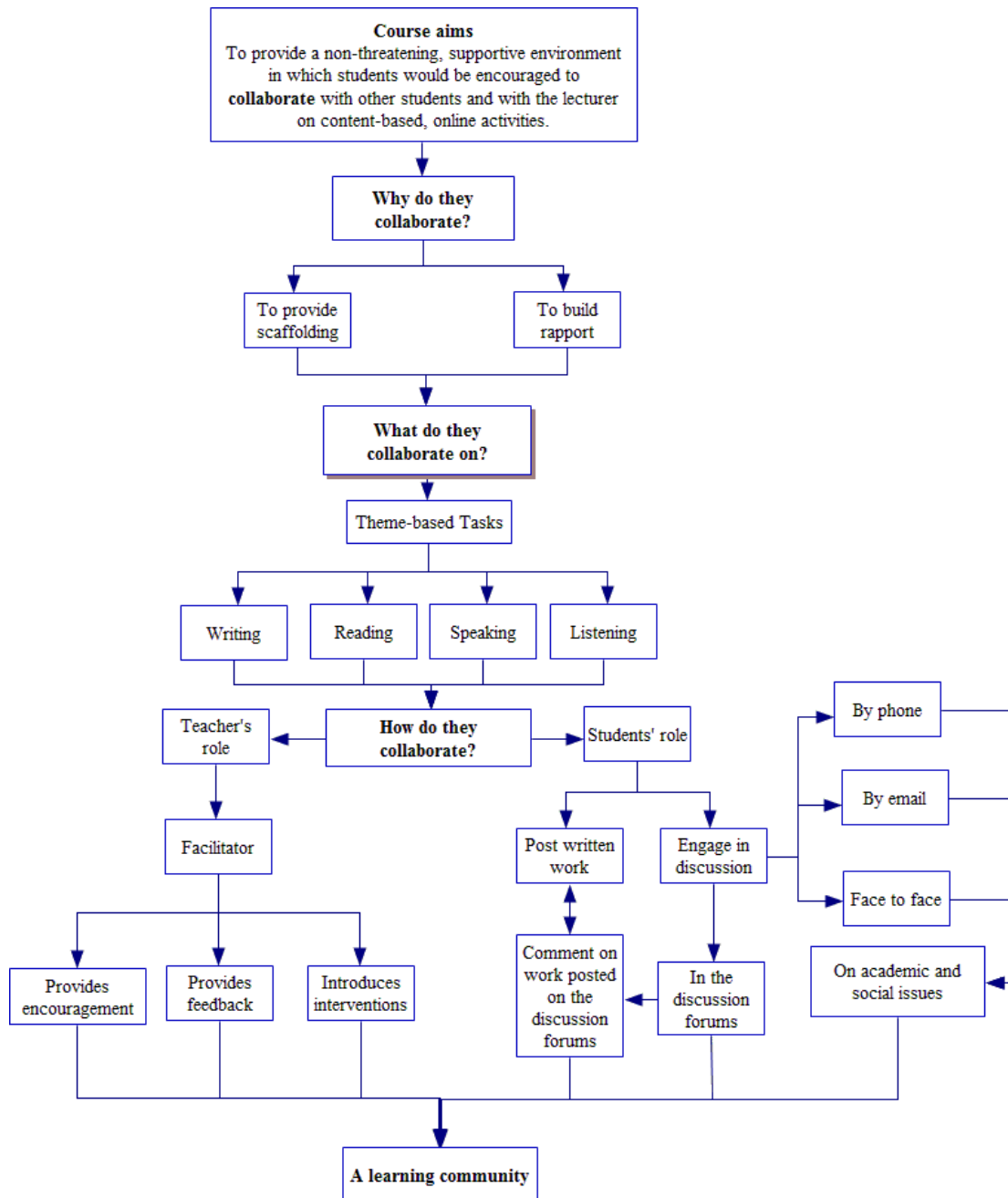
5.4 Learning Technology: Bricks versus Clicks

In the past, there was the classroom. That was the learning community. Now we have VLE, the new learning community. As we move from physical to virtual platforms, from learning in a closed, classroom environment to learning in an open, virtual environment, it is imperative to

detail the technology (the tools) that has allowed us to move from bricks (physical) to clicks (VLE). From pencil (a low-impact, word processing tool, but still, nevertheless, a tool) to e-mail, discussion boards, Messenger and Skype (the tools of VLEs), it is important to keep in mind how we create VLEs. Such communities are then able to create learning environments which are active, collaborative constructions of knowledge, instead of simply one-on-one (teacher to student) knowledge transfer. These virtual classrooms, unlike the restrictive, brick-and-mortar classroom, allow learners (and teachers) to engage in contextualized authentic tasks, very different from the abstract, packaged sequential instruction which takes place in the traditional classroom.

Learning community in this study, to borrow Johnson's definition (Johnson and Johnson, 1999), is "a limited number of people who share common goals and a common culture." Students expressed feelings of belonging or feelings of being a member of community with the sharing of assignments and by exchanging feedback.

In some cases, students identified this feeling with their sharing of emotional difficulty and sympathizing as they moved toward common goals. The immediate goal was to submit the assignment; while the long-term goal was to complete the course. As the previous sections (see section 5.2 and 5.3) showed, collaboration (sharing work, exchanging feedback, sharing emotional difficulty and sympathizing with other students' difficulties) was requisite to creating an online learning community. The result of statement 22 *I hope to keep in touch with one or more of my classmates* in questionnaire was very interesting. Forty percent of students agreed or strongly agreed and 40% were neutral. It was evident from the results in the questionnaire, that the students who agreed or strongly agreed with the statement, were enrolled in the course to accomplish more than a single or, possibly, one or two goals. They wanted to learn English, but also wanted to experience the VLE as part of a larger community.

Hence, when the course ended, they were motivated to maintain contact. Those who were more reluctant to stay in contact, had enrolled for very specific reasons; and, once that focused goals was accomplished, they were less motivated to remain in touch with the study group.

As many other researchers have demonstrated, network technologies in a virtual learning environment, contribute to collaborative learning (Alavi and Dufner, 2005 ; Carlén and Jobring, 2005; Dabbagh and Kitsantas, 2005; Hara et al., 2000; Nunan, 1999; Warschauer, 1997; Warschauer et al., 1996; Alavi, 1994), and to extending and strengthening the learning community (Kamhi-Stein, 2000; Nunan, 1999). The present findings are consistent with previous findings. The asynchronous (24-7 access possibilities) nature, the geographical freedom (access from anywhere) of the technology, despite the lack of face-to-face contact, enhanced collaborative efforts and made it easily possible for students to create a sense of community.

The use of web-board technology, for instance, used in this current study, is one example of how technology lends itself to creating community in a VLE; it provided the means by which students were able to interact, reflect, evaluate, solve problems, or simply exchange thoughts and feelings.

Kamhi-Stein (2000) and Arnold and Ducate (2006) indicate technologies such as asynchronous CMC modes (e.g., Web-based Bulletin Board systems and e-mail) have the potential to promote collaboration and reduce the isolation felt by novice learners. As Gutiérrez (2006) emphasizes, these technological tools mediate and enhance the process of collaborative learning. As with the face-to-face communication that takes place in the traditional classroom, students in this VLE were able to use the web board technology in much the same way, sometimes even more effectively. As well as addressing the task itself, they were able to

express their anxiety and confess their difficulties. Arnold and Ducate (2006) address how asynchronous computer-mediated communication (ACMC) employs a high degree of interactivity as well as cognitive and social presence. Students might feel isolated if they doubt that others are reading their assignment and comments posted to the web board. According to Rovai (2000), as cues are fewer, social presence is lower, and as social presence goes down so does sense of community.

As the results show (see 4.1.2.3), emotional expression and open communication appeared to contribute to learners' sense of belonging to a community and, in turn, lowered their anxiety and helped them to feel at ease expressing the problems and difficulties they faced. The results from the questionnaire supported this. The responses of students to statement 2 *I am less afraid of using English after this course* in the questionnaire (18.3% strongly agreed and 51.7% agreed) indicated that the experience of the VLE course reduced their previous levels of anxiety caused by using English. In addition, 71.6% of students agreed or strongly agreed with statement 15 *To read others' assignments provided less anxiety and a more relaxed environment to complete given tasks as my own assignment.* A similar percentage (71.7%) of students disagreed or strongly disagreed with statement 16 *I would have liked this course better without submitting my assignment in public on the web board*. These responses regarding levels of comfort and reduced levels of anxiety are directly linked to the technology (in this case, the web board), and further proof that VLE technology, though it does not replace the face-to-face effect that takes place in a traditional, physical classroom, does influence and support the creation of community.

The technology used to create virtual, distance-learning environments is part of the process of building 'spirit and trust' which Rovai (2000) classifies as necessary components of community building. Spirit refers to recognition of membership in a community and the

feelings of friendship and cohesion that develop between learners. Trust influences the interaction among peers and encourages easy and positive feedback (McMillan, 1996). Brown (2001) finds from his study that students realize the potential of distance-learning technology to create a community, they grow more and more comfortable about using the various forms of that technology (discussion boards, email, Messenger) to discuss course content and to communicate with their online peers. He suggests that "community-building should be emphasized not just for the sense of togetherness it provides students, but also to help keep the students in the class and in the program, to promote full engagement in the class, to facilitate effective collaborative learning (Brown 2001:34)."

The current study confirmed, that active engagement and quality, and depth and breadth of collaboration were associated with creating a learning community; and that this creation of community was supported and encouraged directly by the use of appropriate VLE technology.

Building and sustaining community by encouraging and facilitating equitable interaction and collaboration made learners feel valued and allowed them to benefit from sharing ideas, experiences and resources. Such interactive and collaborative opportunities in a virtual learning space have positive influences on learners' satisfaction and retention (Alavi, 1994; Alavi and Dufner, 2005).

In addition, asynchronous tools allow time for reflection before contributing (Ducate and Lomicka, 2008; Ducate and Lomicka, 2005; Williams and Jacobs, 2004; Oravec, 2003; Garrison et al., 2001; Warschauer, 1997; Aiken, 1993). Especially for EFL learners, who need to gain greater flexibility in language skills, an asynchronous medium provides both the interactive features and the reflective qualities that face-to-face interaction does not allow for (Sengupta, 2001). Students, in this study, took advantage of this benefit while they were

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working and revising their assignments after reading others' work or receiving feedback. This reflective luxury allowed for by the asynchronous technology is exemplified in the journal entries of students (See Appendix I).

Vonderwell and Zachariah (2005) emphasized the effect of students' technology literacy levels and the complexity of web board interface design on the levels of participation and reflection. In contrast, the findings in the current study indicate that language competence had, in fact, a greater effect than their knowledge of or proficiency with the technology. Even those students who were new to the technology, once they realized its potential, began to show gradual improvement in their comfort levels. More critical, in this particular study, was the issue of the content, English itself. Yildiz and Bichelmeyer (2003) find that linguistic barriers including reading comprehension and writing difficulties and cultural differences impose difficulties on participation and interaction in discussion forums. Felix (2002:6) also emphasizes that "the Web has the potential to engage students more fully in the construction of knowledge especially at an intermediate and advanced level." Encouragingly, in this study, those less confident students were challenged, but tried harder to contribute, and to engage in collaboration even though disadvantaged by their language proficiency. In the current study, the comfort level of today's students with technology in general, was actually an advantage and an encouragement when it came to improving language learning in a VLE.

Student satisfaction studies have been both positive and negative. Fleming and Hiple (2004) found that learners felt comfortable and had no problem using asynchronous tools in collaborative ways. Ocker and Yaverbaum (1999), on the other hands, found that students were less satisfied with the asynchronous learning experience. The findings of the current study support Fleming and Hiple's work, finding that students were generally quite satisfied with the way they were able to use web boards for communicating and collaborating in the course. One

possible explanation of the differences in these findings may be simply related to the swiftness with which technology has proliferated. Ocker and Yaverbaum did their work in 1999; while Fleming and Hipple conducted their research in 2004.

By the time this current study takes place, the technology is almost ubiquitous. Students are used to taking advantage of the asynchronous nature of online learning to work in their own way. In this study, as in others (Ware and Warschauer, 2006; Lamy and Goodfellow, 1999; Ailekn, 1993), both students who wanted to take their time preparing postings, and those who wanted to communicate at a faster pace, were able to work within their own schedule and pace of learning.

By participating in collaborative experiences in an e-learning environment, students have opportunities to share different opinions, and to use various styles of collaboration and communication with which to construct knowledge of the target language (Ware, 2005). In the current study, the ways of collaboration and communication consisted of sharing peers' works and exchanging feedback on the web board as part of the process of building knowledge. Rovai (2000) says that 'learning' is one of the components of community. In as much as the technology used to create an online classroom lends itself to sharing knowledge and increasing collective knowledge, it can be said a VLE enhances the building of community. By collaborating with someone who is more experienced, such as a teacher or a more advanced peer, a learner can complete more difficult tasks. Thus, learners learn and develop more than they could have on their own.

In this study, two very important and relatively new phenomena surfaced. This researcher has termed these as *anonymity* and *reciprocity*, and posits they play important roles in developing and enhancing knowledge-building and community creation in VLEs.

On the basis of students' comments, this study found that anonymity allowed students to share their work and ideas with more ease. If they did make what they considered to be an embarrassing contribution, this sense of anonymity lessened the negative impact such a contribution would have had in a face-to-face exchange. Anonymity, as found in the Cambridge dictionary, is defined as *when someone's name is not given or known*. In this study, although students used their real name, students explained in their journals how being able to comment without actually knowing the other students or being known by them, made it easier for them to discuss language deficiencies and their inability to understand the assignments or exercises.

The "distance" referred to by Kamhi-Stein and Warschauer (Kamhi-Stein, 2000; Warschauer, 1996a), though they do not use the term anonymity, comments on the sense of anonymity provided by technology. Their study goes on to say that this sense of "distance" motivated students to participate in a VLE, where they would rarely have participated in the physical classroom due to potential embarrassment.

Research has been conducted on these phenomena (anonymity and reciprocity) in other disciplines. In the field of medicine, for instance, Greist *et al.* (1973), was able to show that medical patients tend to report more symptoms and undesirable behaviours when interviewed using similar distance-learning technology to that used in this study, than they did in face-to-face interviews. A similar study by Joinson (2001), in the discipline of psychology, carried out three separate studies examining the comparison of levels of self-disclosure in CMC (a component of VLE) and face-to-face. These studies found that anonymous participants, and participants not visually (no digital camera) connected in CMC, disclose significantly more information about themselves.

By comparison with earlier VLE research, social exchanges were more prevalent in this study than in previous studies. These social contributions seem to be fundamental in the building of a learning community. At the beginning of the course, some students clearly experienced apprehension about their use of English. As the course progressed, however, students gradually participated and contributed more actively and openly without expressing any sense of losing face (See Appendix J).

As well as anonymity, this study revealed that the phenomenon of reciprocity was also important in the development and enhancement of knowledge-building and sense of community. Arnold (2006), looking at transcripts from asynchronous discussions in foreign language methodology classes, noted that the considerable open communication which takes place in a collaborative learning environment leads to the forming of a learning community. He added that reciprocal and respectful exchanges are characteristics of open communication and help to build a sense of community and keep each other engaged in the given task. In the current study, the students' journal entries indicated that learning from others prompted them to share (see below) what they had learned with the greater community. Such learning lessons included concrete examples of a deeper understanding of grammar, increased vocabulary, and more abstract things such as ways of thinking or talking about an idea. And even, in some cases, such learning lessons included emotional growth and expansion of comfort zones. In all cases, those experiencing the learning also felt compelled to give something back, the very essence, in this researcher's thinking, of reciprocity.

The journal entries continually support this claim. The journal citation below is a good example. Student S10 was clearly an experienced traveller. But in the beginning, he was not eager to share his experiences. After participating in and learning from the group, and getting

better at expressing himself in English and, despite still very clearly perceiving his English as being poor, he risks sharing his travel expertise.

> **At the beginning
> (S10)
> 첫주엔 뒤늦게 과제를 제출했더니 물론 답글도 없었다. 그래서 가능하면 일찍 올리려 했고, 그러면 다른사람들에게도 도움이 되고 나 또한 달리는 댓글을 많이 볼 수 있게 되었다.
> I uploaded my first week's work a few days later than the due date. Of course, there was no comment. After that, if possible, I tried to submit my work early in order to get many feedback comments. It would be helpful for peers as well as for me.

> **At the end of course
> (S10)
> Travel tips 사이트에서 찾는 것은 물론이고 나름대로 그동안 여행 다니면서 겪은 시행착오들에서 얻은 산지식들 중에서 공유하고 싶은 말이 참 많았는데... 언제나 그렇지만 짧은 영어 실력에 밤새우기가 일쑤인지라...아쉬웠다.
> I wish I could share a lot of tips from my experience which I obtained from trial and error through travelling around, and information from web sites on travel tips. As usual, I stayed up all night (to do assignments) because of my poor English… I felt my work left a lot to be desired.

There is much to be said for the learning experience that takes place in the traditional classroom, the subtle influences of body language and the immediacy of exchanges between students and students, between students and teachers. And there is much yet to be researched, documented, and validated about the learning experience that takes place in a VLE. The interactive possibilities, reliant on neither time nor geography, of the rapidly evolving platform technologies of distance learning leave much to be explored. The two emerging phenomena – anonymity and reciprocity – embedded within this learning experience have yet to be explored in any depth in this research. This study, in a modest way, moves that discussion forward.

5.5 Learning Language through Content

As VLEs can be accessed anytime, anywhere, they provide maximum exposure to the learning experience. The variety, the flexibility, the chances of providing wide ranging interactions with different persons in different places allows learners to rapidly increase their vocabulary, gain

understanding of the correct usages of words, and be exposed to the latest, up-to-date language usage (Polisca, 2006). Keeping such previous findings in mind, this course built on the advantages of the Internet by designing a curriculum to use various authentic materials and relating them to weekly themes that were perceived as relevant to real life by the students (see sections 3.5.3 and 3.5.4). Brinton (2004:2) defines content-based instruction as "the integration of particular content with language teaching-aims." This became another focus for the current study. The idea that language is most effectively learned in content based instruction is not new or revolutionary (Brinton et al., 2004) as several studies have shown the effectiveness of content-based second language instruction (Stoller, 2004; Short, 1999; Crandall, 1992; Peck, 1987; Lafayette and Buscaglia, 1985; Buch and Bagheera, 1978). Therefore, in this study, an attempt was made to determine whether learners oriented towards language (vocabulary, expressions, idioms, etc.) or toward content (theme-based, as in a discussion about medicine, or diseases, travel or culture).

Students focused on content as well as language equally (71.7%), when they dealt with course material or peers' assignments. Interestingly, they felt that they had better understanding for learning content (88.3%) than language (66.6%). Also, they believed that others' assignments affected their content learning (71.3%) slightly more than their language learning (63.3%) (see section 4.2.4).

In the beginning of the on-line course used in this current study, what students mainly focused on (perhaps because of previous language-learning experiences) were vocabulary, expressions, idioms, and usage of words. Journal entries, student-to-student questions, student-to-teacher questions, web postings evidenced this. For example, when students read about some diseases or symptoms of those diseases, they focused on and learned those words, phrases, or expressions related to their prior knowledge by using

inner resources within the ZPD, picking up on and incorporating word content such as diabetes, insomnia, migraine, or a runny nose, etc. What is striking is that they rarely focused on grammatical accuracy and spelling, as they might have in a traditional, form-focused or English language course. When students exchanged feedback, there were few instances of explicit error correction or form-focused comments. As a result of this scaffolding, the students became aware of appropriate usage of various expressions and words, depending on their own interests and needs. As the course progressed, and students became more comfortable with one another (the formation of community) the exchanges became, over time, more focused on the contextual (content orientation), real-life uses of language (see sections 4.1.4.1, 4.1.4.3, 4.1.2.2.2, 4.3.3, and 4.3.4.2).

Some students, going an extra step, trying to orient toward content, translated course materials into Korean, and even added translation to their assignments. Translation as effective scaffolding played a supplementary role allowing students to understand course materials and search out further relevant materials.

From a content learning view, students accumulated the content knowledge by going from specific to general information by activating their prior knowledge and experience. In other words, students took their current knowledge about the content or subject and expanded their previous knowledge of that content. Emotional and affective connections with prior information increase memory and recall of information (Grabe and Stoller, 1997). What they found interesting in the content had an influence on learning in terms of enhancing their motivation. Järvinen (2006:439) also discussed this "meaning-based" nature of content-based instruction (CBI) in which "Language is a tool of learning relevant academic content; and as such its use in the classroom is real and thus potentially more challenging, motivating and more pushing (Swain, 1993) than for example in communicative language teaching, which is more

"meaning-oriented" in the sense that the practice of language functions and situations are classroom role-plays or simulations of authentic language use." According to Stoller (2002:123), content based instruction is language "as a medium for learning content" and content "as a resource for learning and improving language." Such findings indicate that content connected to students' prior knowledge or experience can create a scaffold upon which the students can link what they already know to new knowledge needed to complete the given tasks.

There are other factors, besides inherent language-learning lessons and content, which influence learner participation. For instance, Vonderwell and Zachariah (2005) found that students' experiences and expertise influenced participation. The immediate real-life value of the content led to a more active exchange of comments because this led to a higher degree of intrinsic motivation to intereact. Students, after realizing that what they were learning was actually connected to real-life situations, focused and read more deeply to take a more concentrated, participatory approach. Awareness of a student's strengths, experiences, and backgrounds (Krashen, 1981) and relevant and immediately usable content (Brinton et al., 2004; Rogers and Freiberg, 1994) have a strong connection with motivation (Coryell and Chlup, 2007) and language learning. The examples below are responses from the open-ended questions in the questionnaire, journal entries, and LMS records and serve to illustrate these findings (Krashen, Rogers and Freiberg, Brinton *et al.* and Coryell and Chlup) (See Appendix K).

As the course progressed, the approach to learning English tended to change from studying English formally, with the focus being on grammar, correct punctuation, syntax, and so on, to using English in a real-life situations (see below data from Journal entries). Students, in the beginning, when they first started the course, often had the impression that to learn

English meant studying linguistic knowledge rather than actually using the language. This finding was not unexpected because students had been more familiar with largely decontextualized, rule-focused teaching and learning since their school days. For example, Chen and Li (2010:341) emphasize that "meaningful vocabulary learning occurs only when the learning process is integrated with social, cultural and real-life situations." Anderson (2000) states that more elaborated information is retained over a long period of time and recalled better. Andersons' learning theory reinforces the approaches which combine the development of language knowledge and practice in using language.

Clearly, language and content are inextricably woven together. The findings in this study reinforced the previous research that methods of learning that enhanced content, by placing language learning in real-life contexts, increased motivation, and led to a more successful language learning experience.

5.6 Motivational and Attitudinal Changes

Prior research focused on the importance of students' motivation and attitude as critical success factors in computer-assisted language learning (McLinden et al., 2006) environments (Ushioda, 2005; Warschauer, 1996b). Ngor (2001:58) says, "A change of attitude about teaching and learning is fundamental to bring about the introduction of technology to classrooms." That motivation and attitude regarding learning in a different learning, i.e., CALL, environment is of the utmost importance, is supported by this current study. Taking this to the next step, however, this study confirms that importance, but looks more closely at the factors influencing those changes and how this, in turn, affects L2 learning.

In the journal entries (see section 4.1.5) and the questionnaire (see section 4.2.2), a noticeable change in students' attitude and motivation toward English on a personal level took

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place over time. Statement 15 (see section 4.2) reads: *To read others' assignments provided less anxiety and a more relaxed environment to complete given tasks as my own assignment*. A majority of the students, 71.6 %, reported a positive response toward reading other's assignments in terms of reducing their own anxiety and a sense of an increasingly relaxed environment while completing their own responses to the given assignment. Some students claimed that they felt anxious about a new learning environment (i.e. recording assignments, sharing work, and exchanging feedback) at the beginning of the semester. As the course progressed, most students felt positive and were motivated by their experience. Evidence is that students did develop learning goals and study methods which took the form of their accessing the learning site 24-7, improving their time management skills, describing their language improvement, and an increased satisfaction in accomplishing their work within the weekly schedule. Also, students' participation and collaboration increased (see section 4.3.1). Their growing confidence was evidenced in their willingness to take risks to comment on peers' writings. Ushioda (2005) points out that active participation is an indication of motivation. Panichi (2010) adds that the level of motivation and participation in language learning in the virtual world (VLE) is affected by the learner's sense of comfort in the learning environment. In this study, students took that active participation that Ushioda was talking about a step further, and risked giving their feedback in the target language, and using the target language, English, in their journal entries. As Xu (1991) points out, the development of learning strategies and achieving goals is another important factor in the improvement of language proficiency. In this study, students developed various learning strategies to improve their language skills and achieve goals, building both confidence and satisfaction.

5.6.1 Factors Influencing Changes

Having looked at the previous research which focused on the importance of motivation and attitude, this section will focus on the causes of those motivational and attitudinal changes.

There were two factors influencing students' motivation and attitude:1) Collaborative learning and 2) Technology.

5.6.1.1 Collaborative Learning

Collaborative learning plays an important causative role in the development and enhancement of motivational and attitudinal response to learning in a CALL environment. Collaborative learning environments are non-threatening learning environments proving to be confidence boosters, by helping students maintain their level of motivation (Polisca, 2006).

This study, revealing three forms of collaborative learning, also indicates that collaborative learning environments give students a sense of belonging to a learning community. The three differing forms (reading, feedback, discussion) of collaborative learning (see section 5.2) led to an online learning community. Such collaborations allowed students to support one another in both their academic work as well as in their emotional well being. They gradually expressed a strong sense of belonging to a learning community. Several studies emphasize the importance of creating a community in reducing feelings of isolation (Rovai and Jordan, 2004; Rovai, 2002; Rovai, 2000). They comment that communities make demands on their members, and members feel an obligation to respond. The findings of the current study showed this feeling of belonging affected students' motivation and changed their attitudes in positive ways.

What's missing is commented on by Trotter (2002) and Welsh *et al*. (Welsh et al., 2003), who point out that a potential drawback of online course delivery (VLE) is the lack of

human interaction. The phenomena of anonymity and reciprocity (see section 5.4), which this current study only began to explore, compensates in some ways for this shortcoming.

According to Johnson *et al.* (1998), collaborative efforts are based on intrinsic motivation generated by interpersonal factors and a joint aspiration to achieve a significant goal as well as extrinsic motivation to achieve reward. Many researchers have long proposed the need to bring the heart (motivation) and brain (cognition) together when considering student learning (Bickhard, 2003; Garcia and Pintrich, 1994; Lepper, 1988). Pea (2004) reminds us that scaffolding must consider both cognitive and motivational aspects of learning.

While supporting Trotter and others, who emphasize the importance of heart (motivation) and brain (cognition), this study, because of the influence of the phenomena of anonymity and reciprocity, challenges the claim that learning in a physical environment is always superior to that in a VLE.

The attitude toward collaboration (i.e. sharing their work and exchanging feedback) gradually changed from treating those activities as annoying or burdensome, to having a chance to improve their English and helping peers in the learning community.

Some students used what they had learned in journals. For example, Student S24 wrote in her journal in English using the expression, *have butterflies in my stomach*, which she had learned from the previous week's lesson. Finally, she could use this expression appropriately in a real situation. When learners learn new knowledge which they are able to apply in real life situations, they grow more confident and become motivated to engage in language learning. For Student S24 to voluntarily write her journal in English, in itself is an indication of her motivation. Student S18 also exhibited this when she remembered the content she had learned in the course. As Dörnyei (1994) notes, learners' motivation is influenced by three

components - *the language level, the learner level, and the learning situation level* - in L2 motivation, in any learning situation.

5.6.1.2 Technology

Technology provides the infrastructure of online learning and, like participants' collaborative behaviour, has a direct effect on motivation and attitude (Batardière and Jeanneau, 2010; Ushioda, 2005; Warschauer, 1997). Students, as they learn to use VLE technology, grow more and more confident and develop positive attitudes toward the learning process. Kamhi-Stein (2000) found that, because bulletin board discussions allow students to read the views of others it encourages positive attitudes and a desire to work together. He added that the asynchronous nature of online learning allowed them to participate at their own pace, something that learners, as non-native speakers, found very positive. Students also acquire competences in Information and Communication Technology (ICT) which are useful for their learning and even for profession (Rivens Mompean, 2010). Last, but not least, Adair-Hauck *et al.* (1999) describe the effectiveness of technology-enhanced language learning (TELL) environments and the effect they have on lowering students' anxiety level so that students could enjoy learning in a more relaxed atmosphere without the pressure of the immediacy and closeness of a classroom and peers. In addition, several studies have suggested that an online language learning course structure encouraged students to develop their metacognitive learning strategies to be successful students (Hauck and Hurd, 2005; Ushioda, 2005; White, 1997).

In the current study, using web boards encouraged students to be more relaxed and allowed for time to reflect on their learning. The students in this course reached a level of comfort that allowed them to stretch themselves and they actually started to use emoticons in their exchanges. This led to a whole new level of feeling like they were creating and belonging to a learning community. As students became more proficient

with the technologies inherent in online learning environments, their motivation and attitude toward learning also grew in positive ways.

In conclusion, collaborations and technology, working in tandem, forged a vital and powerful partnership to foster and enhance student motivation and attitude. Students were motivated and their attitudes changed positively as the course progressed.

Motivation and attitude had been researched in depth in previous works. This study supported and confirmed those findings; and, by factoring in the influences of anonymity and reciprocity, added a new level of knowledge to our understanding of the language learning experience in a (VLE) virtual learning environment.

VI. CONCLUSION

6.1 Summary

What "good teaching" means to *one* student may not mean the same thing to *all* students (Grow, 1991). That is, teaching is not a one-size-fits-all contextual setting. This study applied the findings of Grow and the socio-constructivist perspective (Vygotsky, 1962, 1978), to virtual learning environments (VLEs). The creation of "good teaching" within a supportive learning environment is affected by situation and context; therefore, it requires that an online version of such a course focuses on, and takes into consideration, the needs of individual learners, regardless of their stage of learning. The advantage of VLE(s) is that the technology can be used to enhance collaboration, between student participants and the teacher, and also between those more advanced students and those students less experienced, to allow "good teaching" to come from many sources.

This thesis seeks to show that the variety and complexity of the technologies inherent in an online learning experience, when introduced and used in appropriate ways, can actually encourage and enhance participants' motivation to interact and learn in collaborative ways. Obviously, students participating in an online course were not able to take advantage of all the learning clues that face-to-face learning allows. In part, the use of a learning management system (LMS) software package made up for this lack. The LMS allowed the researcher to employ a number of data collecting practices to record, compile, and compare learners' performance. The use of asynchronous electronic communication tools (e.g., web boards), and voice recording programs allowed for the introduction of timely interventions. For example, bulletin boards (or web boards) were used for reading others' work, exchanging comments, ideas and sharing learning experiences between to peers and between students and the

instructor. In this ways, students were able to share multiple perspectives which helped to broaden their knowledge and deepen their understanding. These interactive possibilities, made possible by the technology in a VLE, actually allowed students more opportunities to build on each other's ideas than they would have had in many space-based environments. The asynchronous nature of the technology also allowed them time to reflect before contributing. In the beginning of the course, the participants found the technology intimidating and challenging; however, with gradual and continuing interventions by the teacher, they began to feel comfortable and safe to share and to work collaboratively in a genuine learning community.

The findings of this study provide useful information for understanding the development of students' collaboration in a virtual learning environment and its consequences. Through the process of collaboration, students developed friendships and sometimes even strong ties with peers. Over time, they began to feel more comfortable working together. As the sense of belonging to a learning community deepened, their willingness to share with, and to help one another, increased in quantity and quality. It was clear, that many participants felt a growing responsibility to the community. This connectedness became a crucial component in the collaborative experience. Students began to enjoy working together. Learning from each other by working together became very meaningful to them.

This study concludes:

Collaboration occurs in many ways. Previous studies have mainly examined collaboration from the perspective of the formation of a group for a particular project, or by examining and detailing written work of collaborators. The current research study, on the other hand, was based on the belief that there were other forms of collaboration just as important, if not more so, than the final, collaborative written product. This proved to be very important for

the beginning-level language learners. For instance, reading and comparing other students' work with their own was viewed as a form of collaboration. In some of the students' reflective journals, it was indicated that they had clarified their understanding of course content by comparing their work with that of other students. This study provided many instances and examples of how students used reading material to work together. The data collecting features of the LMS used in this study, allowed for the quantification of how the technological supports - web boards, e-messaging, the use of emoticons - enhanced the participants' collaborative learning experience. For instance, one excellent example of this surfaced quite early in the course. Beginning-level language learners held off on working on their assignments until they had had a chance to read the submissions of the more advanced students. The more advanced students, in turn, as the course progressed grew more willing to share their insights and to encourage one another and the less fluent students.

Collaboration enhances learning. Students made the sharing of knowledge, the learning experience more enjoyable by exchanging social and affective feedback and comments with peers. Students are well served when instructors of VLE courses introduce the collaborative possibilities of online technologies, allowing participants to connect and form social attachments, emotional bonds which, in turn, strengthen and encourage collaborative learning.

Collaboration helps motivate learners. *Learning situational level*, supported by Dörnyei's (1994) L2 motivation model, is an important motivational component. In the current course, used for the research purposes of this thesis, as the sharing of frustration and satisfaction occurred, it led to more interactions and collaborations, some personal, some content or course specific, taking place, enabling the relationship experiences to form and strengthen. The collaborative possibilities of online learning, interventions by the instructor,

led to the creation of a shared, learning community which, in some ways, was more welcoming and encouraging than what is often observed in a competitive, place-based classroom.

During the process of conducting the research for this thesis two previously little explored phenomena, which made an important contribution to establishing and encouraging a collaborative environment, surfaced: anonymity and reciprocity.

Anonymity allowed students to share their work and ideas with more ease. If they did make what they considered to be an embarrassing contribution, this sense of anonymity lessened the negative impact such a contribution would have had in a face-to-face exchange. In this study, although students used their real names, they explained in their journals how being able to comment without actually knowing the other students or being known by them, made it easier for them to discuss language deficiencies and their inability to understand the assignments or exercises. The "distance" referred to by Kamhi-Stein (2000) and Warschauer (1996a) though they do not use the term anonymity, sheds light on the influence of anonymity made possible by the technology. Their study goes on to say that this sense of "distance" motivated some students to participate in a VLE, where these same students would rarely have participated in the physical classroom due to potential embarrassment.

The phenomenon of reciprocity was also important in the development and enhancement of knowledge-building and sense of community. Learning from others prompted them to share what they had learned with the greater community. Such lessons learned included concrete examples of a deeper understanding of language uses, grammar, increased vocabulary, and more abstract things such as ways of thinking or talking about an idea. And even, in some cases, such lessons included emotional growth and expansion of comfort zones. In all cases, those experiencing the learning also felt compelled to give something back.

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Awareness of these two little explored or understood influences, and how they affect the efforts to motivate students to learn in sharing, trusting, and collaborative ways in an online environment (VLE) is what this thesis adds to the knowledge base of collaborative learning in an online environment.

This does not challenge the effectiveness and success of face-to-face, place-based (physical) learning environments, but, rather, provides an alternative to these when place and time are barriers to learning opportunities. It is an alternative, to provide just one example, when it is necessary to offer courses, programs, certificates, degrees – learning experiences – to those living in remote, inaccessible areas.

There is much research yet to be done in this area. Yet another, almost stand-alone research effort, might look at the implications of anonymity and reciprocity, and how those phenomena balance the deficiencies of distance learning with their positive influences on building and enhancing community in remote areas unable to accommodate the traditional brick-and-mortar classroom. How can we best – using the varied and complex technology inherent in the delivery of online learning environments (VLEs) – amplify these phenomena, anonymity and reciprocity, to close the gap between learning in a place-based, traditional classroom environment and in a distance-learning, or VLE classroom.

6.2 Pedagogical Implications

This researcher found that delivering a learning experience in a virtual environment was an exciting and challenging experience. Planning and developing a virtual course combining educational approaches founded on place-based practices with the possibilities of technology in a VLE that would enrich students' learning was a daunting task.

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Instructors or course designers should consider which strategies will best create an open and warm atmosphere in a virtual learning environment, which strategies will best facilitate and encourage students' collaborative learning experiences. Social and affective scaffolding seems to play an important role in learning and in creating a learning community in a virtual world. Active participation and the thoughtful reflection prior to posting a response enhances the collaborative aspects of the online learning. Lack of physical presence does not preclude social presence. Participants grew to feel they had a close connection, despite geographical and temporal distances.

Instructors should also pay close attention to their own, intervention practices. These interventions, with appropriate uses of technology, can foster a thoughtful exchange of ideas and information as well as provide means by which students can support each other. For effective facilitation of interactions and collaboration, the instructor needs to carefully monitor the classroom and adapt curriculum as circumstances dictate. In this study, sharing assignments, being able to access and view peers' assessment or comments on their assignments enhanced the learning experience. Instructors of on-line courses should remind students that when they use direct quotes from fellow participants when submitting their own responses to assignments, they should credit that quote to the student they took it from, so there is no chance of being charged with plagiarism.

Instructors, too, should make a special effort to develop connections between participants. As Jiang and Ramsay (2005) comment, the importance of rapport lies in its potential to enhance learning, motivate learners, and reduce learner anxiety.

Educators and course designers also need to be careful in choosing the technological tools for the course. The communication system that will be used for the online course should

provide diverse functions for students' communication and collaboration with peers, such as synchronous/asynchronous, private/public communication and visual/audible communication (i.e. emoticon, voice feedback). The e-learning environment, appropriately configured, can enhance learners' collaboration, which in turn, leads to more effective, successful language learning. It is important to keep in mind that technology itself cannot help students to learn. It requires effective instructional design. EFL teachers, as well as courseware designers, must consider that the applicability of technology depends on effective pedagogical strategies to produce an effective language learning environment.

6.3 Limitations of the Study

The unique relationship of the participants to this study - their individual language learning levels (beginning, intermediate, advanced) and degrees of familiarity with VLE technology - was the first challenge to this study. A primary objective of this course was to overcome the difficulties posed by those individual differences in linguistics knowledge, and their lack of experience with the technology. With appropriate use of on-line technology, using teacher-interventions - the course design was to lead learners, in a safe and inviting way, to use the technology to share and collaborate in language learning.

The participants of this study were graduate students, with differing majors. They were also of varying ages. Such differences would suggest differing levels of motivation and self-expectations. Undergraduate students would have, obviously, other differing characteristics and motivational drives. Consequently, the distinctive aspect of this specific course (and study) given the participants' unique characteristics, means that the results may not be applicable without modification to other online language courses. Whether the findings are applicable in another context depends on the degree of similarity between the two contexts (Lincoln and

Guba, 1985). It is hoped that researchers and designers operating in similar contexts may find useful information to apply to their own environments.

Another limitation of the study concerns the legitimacy of the captured data. Because students knew that the teacher would be reading their journals, they may have censored their entries, thinking it would make a better impression. In addition, there was no way to monitor if students were interacting and/or collaborating outside the confines of the on-line course. These exchanges, if they took place, were not documented, captured, or analyzed. To offset these possibilities (the 'apple' syndrome – students wishing to give the teacher a good impression; and students collaborating outside the system) the researcher triangulated the findings with four different data-collection techniques (reflective journals, a questionnaire, written documents and records in the learning management system).

Of the original 67 registrants, 20 students dropped the course. Four students attended only two weeks before dropping; four others did not participate until the course had been running for eight weeks; two submitted English scores from acceptable – TOEFL, TOEIC, MATE (see Tables 3.4 and 3.5 in section 3.5). The other ten did not attend at all. The journal entries, exchanges, and so on – the data which was captured from the students who continued in the course – was not included in this study. Since ten of these never attended at all, the effect on data capture and interpretation can probably be ignored.

It is suggested, in the next section on future research, that a follow-up interview might add value that was missing in this current study. In that light, this small minority - the remaining ten students who did attend for the two weeks - should their data have been captured, and adding to that the information that might have been gathered from the follow-up interview - might have given the evaluation of the course experience a more negative outcome.

Despite these limitations, the study, with the triangulation, using four different data-collection techniques, provides a sound, research platform on which to look at the effects that the use of appropriate application of VLE technology has on content-based, on-line language learning. The incorporation of approaches and methodologies that would compensate for these limitations, could only strengthen theory and application.

6.4 Future Research

Viewed in the context of sociocultural learning theory, which emphasizes the educational value of creating cross-cultural communities of practice and critical inquiry, the features of an e-learning environment make it a potentially useful tool for collaborative language learning (Warschauer, 1997). This current study affirmed Warschauer's work, that an e-learning environment could play an effective and successful part in collaborative learning.

Future research might take several different approaches. One of them could be a comparative study, looking at the contextual setting of VLEs in different cultures. Another might examine incidental language learning that takes place in a VLE course. A third study might examine the technology used, and how that technology might enhance motivation and collaboration, informing effective online learning course design. It may also be useful to conduct in-depth follow-up interviews with participants some time after the end of the course, to investigate their needs. Finally, a blended learning approach (the on-line learning experience might be strengthened with one or two in-person sessions) could be considered.

A comparative study may be beneficial in determining the effect of participants' cultural backgrounds on collaboration in an online environment. The cultural context of this study was Korean. A study of this South-East Asian context compared to one, for instance, in a

Western culture may lead to some interesting findings on how individuals in these two cultures view and carry out collaboration and knowledge-sharing.

A close examination of the incidental language learning that takes place in a VLE, may reveal better ways in which to use the IT involved, and improve on content versus language, course design. This current study did investigate whether students focused on 'language' or 'content' or 'both' when the course was designed in content-based instruction, in particular, theme-based instruction, and, as the course progressed used data gathered from students' submissions – via teacher interventions – to encourage collaboration. In content-based learning, language is usually viewed as a medium for learning content, and content is seen as a resource for learning and improving language (Stoller, 2002). Thus, as a course is structured to promote the acquisition of content knowledge and develop expertise by means of a coherent curriculum in subject matter, it would be worth examining to what extent learners might be encouraged to learn content and language by being exposed to input from a variety of sources in a VLE.

Research looking at the technological infrastructure might seek to address what this study identified as the crucial importance of being able to access and read materials; that is, making appropriate use of VLE technology to encourage collaboration. Data from oral collaboration through asynchronous or synchronous media tools could be important to a broader understanding of learners' collaboration in a VLE. In addition, data from interviews could provide useful to have in-depth information from participants. Both data from oral collaboration and interviews would yield a much more complete picture.

The general nature of this thesis has opened up more questions than it has addressed or resolved, but such questions could have a useful role in guiding future socio-constructivist

researchers, and future language teachers and learners, course designers, curriculum developers

and, in a larger sense, designers of virtual learning environments.

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APPENDIX A

Questionnaire

Please circle the answer that best fits your opinion about this course.

수업 개선을 위해 여러분들의 고견을 듣고자 합니다.

1. I enjoyed this course. 나는 이 수업이 즐거웠다.
   Strongly agree   agree   neutral   disagree   disagree strongly

2. I am less afraid of using English after this course. 이번 학기수업이 끝난 지금 영어를 사용하는 데 두려움이 줄어들었다.
   Strongly agree   agree   neutral   disagree   disagree strongly

3. Think about last week, how many times did you read other students' assignments last week? (수업을 들었던 학기중) 지난 주를 생각해볼 때, 수강생 과제를 몇 개정도 보았습니까?
   0(never)   1-5   6-10   more than 10

4. How many other' assignments did you usually read in a week? 보통 일주일에 몇 개정도의 다른 수강생과제를 보았습니까?
   0(never)   1-3   4-6   more than 10

5. What do you prefer to do assignments (given tasks)? 과제를 할 때 어떻게 하고 싶은지요?
   Alone 혼자   group 그룹으로   no preference 특별히 원하는 것 없음

6. I learned things through others' assignments in the web board that I would not have figured out by my self. 내가 이해하지 못했던 것들을 게시판에 있는 다른 수강생의 과제들 통해 배웠다.
   Strongly agree   agree   neutral   disagree   disagree strongly

7. To read other's assignment on the web board gave me better understanding for learning content (material). 게시판에 있는 다른 수강생의 과제들이 내용을 더 잘 이해하는데 도움이 되었다.
   Strongly agree   agree   neutral   disagree   disagree strongly

8. To read other's assignment on the web board gave me better understanding for learning English. 게시판에 있는 다른 수강생의 과제들이 영어를 배우는데 더 도움이 되었다.
   Strongly agree   agree   neutral   disagree   disagree strongly

9. As I read others' assignments, I focused on content. 다른 수강생의 과제를 볼 때, 나는 내용에 초점을 두었다.
Strongly agree   agree   neutral   disagree   disagree strongly

10. As I read others' assignments, I concentrated on English. 다른 수강생의 과제를 볼 때, 나는 영어에 초점을 두었다.
Strongly agree   agree   neutral   disagree   disagree strongly

11. I enjoyed reading others' comments on my work. 내 과제에 다른 수강생들이 준 코멘트를 읽는 것이 즐거웠다.
Strongly agree   agree   neutral   disagree   disagree strongly

12. I enjoyed reading others' comments on their works. 수강생들의 과제에 다른 수강생들이 준 코멘트를 읽는 것이 즐거웠다.
Strongly agree   agree   neutral   disagree   disagree strongly

13. To receive other's comments encouraged me to contribute to others' work as well. 다른 수강생들의 코멘트를 받으면 다른 수강생의 과제에 나도 코멘드를 달고 싶어지게 했다.
Strongly agree   agree   neutral   disagree   disagree strongly

14. I enjoyed giving some comments on other students' assignments. 나는 수강생들의 과제에 코멘트를 주는 것이 즐거웠다.
Strongly agree   agree   neutral   disagree   disagree strongly

15. To read other' assignments provided less anxiety and a more relaxed environment to complete given tasks as my own assignment. 내 과제를 끝마치기 위해 수강생의 과제들을 읽는 것은 나를 더 여유롭고 덜 초조하게 해주었다.
Strongly agree   agree   neutral   disagree   disagree strongly

16. I would have liked this course better without submitting my assignment in public on the web board. 게시판에 공개적으로 내 과제를 제출하는 것이 없었다면 수업이 더 좋았을 것이다.
Strongly agree   agree   neutral   disagree   disagree strongly

17. How did you choose other's assignment to read?(make them in order) 어떻게 수강생들의 과제를 선택하여 읽는지요? (가장 비중이 큰 것을 1 번으로 순서대로 1 에서 5 번호를 적으세요.)
_____ Name of a student   수강생 이름
_____ comments by an instructor   교사의 코멘트
_____ comments by learners   학생들의 코멘트
_____ accessing frequency   접속횟수
_____ randomly   무작위로

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_____

18. How much others' assignment affect your own work? 다른 수강생의 과제들이 얼마나 내 과제에 영향을 주었습니까?

| Very much | much | neutral | a little | rarely |

19. How much others' assignment affect your language learning? 다른 수강생의 과제들이 얼마나 내 영어학습에 영향을 주었습니까?

| Very much | much | neutral | a little | rarely |

20. How much others' assignment affect your content learning? 다른 수강생의 과제들이 얼마나 내 내용학습에 영향을 주었습니까?

| Very much | much | neutral | a little | rarely |

21. I might have given up this course without reading other's assignments as a reference. 나는 다른 수강생의 과제를 볼 수 없었다면 이 수업을 포기했을지도 모른다.

| Strongly agree | agree | neutral | disagree | disagree strongly |

22. I hope to keep in touch with one or more of my classmates. 나는 몇몇의 수강생들과 계속 연락하고 싶다.

| Strongly agree | agree | neutral | disagree | disagree strongly |

23. Please write your comments related to above questions. 위의 질문에 관련된 의견을 적어주세요.

24. Please write what strengths are in this course. 이 수업의 장점을 적어주세요.

25. Please write what weaknesses are in this course. 이 수업의 개선점을 적어주세요.

APPENDIX B

Informed Consent Form

(An English version translated from Korean)

Newcastle University
School of Education, Communication and Language Sciences
Informed Consent Document

The Researcher: Hee-Jin Chang (hee-jin.chang@ncl.ac.uk)

Title of the Research: The development of collaborative learning practices in an online language course

I, the undersigned, confirm that (please tick box as appropriate):

1.	I have read and understood the information about the project, as provided in the Information Sheet dated _____.	☐
2.	I have been given the opportunity to ask questions about the project and my participation.	☐
3.	I voluntarily agree to participate in the project.	☐
4.	I understand I can withdraw at any time without giving reasons and that I will not be penalised for withdrawing nor will I be questioned on why I have withdrawn.	☐
5.	The procedures regarding confidentiality have been clearly explained (e.g. use of names, pseudonyms, anonymisation of data, etc.) to me.	☐
6.	If applicable, separate terms of consent for interviews, audio, video or other forms of data collection have been explained and provided to me.	☐
7.	The use of the data in research, publications, sharing and archiving has been explained to me.	☐
8.	I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the data and if they agree to the terms I have specified in this form.	☐

9.	Select only **one** of the following: • I would like my name used and understand what I have said or written as part of this study will be used in reports, publications and other research outputs so that anything I have contributed to this project can be recognised. • I do not want my name used in this project.	☐ ☐
10.	I, along with the Researcher, agree to sign and date this informed consent form.	☐

Participant:

_____   _____   _____
Name of Participant   Signature   Date

Researcher:

_____   _____   _____
Name of Researcher   Signature   Date

APPENDIX C

A summary of *t*-test

Group Statistics

	Test Type	N	Mean	Std. Deviation	Std. Error Mean
(S1) I enjoyed this course.	Main	23	1.5217	.79026	.16478
	Preliminary	37	1.8649	.88701	.14582
(Q3) Think about last week, how many times did you read other students' assignments last week?	Main	23	3.3043	.82212	.17142
	Preliminary	37	3.2432	.83017	.13648
(Q4) How many others' assignments did you usually read in a week?	Main	23	2.8261	.77765	.16215
	Preliminary	37	2.8919	.69856	.11484
(Q5) How do you prefer to do assignments (given tasks)?	Main	23	1.3478	.64728	.13497
	Preliminary	37	1.3514	.63317	.10409
(S6) I learned things through others' assignments in the web board that I would not have figured out by myself.	Main	23	1.6522	.64728	.13497
	Preliminary	37	1.7838	.71240	.11712
(S7) To read other's assignments on the web board gave me better understanding for learning content (material).	Main	23	1.6957	.70290	.14657
	Preliminary	37	1.6757	.66892	.10997
(S8) To read other's assignments on the web board gave me better understanding for learning English.	Main	23	2.0870	.84816	.17685
	Preliminary	37	2.0270	.76327	.12548
(S9) As I read others' assignments, I focused on content.	Main	23	2.1304	.54808	.11428
	Preliminary	37	2.3514	.63317	.10409
(S10) As I read others' assignments, I concentrated on English.	Main	23	2.2609	.81002	.16890
	Preliminary	37	2.0541	.77981	.12820
(S11) I enjoyed reading others' comments on my work.	Main	23	1.6522	.77511	.16162
	Preliminary	37	1.8108	.70071	.11520
(S12) I enjoyed reading others' comments on their works.	Main	23	1.9130	.73318	.15288
	Preliminary	37	2.1081	.65760	.10811
(S13) To receive other's comments encouraged me to contribute to others' work as well.	Main	23	1.9130	.94931	.19794
	Preliminary	37	2.1081	.84274	.13855
(S14) I enjoyed giving some comments on other students' assignments.	Main	23	2.2609	1.00983	.21056
	Preliminary	37	2.8378	.95782	.15746
(S15) To read others' assignments provided less anxiety and a more relaxed environment to complete given tasks as my own assignment.	Main	23	2.0435	.70571	.14715
	Preliminary	37	2.3784	.89292	.14679
(S16) I would have liked this course better without submitting my assignment in public on the web board.	Main	23	3.9130	.79275	.16530
	Preliminary	37	3.7297	.83827	.13781
(Q18) How much others' assignments affect your own work?	Main	23	2.2609	.86431	.18022
	Preliminary	37	2.4324	.86732	.14259

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(Q19) How much others' assignments affect your language learning?	Main	23	2.3043	.70290	.14657
	Preliminary	37	2.4054	.79790	.13117
(Q20)How much others' assignments affect your content learning?	Main	23	2.3478	.71406	.14889
	Preliminary	37	2.3243	.66892	.10997
(Q21) I might have given up this course without reading other's assignments as a reference.	Main	23	3.6087	1.11759	.23303
	Preliminary	37	3.3784	1.13899	.18725
(S22) I hope to keep in touch with one or more of my classmates.	Main	23	2.7391	.96377	.20096
	Preliminary	37	2.7568	1.11568	.18342
(S2) I am less afraid of using English after this course.	Main	23	2.0435	.70571	.14715
	Preliminary	37	2.1892	.73929	.12154

APPENDIX D

A summary of the questionnaire results

Statement	Mean	Std. Deviation	Valid percent				
			Strongly agree 1	agree 2	neutral 3	disagree 4	Strongly disagree 5
(S1)I enjoyed this course.	1.7333	.86095	**51.7**	25.0	21.7	1.7	0.0
(S2)I am less afraid of using English after this course.	2.1333	.72408	18.3	51.7	28.3	1.7	0.0
(S6)I learned things through others' assignments in the web board that I would not have figured out by myself.	1.7333	.68561	40.0	46.7	13.3	0.0	0.0
(S7)To read other's assignments on the web board gave me better understanding for learning content (material).	1.6833	.67627	43.3	45.0	11.7	0.0	0.0
(S8)To read other's assignment on the web board gave me better understanding for learning English.	2.0500	.79030	28.3	38.3	33.3	0.0	0.0
(S9)As I read others' assignments, I focused on content.	2.2667	.60693	5.0	66.7	25.0	3.3	0.0
(S10)As I read others' assignments, I concentrated on English.	2.1333	.79119	20.0	51.7	23.3	5.0	0.0
(S11)I enjoyed reading others' comments on my work.	1.7500	.72778	41.7	41.7	16.7	0.0	0.0
(S12)I enjoyed reading others' comments on their works.	2.0333	.68807	21.7	53.3	25.0	0.0	0.0
(S13)To receive other's comments encouraged me to contribute to others' work as well.	2.0333	.88234	30.0	43.3	20.0	6.7	0.0
(S14)I enjoyed giving some comments on other students' assignments.	2.6167	1.00998	15.0	28.3	40.0	13.3	3.3
(S15)To read others' assignments provided less anxiety and a more relaxed environment to complete given tasks as my own assignment.	2.2500	.83615	13.3	58.3	20.0	6.7	1.7
(S16)I would have liked this course better without submitting my assignment in public on the web board.	3.8000	.81926	0.0	8.3	20.0	55.0	16.7
(S21)I might have given up this course without reading other's assignments as a reference.	3.4667	1.12697	5.0	15.0	28.3	31.7	20.0
(S22)I hope to keep in touch with one or more of my classmates.	2.7500	1.05163	11.7	28.3	40.0	13.3	6.7
	Mean	Std. Deviation	Valid percent				
			very much 1	much 2	neutral 3	a little 4	rarely 5

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	Mean	Std. Deviation	10.0	43.3	31.7	11.7	3.3
(Q18)How much did reading other students' assignments affect your own work?	2.3667	.86292	10.0	43.3	31.7	11.7	3.3
(Q19)How much others' assignments affect your language learning?	2.5500	. 75838	10.0	50.0	33.3	6.7	0.0
(Q20)How much others' assignments affect your content learning?	2.3333	.68064	5.0	63.3	25.0	6.7	0.0

	Mean	Std. Deviation	Valid percent		
			1-5	6-10	More than 10
(Q3)Think about last week, how many times did you read other students' assignments last week?	3.2667	.82064	23.3	26.7	50.0

	Mean	Std. Deviation	Valid percent		
			1-3	4-6	More than 10
(Q4)How many others' assignments did you usually read in a week?	2.8667	.72408	33.3	46.7	20.0

	Mean	Std. Deviation	Valid percent		
			Alone	Group	no preference
(Q5)How do you prefer to do assignments (given tasks)?	1.3500	.63313	73.3	18.3	8.3

APPENDIX E1

Group work

2008/12/15(mon) ~12/24(wed)**1(EUR)** = **1726.57won**

date	accommodation	schedule	expenses
12/15	[14:25] departure Deutsche Lufthansa AG	[14:25] departure Incheon International Airport	Airfare:2,530,000 (**Include**tax /2person)
12/16	**[20:50]arrival/ Heathrow Airport JOLLY HOTEL ST ERMIN S**	**[20:50]arrival/ Heathrow Airport** Go hotel	**£ 220** **(380,000)** **Include breakfast**
12/17		-The British Museum -Buckingham Palace - Covent Garden -Trafalgar Square/ watching a Opera "**The Phantom Of The Opera" Her majesty's Theatre**	**£ 100** **(shopping, lunch,dinner)** **£ 73.0** (average price per person - £36.5)
12/18		-the University of Oxford (CarfaxTower, Sheldonian Theratre, Magdalen College) ▶departure/ ST.PANCRAS by Eurostar 19:39 - **London St Pancras** | 23:14 - **Paris Nord**	**£ 100** **(shopping, lunch,dinner)** **£ 150** (average price per person - £75.00)
18 일	**[23:14]arrival/** Gare du Nord Hotel Le Lavoisier	[23:14] arrival / Gare du Nord Go hotel	**£ 414** **Include breakfast**
12/19		[10 :00] Musée du Louvre [17:00]Take an excursion ship in la Seine [23:00:] theEiffel Tower Go hotel	**£ 18** (average price per person - £9.00) **£ 20** (average price per person - £10.00) **£ 100** **(shopping, lunch,dinner)**

12/20		- Go shopping Avenue des Champs-Elysees ▶departure/Gare du Nordby Eurostar 17:55 - **Paris Nord** | 21:45 - **Cologne Hbf**	**£ 200** **(shopping, lunch,dinner)** (average price per person - £100.00) **£ 113** (average price per person - £56.50)
12/20	**[23:14]arrival /Cologne Hbf** **[24:14]arrival /Frankfurt Radisson SAS**	- Go hotel	**£ 214 Include breakfast** **(361,600)**
12/21	 **[11:00]arrival / Munchen**	**[10:00]Co·logne; Co·logne cathedral tour** - Schloss Nymphenburg	**£ 100** **(shopping, lunch,dinner)**
12/22	**Frankfurt**	-Goethehaus -Sachsenhausen ; drinking ApfelWein -Loreley	**£ 10 (per 5)** **£ 100** **(shopping, lunch,dinner)**
12/23	**[13:15]departure/Frankfurt**		
12/24	**Arrival/Incheon International Airport**		

➷**the total expenditure : 5,865,733won**

Airfare		2,530,000won
Stay cost	£ 1,932	3,335,733won

➷**Hotel reservation**

1) London

2) paris

3) Frankfurt

➲Eurostar reservation

Ò**flight reservation**

APPENDIX E2

Messenger Dialogues

Our Team is **, **

we will travel to Europe **London, Paris,Frankfurt**
Our trip is ten days and nine nights.

1.attached Schedule file!!!
2.dialog

[2008. 11. 05 afternoon]

S34 님의말 : 안녕하세요? 어 S34 라고합니다.

S8 님의말 : 네.반갑습니다. S8 이라고해요. 조별팀에대해글을올리셨더라구요.^^

S34 님의말 : 네. 우리의논해서여행계획짜서함께과제해요.

S8 님의말 : 네. 그래요. 함께하게되서반가워요.^^

S34 님의말 : 네. 반가워요.^^ 우리잠시후에다시만나서의논할까요?

S8 님의말 : 네. 그래요.^^이따뵈요~

S34 님의말 : 저희어디로여행을가볼까요?

S8 님의말 : 음..따른나라들도좋은데많지만..유럽이좋을꺼같아요. 어때요?

S34 님의말 : 네.저도그렇게생각했는데...오!

S34 님의말 : 좋아요^^

S8 님의말 : 나라를 하나 정하게되면 지역을 나눠야하니까것보다 유럽은 크게크게 나라를 정하면되니까 좋은거 같아요^^

S34 님의말 : 맞아요.^^

S34 님의말 : 그럼

S34 님의말 : 유럽주소로

S34 님의말 : 이동하겠습니다.

S8 님의말 : 넵^^

S34 님의말 : 로마

S34 님의말 : 스페인

S34 님의말 : 영국

S34 님의말 : 이렇게나와있네요

S34 님의말 : 저희저 3 나라를

S34 님의말 : 2 일씩

S34 님의말 : 관광할까요?

S8 님의말 : 세나라를이틀씩이면거의총일주일이되는건가요?

S34 님의말 : 6 일에다가오고가고거의...9 일!

S34 님의말 : 그렇겠네요!

S8 님의말 : 네~

S34 님의말 : 9 박 10 일혹은 8 박 9 일이요

S34 님의 말 : 흠...

S34 님의 말 : 그럼

S8 님의 말 : 네네.

S34 님의 말 : 언제출발하는것으로할까요?

S8 님의 말 : 음..방학시작하는 12 월 15 일쯤부터 12 월 24 일정도까지?

S34 님의 말 : 네...

S34 님의 말 : 그럼완전자유여행아니면호텔팩? 뭘하죠?

S8 님의 말 : 그러게요...어떤게나을까요?..>.<<

S34 님의 말 : 숙박이호텔좋으세요? 가서정하는건넘힘드니까, 여기서호텔팩으로정해서가요! 호텔팩이더좋으니까요~^^

S8 님의 말 : 네.그래요^^

S34 님의 말 : http://hotel.travel.naver.com/hotels_a/index.asp

S34 님의 말 : 요기보시면네이버의호텔팩사이트예요

S34 님의 말 : 여기서...일단유럽을가야하니까...어느도시로먼저갈까요?

S8 님의 말 : 네. 근데로마스페인영국세나라는위치가각각넘멀어서이동시간이넘많이걸리겠어요.

S34 님의 말 : 네...맞아요.그럴꺼같아요. 그럼런던파리프랑크푸르트? 어때요?

S8 님의 말 : 굿굿~좋아요좋아요.^^

S34 님의 말 : 네그럼

S34 님의 말 : 먼저런던으로내려서

S34 님의 말 : 해외항공+호텔

S34 님의 말 : 검색탭에서검색해봐요!^^

S8 님의 말 : 네..^^런던(히드로공항) 히드로공항에내려서,

S34 님의 말 : 네

S8 님의 말 : 잠시만요..제가유럽여행책도한권가져올께요

S34 님의 말 : 네!!

S8 님의 말 : 히드로공항에내려서 central line 튜브(영국지하철)타고,

S8 님의 말 : 한인숙소가주로밀집되어있는 east acton 역에내려서, 짐을풀어놓고, 관광(ex:버킹엄궁전,대영박물관등)

S8 님의 말 : 그리고 이튿날은 근교캠브리지 당일로 다녀와서 유로스타를 타고 파리로 이동,

S8 님의 말 : 이렇게하면되는건가요?..--;

S34 님의 말 : 와우!!!

S34 님의 말 : 좋아요!!!

S8 님의 말 : 캠브리지에서두세개유명대학을본후유로스타타고파리로이동해서,

S8 님의 말 : 북역(nord station)에도착해서북역근처에짐을풀고

S34 님의 말 : 네!

S8 님의 말 : 루브르박물관,오르세미술관,쁘렝땅백화점등등관광또는쇼핑을하고,

S34 님의 말 : 오! 루브르박물관함제대로봐요~

S34 님의 말 : 파리의호텔은

S34 님의 말 : Hotel le Lavoisier 로해요제친구가다녀왔는데 ..강추강추!!

S8 님의 말 : 네~

S34 님의 말 : 노천카페에서브런치하고

S8 님의 말 : 그럼하루는루브르박물관과오르세미술관관람하고

S34 님의 말 : 몽마르뜨도걸어주고

S8 님의 말 : 아마따.몽마르뜨.!! 에펠탑도봐주구..

S34 님의 말 : 냐하~

S8 님의 말 : 밤 11 시에이벤트있어요

S34 님의 말 : 와우

S8 님의 말 : 에펠탑.

S34 님의 말 : 와우!

S8 님의 말 : 예전엔있었는데지금은몰겠어요..^^

S34 님의 말 : 그거필수로봐주고!

S8 님의 말 : 넵!!

S8 님의 말 : 그렇게 2 박하고

S34 님의 말 : 네

S8 님의 말 : 프랑크프루트로가기전에

S8 님의 말 : 독일뮌헨을먼저가서독일은맥주가유명하니깐,,

S34 님의 말 : 오키!

S34 님의 말 : 영국에서도기네스한잔쭈욱~!!! 해주구요

S8 님의 말 : 뮌헨에호프브로이가서맥주한잔하고밤새놀고,,ㅋㅋㅋ

S34 님의 말 : 좋다!

S8 님의 말 : 네,ㅋㅋ기네스좋아요,ㅋ

S34 님의 말 : 이제...여행의피로에지친우리에게알코올이필요할때인듯!

S34 님의 말 : 딱조아요

S8 님의 말 : 그러고프랑크프루트가서근교베를린장벽도보고,

S34 님의 말 : 오!!

S8 님의 말 : 프랑크프루트에괴테의생가도함들려주고,, 여행마무리하고 프랑크프루트에서 아웃해서와도 될꺼같아요.

S34 님의 말 : 네!

S34 님의 말 : 딱이네요!

S34 님의 말 : 그러면

S8 님의 말 : 그럼일주일일정이고왔다갔다하면열흘정도?

S8 님의 말 : 네,,,

S34 님의 말 : 우리가공동으로준비할준비물...모..몇가지적으면될거같아요^^

S8 님의 말 : 네.그래요..^^비용은어케하죠?

S34 님의 말 : 각자분담해서가져올거랑

S34 님의 말 : 그러게요

S34 님의 말 : 지금 항공료랑 호텔팩을 참고로해서 예산도 적어넣을께요 거기다가 참고사이트 다적어서 파일로 드릴께요!

S8 님의 말 : 네.그래요. 조별과제많이걱정했었는데..S34 씨만나게되서넘좋아요.^^

S34 님의 말 : 저두그래요^^ 그럼 파일 만들어서 보낼께요. 그럼 그때 우리의논을 더해서 S8 씨가

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파일에 덧붙이고 또 얘기해서 수정한 후 과제제출하면 될꺼같아요.^^

S8 님의말 : 네.그래요...그렇게 하면 되겠죠??^^ S34 씨일하시면서고생많으시겠어요.ㅠ

S34 님의말 : 아녜요..^^ 우리같이힘내요.

S8 님의말 : 넵.화이띵!!

[next morning]

S34 님의말 : 안녕하세요? S8 씨.^^

S8 님의말 : 네.안녕하세요.좋은아침입니다.^^

S34 님의말 : 우리 오늘은 과제 마무리해서 제출하도록해요.

S8 님의말: 네. 꼭마무리해서우리제출해요.

S34 님의말: 네.그럼 우리자기가 맡은부분 다시 수정해서 파일주고받고올리죠.~^^

S8 님의말: 넵.그래요. 저두 언넝해서 파일보내드릴께요. 화이띵!^^

S34 님의말: 네.화이띵!^^

(이틀동안 S8 씨와 S34 씨는열심히자기가맡은부분을체크하고또파일을주고받으며교환하고있었습니다.^^)

APPENDIX F

Passover

(S41 2008-11-23 07:33:57)

What is PASSOVER?
Passover is the 8th observance commemorating the freedom and exodus of the Israelite(Jewish slaves) from Egypt during the reign of the Pharaoh Ramses II.

Most important event is The PASSOVER Seder.
Taking place the first 2 nights of the 8 day holiday.
Usually gahtering the whole family and friends together,the Seder is steeped in long held traditions and custom.
First night of Passover, the home is cleaned and cleared of all yeast food,called Hametz using utensils and dishwear.

Haggadah
During the seder, participants read from the Haggadah,it is a comilation of stories,special blessings and song.

Matzo
It is essential Passover food.During the holiday,on;y unleavened bread may be eaten.That means no pasta,cereal,bread,cakes,cookies or any other starch product made with yeast.It's symbolizes the minimalist fare that was eaten by Egyptian slaves.The Jews had to leave so quickly that they didn't have time to rise their dough.

When is the First Night of Passover?
Passover begins on the 15th day of the Jewish month of Nissan.
April 12,2006
April 2,2007
April 19 2008
April 8,2009 ....

APPENDIX G

(S13 2008-10-14 00:01:54 the number of hits :43)

HI, I'm Anna, who ordered an anti-snoring pillow for my husband the other day at www.ebay.com. According to what you say on your homepage, the pillow should have been delivered within 24 hours after the order was placed, but actually it took more than two days. And you didn't show any sign of apology. What's more, I found out that the advertisement was all bogus, because it didn't work at all for my husband. He even snored much more with that darn pillow. Therefore, I want a refund as soon as possible. If the refund process takes more than two days, you'd better prepare to meet my lawyer one of these days. No ifs, no buts, period.

(S13 2008-12-14 13:00:17)

HI, I'm Anna, who ordered an anti-snoring pillow for my husband the other day at www.ebay.com. **Based on what I read on your website, I thought I made the right choice for him and all the reputations were good. But soon after I found to have made a wrong choice.** According to what you say on your homepage, the pillow should have been delivered within 24 hours after the order was placed, but actually it took more than two days. And you didn't show any sign of apology. What's more, I found out that the advertisement was all bogus, because it didn't work at all for my husband. He even snored much more with that darn pillow. Therefore, I want a refund as soon as possible. If the refund process takes more than two days, you'd better prepare to meet my lawyer one of these days. No ifs, no buts, period. **You will pay for this.**

: Of course, the complint is all made up, but I put some additional sentences to show I am really angry and to make it more pausible.

line from Haeran, which caught my eyes.
: .... so i'll send you these. Give me a call when you get this
I just want to return these....

The reason I picked up those lines above is that I believe it is really hard to return a product to the seller, because it takes your time and money. But Haeran tries to do this when making complaint. I think it's impressive.

   E-card
How are you Prof.**? I'm ** Lee Very glad to send this card to you!
Every Jew commemorate their ancester's freedom. It means every people want live in a freedom from any other things and environment. But what means the Freedom?
Sometimes press our lives from inside of mind to outside problem include economy,health,parent,children,education and lover....and so forth.
Thank you and congrration !!! Freedom and your own Passover.
And i wish your health and wellbeing.
Always thank you for teaching.

Sincerely

**Questionnaire
과제 공개 및 코멘트는 원격강의에서 정말 필요한 요소인것 같습니다.
It seems that factors such as sharing assignments and comments in the online course are really necessary.

**Journal
(S33)
누군가에게 '보기에 너무 좋네요', '잘했네요', '도움이 된다',등등의 칭찬 덧글을 받아서 매우 기분도 좋고 보람있는 주 인 것 같다....간단한 메모인데도 모르는 사람들이 내 글을 읽고보고 좋다 라고 칭찬을 해주니 참으로 기분이 좋고 신이나는 과제 수행이 된듯 하다.
I am quite happy and feel rewarded because I got feedback from others such as 'You did a good job', 'It looks so good', and 'It is helpful.' Although they are simple comments, I felt so good with their compliments. They made my day.

**LMS
(S22 2008-09-24:04:40:46)
그래요..과제도 너무 과하죠..^^
"That's right.. it seems to have too much assignments^^…

(S32 2008-11-02 04:28:02)
저 컴맹인데요. 너무 너무 궁금한 것이 있어요.녹음을 겨우 하긴 했는데 본인이 녹음한 소리는 어떻게 듣나요? 녹음이 제대로 전달이 된건지 안된건지 도무지 확인할 길이 없네요.알려주시길 바랍니다
I'm computer illiterate. There are so many things that I am curious about. I managed to do a recording assignment. But how can I listen to my recording? I am not so sure if I recorded it properly or not. Please let me know.

(S9 2008-11-03 09:39:10)
재생버튼을 누르면 녹음한 목소리 들을수 있어요. 빨간색의 녹음버튼 옆에 재생버튼 ..그거요~전 제가 녹음한거 들을때마다 아주...부끄럽답니다..
You can listen to your voice if you click the play button. The red one next to the record button,… that's it. ~ Whenever I listen to it, I feel so embarrassed.

APPENDIX I

(S3)

실수를 줄이려는 마음에 올리기 전에 여러 번 본다.

To reduce errors, I read and check my work several times before submission.

(S21)

올리기 전에 내 앞에 사람 두명 것을 보니, 다 나하고 다른 스타일이네!..

Before uploading my work, I read two students' in front of me. What a different style!

(S28)

내가 잘못하고 틀린 부분도 알게되어 고칠수도 있었던것 같다.

I think I could spot errors and mistakes in my work and could correct them.

(S15)

내가 올린 과제에 즉각적으로 누군가가 공감하는 글을 적었을 때 온라인상의 대화이긴 해도 같이 수행하고 공감하는 듯 한 감정으로 용기가 2 배가 되고 나도 그 누구에게 용기의 메시지를 주고 싶기도 하고 감정교유적인 이 학습방법이 이제는 익숙해지려 한다.만약 혼자 그 과제를 수행했다면 두꺼은 벽하나에 떠들어 대고 있는 모습일것 같다.

When someone gave some feedback on my work, it encouraged me a lot even though they are online comments. So I want to give comments on others' work in the hope of giving courage and emotional support to them. Now I am getting used to this method of the course. If I did the given tasks alone, I would feel as if I was talking to the wall.

APPENDIX J

**At the beginning
(S39)(수강생들이 모두 보는 게시판인데) 혹 해석을 잘못해 웃음거리가 되지는 않을까하는 걱정된다.
(The web board is in public.) I was worried what if my translation was wrong and my classmates would laugh at my English.

**Mid-course
(S23)처음 강좌가 시작 되었을 때는 내가 한 과제가 공개되는 것에 대해 부담스러웠다. 하지만 그 생각은 잠시였고 별로 신경 쓰이지 않았다. 나는 영어강사도 아니고 외국인도 아니기에 당연히 영어를 잘할 수 없고 또한 지금 이 강의를 듣고 있는 학생들도 나와 비슷한 입장일 것이다. 모두가 배우는 입장이기 때문에 미숙한 점이 있고 서로의 과제를 참고하면서 그 미숙함이 채워진다면 더욱 좋을 것 같다.
At the beginning, I felt uncomfortable with the idea that my work is open to other students. But the uncomfortable feeling did not last long and it does not bother me anymore. I am not a native speaker or an English teacher. So, it is natural that I am not good at English. Not only I but also peers taking this course would be in a similar situation. All of them are learners just like me and we are not good at English. It would be great if sharing assignments helped us become better English learners.

(S4)게시판을 보니 다들 과제가 많아 힘들다고, 매일 영어공부만 한다고... 나만 그런 것 아니네... 다행이다..
Most students said on the web board, "It is really challenging and stressful, because there is a lot of homework to do. Almost every day I have to study English." Thank God, I am not the only one.

**At the end of course
(S26)감탄할 만큼 잘해놓은 과제를 보면 내가 한 과제가 비교되어서 스스로 반성도 했다. 그리고 가능하면 내 과제를 열어본 누군가에게도움을 줄 수 있도록 좀 더 잘하려고 애썼는데..
When I read excellent assignments posted by other students, I compared them with mine and reflected on my own work. And I try to hand in flawless homework, so that peers will use my work as their reference just like I did.

(S15)지금까지 그랬듯이 게시판에 먼저 올라온 분들의 과제를 참고하는 것은, 과제를 진행하는 데 매우 큰 도움이 되었습니다. 혼자 공부한다는 느낌보다는 함께 한다는 느낌에 더욱 그러했던 것 같습니다.
It is very helpful for me to refer to others' work, when I do my homework. It gives me a feeling that I am studying together with my classmates, not doing it alone.

(S22)습관적으로 영어 게시판 다른사람들의 숙제한 것을 보면서 리플달기도 하고 하여간 이제는 하루에도 여럿차례 사이트를 열어보는 취미가 생겼네요...ㅎㅎ

Habitually I give some comments on others' work on the bulletin board and log on to the course several times a day... Ha ha

APPENDIX K

**Journals

(S5)시차에 대해 적응하는 팁들은 아주 유용했다. 여행에 대한 실질적인 도움을 많이 얻었다.
The tips for adapting to jet lag were very useful. I got a lot of practical help for travel.

(S36)travel style 질문에서 overpack 과 underpack 의 의미를 몰라서 알게되기까지 수강생들의 답변과 여러 사이트를 뒤져야 했다.
In the questionnaire about travel style, I didn't know what 'overpack' and 'underpack' mean. So I searched for the answer from others' work and many websites.

 (S18)'stretches' 비행동안 기본적인 스트레칭! Minimize Risk, Dress for Comfort, Use a map, 작은 행동이지만 공부를 하면서 다시 한 번 생각하게 되었고 꼭 필요한 것들이라 어려웠지만 재미있었습니다.
'Stretches' basic stretches for the flight! Minimize Risk, dress for comfort, and Use a map, these seem to be small movements but I thought them over while I was studying them. Although this reading material was difficult to study, it was interesting because it was essential.

**Questionnaire

실생활에 유용하게 사용할 수 있는 표현과 내용을 통해 자유롭고 즐겁게 영어공부를 할 수 있게되고 영어공부 뿐 아닌 다른 지식에 대해 부가로 얻을 수 있어 좋았다.
우선 재미있었어요....이제 영어사이트에 들어가는 게 조금도 두렵지 않습니다.
Useful expressions and real life contents encourage me to learn English and make it fun. Also, it is good for me to study English as well as to get other additional knowledge. To begin with, it was wonderful ... Now I am not afraid of accessing English websites.

**LMS records
(example 1)
(S13 2008-11-24-00:25:31)
'Passover' and 'Thanks giving Day of the Hebrews' interpreted with meaning which is same.
   (S41 2008-11-25 00:19:28)
   Thank you for your comment. But i know two days are some different origin and meaning. I want to find more information and share it.

(example 2)
(S27 2008-11-26 23:36:02 the number of hits :76)
Psitive body language
- Touching another's arm or shoulder
At times when the person tells me an interesting story, I pat her shoulder or arm. I think over the person's story and still find it to be interesting. When I feel good, I often fold my arms with my friends', although it may be misunderstood in foreign countries.
- Nodding
At times in meetings and gatherings I often bow my head in assent when the person speaks.
Negative body language
- Legs crossed

When being seated in a chair, I often cross my legs, although the habit is unhealthy because it may bend the shape of the legs. My son at times points out my bad habit. My God, I know it is a bad habit, but I feeling like doing it sometimes. I wish I could assume a good posture.

- Tight or no smile

I wish I had a more comfortable and warm expression on my face. At times when I am absorbed in thought, my face has a deadpan expression. If I am lost in thinking, then, it is likely for me to greet neighbors with blank eyes.Let us laugh!   Let us make the smiley face all the time!

(S13 2008-11-27 22:00:49)
[positive body language]
1. warm, open smile
As a natural phenomenon , I give a sweet smile at interesting person.
I smile without noticing it myself. I think that this gesture means I like the person. Although the person talk me boring story, I must be smile ~
2. preening behavior
It is a natural body language. When I met my friends, I was well dressed and
perfect make - up than usual going out . I think that it is etiquette and expression of good feeling for them. ^^
[negative body language]
1. tight or no smile
" no smile " is a contrary concept for " open smile "
I can not hide my mind for them whom I don't like.
It is hard for me to get rid of the body language.
Hm ....
2. arms crossed
It is my bad habit . I have a tendency to show too much pretend to people whom I do not like. I think I should be careful on this kind of thing and should get it corrected.

(S21 2008-11-28 20:08:38)
I often nod my head when I listen to my friend's talk. Although they talk to me for a long time. I showed my consent by nodding to them. Maybe this action is my good habit of listening. also, I nod my head when I understand a lecture of professor. so I chosen nodding.

(S18 2008-11-30 20:26:09)
Most people understand that smile means agree. So many people can think tight or no smiling face means angry or disagree. I do, too.

(S23 2008-11-30 20:39:41)
In many cultures, it is most commonly, but not universally, used to indicate agreement, acceptance, or acknowledgment. I use this gesture for "agree."

(S29 2008-12-17 04:23:17)
I have a same bad habit, Legs crossed. and i also know it's unhealthy.^^
My mom always said to me, Don't sit on the chair with your legs crossed.
but i couldn't abandon that habit.