

**Intercultural Discourse in Virtual Learning Environments**  
**A Socio-Pragmatic Study**

Submitted by  
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*H. R. Dolatabadi.*

## **Abstract**

The potential of community building through computer-mediated communication (CMC) in virtual learning environments has received increasing attention in recent years, yet little empirical research has been conducted in this field in Middle Eastern countries particularly based on a social constructivist approach as in this case. This research is concerned with the processes of community building as experienced by university students in computer-mediated distance education classes in Iran. Its overarching concern was to see if convergence happens in an on-line university discussion forum in a Middle Eastern cultural context, and if so, to explore how it happens and with what strategies it can be supported in such environment. The research addressed the role of collaborative interaction as the process of co-construction of knowledge and identities, by looking at: (i) the students' beliefs as reflected in a survey; (ii) patterns and outcomes of interaction derived from an analysis of on-line transactions; (iii) students' perspectives based on interviews and their responses to a survey.

The participants came from four different Middle Eastern cultural and linguistic backgrounds and were all students studying at Masters Level. The academic context was an Iranian university that has a large face-to-face student population as well as a large number of distance students. The participants' common meeting ground was primarily a virtual environment created for the students to share their learning experience and to communicate with each other and the tutors. The participants' beliefs and ideas in terms of choice, opportunity, culture and expectations were examined through a survey in the first phase of the study. Then, to investigate their roles in shaping the on-line community, an additional university e-forum was designed and implemented by the researcher in the second phase of the study. In this forum the participants were free to contact each other without pre-planned tasks or interventions by the class tutors.

Social constructivist approaches were used to analyse interactions between students and the outcomes of these interactions. The findings suggest that participants moved their communicative competence from tangible topics towards shaping new beliefs and ideas; creating the VSD-Virtual Social Development- model. These developments are

regarded as something unique for an area such as the Middle East where gaining confidence is hard especially when there is no face-to-face contact with other participants, and individuals often have concerns about revealing their real personalities in untried situations. The findings of the interviews support the findings of the second phase of the study and show what strategies the participants used in community building. The research also highlighted many issues for further study, one of which is the various interpretations of the concept of community building in on-line contexts.

## **Dedication**

*To those who taught me  
how to love and share it with all those  
who are looking for it  
with dancing eyes and shaking hands waiting for  
the breeze of love,  
in a shiny day to take them  
to the sky of beauties with blinking stars,  
telling them the everlasting stories of sacrifice*

## **Acknowledgment**

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# Chapter One

# Chapter one: Introduction

## 1. Background; Culture and Education in Iran

Cultural issues in Iranian communities have been studied by many researchers (e.g. Gilbert, 1971; Nicholson, 1995). Yet they all miss crucial aspects of what Iranian cultural and linguistic studies are likely to be in the coming years. Thus there remain large gaps in the research on intercultural discourse and community building among the Iranians in general and university students in particular. Regarding the world of higher education which uses slogans such as ‘internationalisation’ or ‘globalisation’, cultural differences in every part of the world need to be analysed and understood (Cortazzi and Martin, 2001). Thus, it is worth mentioning some aspects of Iranian socio-cultural and educational structure in this chapter in order to focus on community building among Iranian university students.

### 1.1. Languages and Literature

Since culture is multi-dimensional, many disciplines are involved in the Iranian culture, and languages and cultural contact and community building are a major part of it. These have been main parts of the Persian Culture since the dawn of history. Regarding the emergence of the Iranian educational culture, Yarshater, in the *Encyclopedia Iranica* (2009) stated that its major purpose has been ‘to promote moral power, commitment to the local group, and the implicit promise of enhanced social position’ (p. 250). He discusses the idea that throughout history, Iranians have preserved their culture of communication, while they used different languages such as Arabic, Turkish or Kurdish as their mother tongues and Persian as their native language for scientific and philosophical discourses. This enabled them to have a global audience throughout the history. This is why studying Persian culture and languages has become a major subject for many scholars in different parts of the world.

Regarding the diversity of Iranian society, it should be said that Iran is a country with different religions, languages, and ethnic backgrounds. The native and official language of the country is Persian; many people speak this language while there are other Iranian

languages or dialects in different parts of Iran. Turkish languages and dialects are spoken in six provinces in Iran, while Arabic is spoken in the southern provinces and Kurdish is spoken in three western provinces. Most publications and broadcasts are in the Persian language; and this has been used as the lingua franca for many years, although there are many publications and broadcasts in the other languages as well.

The issue of diversity in Iranian society has been a major focus of cultural and linguistic studies, and sometimes has been a major concern for the people who participate in a community which includes the people from these diverse languages and cultures. Some believe that language diversity of one sort or another might cause problems for development, both linguistic and cultural. Some have gone further and said that this diversity 'hinders inter-group cooperation, national unity, and regional cultural cooperation' (Einar, 1966, p. 43). But Iranian communities have often proved that although perspectives on the world differ with different religions, languages and cultural expectations in one area, they should try hard to recognise that not all cultures even in one country are alike and they should look for unity and solidarity among themselves. Regarding this important cultural aspect, it seems that they have recognised these cultural differences as a serious step to entering and uniting with another culture so that the problems and risks of miscommunication among them have, to a great extent, been reduced in the last decades (Yarshater, 2009). Table 11 in this study which includes the major themes and sub- themes emerged from the interview, can clarify this issue.

### **1.2 Education in Iran: an overview of the role of the university**

The need to have an accurate assessment of the potential of the Iranian educational system has long been realised, since it might help the reader have a broader view of potential strength of the virtual learning environments in a diverse community like Iran. On the other hand, this might keep them motivated to better appreciate the importance of community- building in such societies. Nowadays there is an increasing recognition among Iranians, especially university students, of the importance of being active in the civic life in Iran. So as a new strategy, they have started forming communities in a virtual environment (Dolatabadi, 2007). This is now so advanced that Iranian students have realised that they need a bigger share of decision- making in their community because they believe that being involved in their social affairs, independent of political wings, improves Iranian society as a whole.

Educational programs in Iran have been responsible for helping students to prepare their graduate life through knowledge, skills and professional behaviours that 'could reflect the needs of the students in a real life in future' (Hannam, 2000, p. 42). As a result a huge part of the curriculum in the educational system emphasises the experiential education of the students. For a country which has 54 state-operated universities, and 42 state-run medical schools and has the largest and most prestigious programs among the Middle East universities (Dolatabadi, 2008) considering this fact has been a major concern for curriculum designers and decision-makers in the last decades. The revised curriculum concentrates on communication, cultural understanding and socialisation for the students specifically in higher education levels. Regarding the cultural situation of Iran as a diverse community, the role of socialisation is concentrated more than other aspects in higher education. The major philosophy behind this fact is the idea that Hannam (2000) refers to as a critical point in education in such environments. He believes that 'learning of social roles and socialisation can facilitate participation and adequate, appropriate performance in the professional society in which one is a member' (p.27). He adds that 'students cannot afford to ignore this critical aspect of professional development' (p.8).

Iranian universities 'churn out almost 750,000 skilled graduates annually. Also there are more than 40,000 students engaged in Masters Programs and 20,000 students in PhD. There are also institutes like Payame Noor University that offer degrees remotely or on-line' (see Wikipedia, Iran, education, [http://en.wikipedia.org/wiki/education\\_of\\_Iran](http://en.wikipedia.org/wiki/education_of_Iran)). Some schools have tried to have progressive bilateral cooperation with European Universities. For example, the Institute for Advanced Studies in Basic Sciences in Zanjan, or Sharif University in Tehran have close contacts with international research centers for workshops, conferences, and especial educational periods for students and researchers.

### **1.3. On-line learning in Iran**

Information and Communication Technology (ICT) development in Iran was pushed forward by the first national plan on ICT which was officially announced in mid-2002. This program enforced development and application of ICT and virtual learning environments in Iran. Since then several national and international conferences on

various aspects of ICT have been held in Iran. The first Euro-Asian conference on ICT was an example of such activities which was held in Shiraz in October 2002. With respect to e-learning and the virtual university, various activities were pursued in Iran and finally the first virtual university (or e-University) program was conducted in early 2004 by Shiraz University in one university discipline (i.e. B.Sc. in Control Engineering) with about 200 students. This first virtual university program was officially started by the Iranian Minister of Science, Research and Technology in May 2004 in Shiraz University. This university has four university programs and about 700 students at different levels from B.Sc. to M.Sc. (with six years' experience). About two years later, another well-established Iranian university- Iran University of Science and Technology in which this study was carried out conducted some other academic e-learning programs. Iran University of Science and Technology has about 1000 students with three university programs at different academic levels from B.Sc. to Ms.c. from which I chose to study the students from Information and Communications Technology, Software Engineering, Industrial Engineering, Simulation and Process Control, and Management of Information.

Shiraz University is the first Iranian university that started a joint e-learning program with a foreign university (Queen Mary, University of London) which was approved by Iran's Ministry of Science, Research and Technology. The program was officially announced in late 2005. At present, there is an expert committee of IT and e-learning in the Ministry of Science and Technology to conduct and coordinate such programs in Iran. Currently about 2000 students from all areas of Iran, along with some from Kuwait and United Arab Emirates, are studying in these universities in Iran. There are currently four undergraduate e-learning programs in these universities: B.Sc. in Control Engineering, B.Sc. in Electronics, B.A in Law and a B.Sc. in e- Commerce. There are also other degree programs (such as M.A in Law, B.A. in English, B.A. in Communications, etc.) which are active now. Besides the above programs, the following degrees have been provided since 2005 as a joint program between Shiraz University, the Polytechnic and Queen Mary University, London, with the following degrees accredited by the University of London: B.Sc. in Computer Science, Combined B.Sc. in Computer Science with Business Management, MSc. in Computing and Information Management and Advanced MSc. degrees in Computer Science. Shiraz Virtual University has offices in Tehran, Shiraz and Qeshm Island and is about to



establish its new offices in Tabriz, Mashhad, Isfahan, Ahwaz, and Zahedan (all the four corners of Iran and also in central Iran). Some new offices in the neighboring countries are to be established in near future.

This section has briefly introduced Iranian society, culture and the educational system in order that the reader can become familiar with the context of the study before reading the empirical investigation that follows. The following section will be a short introduction about the current situation of the research in virtual learning environments, the significance of this research, the aims of the research in different phases of the study and finally the research questions.

#### **1.4 The background of research in virtual environments**

The increasing global application of virtual learning environments has changed the Net from a 'dominantly English-Language medium to a new space for bilingual and multilingual communication' (Androutsopoulos, 2005, p. 32). In other words, concepts of culture and intercultural have been foregrounded by linguists and theoreticians of language education (Young and Sachdev, 2005) and even a decade ago intercultural communication was recognised as an important area of communication studies (Ma, 1998). Among the many reasons that it has received so much attention is the rapid development of modern technology since it has 'shortened the distance between people in different societies' (Ma, 1996, p. 40) and made it a reality that intercultural communication has a significant part in our lives. In this way, knowledge and skills are regarded as a 'vital competence' (Cortazzi and Shen, 2001, p. 2) in daily contacts and communication. Research has pointed out successful communication is to a great extent dependent on the knowledge of social and cultural values shared by people (Kecskes, 2004, p.3). In other words it can be said that 'co-ordination and synchronisation of both verbal and non-verbal signs reflecting appropriate communication norms and creating new intercultural norms are needed for successful intercultural discourses' (Donato, 2004, p. 290). I have designed the following figure which, I think, shows the above discussion better:

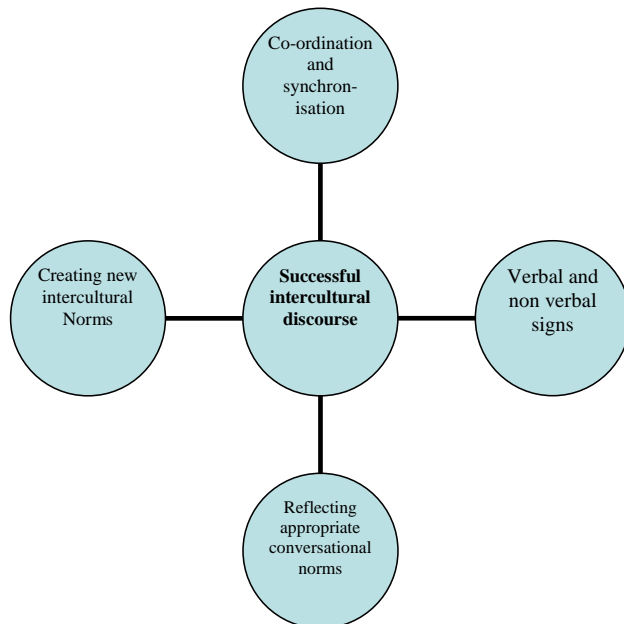


Figure 1 The important factors in shaping a successful intercultural discourse

It is therefore very important to find out how communicative virtual environments and their specific characteristics may affect (a) ‘the kind and amount of language contact should take into account and (b) the kind of on-line community and (c) communicative genre (i.e. single-authored genres such as personal home pages vs. interactive genres such as chats or forums’) (Androutopoulos, 2005, p.14). So a virtual learning environment is regarded as the place in which there are both cognitive and affective challenges.

CMC covers ‘interactive computer messages (e-messages), electronic mail (e-mail), forums, computer conferencing, etc.’ (Haythornwaite, 2006, p. 107). Having a look at various forms of mediated interpersonal communication, it is possible to arrive at the idea that computer-mediated communication (CMC) through virtual learning environments has been widely used in institutions of higher education in many parts of the world. Increasingly, the cultural contacts in virtual communities have themselves been focused in anthropological and sociological research (Robson, 1994). It is worth mentioning that several studies have investigated these issues which will be discussed in more detail when reviewing the literature. Actually recent research has provided us

with informative knowledge on intercultural communication and will certainly be of extreme value to the field of virtual communication, 'giving researchers, ICT material developers and students ample information in this area' (Shah, 1998, p.78). It is worth referring to Ma (1996) as he believes that those who engage in intercultural computer-mediated conversations might be 'better informed about the culture of their communication partners than are those who do not about the same culture' (p. 179).

### **1.5 The Significance of the research**

Both the Social Presence Theory (Short et al., 1976) and Media Richness Theory (e.g. Daft & Lenge1, 1986, p. 360) propose that 'communication can be affected by the quality of the medium (the level of "social presence" or information "richness")'. Furlong (1989:179) states that an 'electronic community' can be created via on-line networks. Gumperz and Drucker (1992) also challenge the traditional notion of physical space which is now being replaced by electronic space, and is 'an associational construct without place between two or more persons...' (p. 18). But it is worth mentioning that characteristics of electronic genres and communication styles are different between cultures (Chase & Macfadyen, 2003). The need to understand the different phenomena and world views in other cultures is increasing due to globalisation (Giddens, 1993; Robson, 2002) media explosion (Pallof and Pratt, 1999) and expansion of technology. However, inter-cultural studies in virtual environments are undertaken rarely (Dimmock, 2000), especially studies which focus on intercultural communication (IC) in virtual environments in the Middle Eastern universities. The need to fill this gap 'introduces a cultural dimension into educational research' (Shah, 2004, p. 35). Although the term virtual community has been used a lot so far, few studies have been done to discover how adult distance learning students define community, whether they feel part of a community, and if so, how that phenomenon occurs. In other words, it should be stated that little is known about the actual experience in the field using these technologies to facilitate communications between university students from different cultural backgrounds. Chase and Macfadyen (2003) also noted this fact by saying:

*"Individuals culturally 'at home' in the foundational scientific/technical culture of the Internet "encounter others whose cultures vary widely, and whose culturally-defined communication styles do not 'match' the dominant communication patterns of cyberspace" (p.2).*

Previous research has found some key points in the differences in cultural values that had an impact upon successful on-line communication between learners from widely divergent cultural and sub-cultural backgrounds. These studies have also shown that ‘discordance between cultural values and expectations of individual communicators in these areas rendered networked communication problematic’ (Chase and Macfadyen, 2003, p.7). So what has interested the researchers is how cultural identities (ethnicity, youth culture, gender, etc.), interact with intercultural communication on-line; that is, ‘already removed from the face-to-face setting, and not only with regard to organisational behaviour’ (p.4). Shah (1998) notes that when a wide cultural gap exists between communicators, the anxiety on their part can increase significantly. In another study Chase and Macfadyan (2003) came to the idea that in the virtual environment cultural gaps can be the result of differences in world views, experience, or even ‘expectations of an educational environment, or tolerance for criticism or debate’(p. 6).

Regarding this gap Brown (2002) states that environments have normally got their own features with various functions for the users and ‘different socio-cultural possibilities’ (p. 2). Knowing these factors, participants can reflect on differences within the group in a more constructive and creative way. They emphasise our own cultural frameworks and say that if these frameworks are tacit, this can be an important step in the ‘establishment of more intercultural communication and interaction, and places us in a stronger position to realise the creative potential of cultural diversity and intercultural collaboration within and between groups’ (p.12). In other words, expanding our information and understanding of the process of intercultural communication in a virtual learning environment is a necessary step in establishing successful networked learning environments in an educational system (Yetim and Raybourn, 2003). Regarding the fact that communication and learning are cultural activities and virtual learning environments in general are ‘cultural artifacts’ (Robson, 2002, p. 94) researchers in virtual environment need to do more research to fill the gaps in intercultural communication in such environments. This study will help the researchers to expand their emerging understanding of on-line communication between university students, and will provide the basis for future directions for further research.

I hope that rather than being a marginalised and isolated issue it will be a focus for debate by many people working in the area of virtual learning and communication,

since intercultural discourse and related discussions will always be challenging and may well meet with resistance. Central to such studies is the preparation for future research in educational technology, such that ‘they may adopt multi-level and intercultural perspectives on the complex educational systems within which they work’ (Davis, 2002, p.260).

### **1.6 The Research aims**

The research investigates the strategies used by participants in virtual interactions in order to deal with ‘the departures from expectations and uncertainties resulting from cultural differences’ or in order to resolve misunderstandings successfully (Brown, 2002, p.6). I am hopeful the research can provide practical and theoretical ideas for virtual learning environments with the aim of overcoming the problems and better enabling virtual communication and cooperation. Such analysis is part of what Dewey would call ‘an experiential way of knowing- documenting an activity not to “prove” a claim about it, but to understand it more fully as your working hypothesis, to probe your working theory and next actions’ (Flower, 1996, P.49).

#### **1.6.1 Subsidiary aims of the research**

The objectives of the research will help the reader get a general view of the study. They are shown here together with the ‘phases’ of the research when they will be addressed. More detail of the phases is given later.

##### **1.6.1.1. Subsidiary aims of the research in phase one**

This phase aimed to ascertain the participants’ beliefs regarding their co-learners from other cultures in a virtual learning environment and also gather documentary evidence of the problems facing the participants in their daily work using virtual environment. I used the questionnaire in phase 1, as the questionnaire provides access to a wide number of participants, selected as a large representative sample from the population (Mouly, 1970). In this phase of the study taking the views of more than two hundred Iranian university students in the first stage, a questionnaire was chosen as the most appropriate data collection method. The questionnaire contained many questions on the students’ success and failures in their communication online to get their opinions and views regarding these important issues which would be used to shape the other stages of the research.

#### **1.6.1.2. Subsidiary aims of the research in phase two**

In this 'operational aspect' of the study, two distinctive types of forum were designed for the participants to help them contact each other in the virtual environment. This phase aimed to find out if virtual forms of interacting lead to creative ways of experiencing and communication and are capable of supporting meaningful social interactions. So, this phase was designed to see if intercultural competence can be realised in on-line discussions of the students and if these interactions are manifestations of the students' social and cultural development.

#### **1.6.1.3. Subsidiary aims of the research in phase three**

This phase aimed to see what the participants' ideas are in communicating with their friends from different cultures and societies in virtual learning environment and see if they can cope with the possible social and cultural obstacles in their communication, regarding the fact that they were from different cultures and languages. In phase 3, interviews were used for data collection due to their 'ontological and epistemological relevance to the nature of intercultural inquiries' (Cohen, Manion and Morrison, 2005, p. 86).

### **1.7 The research questions**

In order to address the aims and objectives noted, the following research questions guide the research:

- 1) Does convergence (please see the next chapter for a clear definition of this term) happen in an on-line university discussion forum in a Middle Eastern cultural context?
- 2) What are the processes that determine the tension between accommodation and dissonance in discourse in a virtual learning environment (V.L.E)?
- 3) In what ways are the interactions in the V.L.E manifestations of social and cultural development of the learners?
- 4) How is intercultural communication competence realised in the V.L.E?
- 5) What are the relationships between intercultural communication in the V.L.E and the attitudes of learners?

#### **1.7.1 Subsidiary research questions**

There were also some further details, or extensions of these questions which it was felt would be interesting to address. This mainly would be possible towards the end of the

study, in what will be described as the third phase of the study. These questions and areas of interests are:

- a) What do the members think they have gained by working in the V.L.E and what contribution do they think they might have made to it?
- b) Do members recognise that their environment is a 'community' and if so, do they have a sense of belonging to it?
- c) What do members feel characterises community in that environment?

### **1.8 Conclusion to the chapter**

Regarding the aims of the thesis and to be able to answer the research questions, the thesis has been set out in three phases; at first glance this might seem unusual for the reader since this seems to deviate slightly from standard structure. The dynamics of this research, including the fact that it was never driven by any hypothesis, have meant that it did not seem appropriate to include all the results in a single chapter. Furthermore, the structure of this thesis reflects the way in which it evolved. The focus of enquiry was initially as follows: the relationship between students' virtual intercultural communication and their attitudes and ideas. Subsequently, it moved to other research questions, such as: students' intercultural communication competence in this new environment (the V.L.E). In effect, each research focus grew organically from the previous stage of inquiry; for the purposes of clarity, it became logical to report them independently across chapters.

# Chapter Two



## Chapter Two Key Definitions

This chapter presents some important definitions relating to the important aspects of the thesis and discusses some theories relating to research in virtual environments. The rationale behind this is the fact that these definitions may help the reader go through the discussions in different chapters so that the major philosophy behind each phase of the study is quite clear for the readers.

### 2.1. Linguistic Aspects

Early works in virtual learning environments (e.g. Barki and Pinsonneault, 2001; Bamber, Watson and Hill, 1996) did not entirely ignore cultural and pragmatic problems of learners. However, pragmatics was regarded only as something which could explain how learners acquired grammatical competence and it was a dominant idea that perfect mastery of grammar or vocabulary would result in proper communication and proper use of language in such environment.

#### 2.1.1. Chomsky's meta- linguistic views

A very influential idea in the field of communication has been Chomsky's meta- linguistic views of language, which came as a challenge to previous linguistic views, specifically behaviourist approaches (Chomsky, 1971). Chomsky, however, preferred not to connect language with the manner in which it is used in communication. Some linguists have criticised Chomsky for excluding the socio-cultural significance of utterances. The most influential reaction to Chomsky's claims came from Toulmin (1996). He pointed out that 'Chomsky's category of competence did not provide for language use not even his performance category, which includes only psychological constraints and ignores all aspects of social interaction'(p. 54). Actually all Chomsky's critics, despite their differences, believe that a successful communication includes the ability to act in accordance with sociolinguistic rules and cultural context. They believe that communication is much wider than a 'set of cognitive operations'; it is seriously mixed with the culture in which the language lives (Kamel, 1983, p. 281).

#### 2.1.2. Hymes's notion of Communicative competence

Hymes made an important contribution to theoretical discourse in his notion of 'communicative competence'. Communicative competence can be described as including

knowledge and the ability to apply it in ‘appropriate, contextualised communicative language use’ (Bachman, 1990, p.39). Candlin (1981) also describes communicative competence as:

*“...the ability to create meaning by exploring the potential inherent in any language for continual modification in response to change, negotiating the value of convention rather than conforming to established principle. In sum, a coming together of organized knowledge structures with a set of procedures for adapting this knowledge to solve new problems of communication that have no ready-made and tailored solutions” (p.40).*

Related to what Candlin stated about meaningful communication is the issue of context. This helps us see what the problem actually is in communication among people as it discusses that language can naturally grow and develop in context in relation to contextual communication needs (Bachman, 1990). In other words, knowing language out of context cannot prepare the people for the real world in which the meanings or even markers may have hidden or implied meanings which vary in different intercultural situations and are not easy to understand out of that context (Shah, 2004). It has been stated that ‘it is communication not language, which must provide the frame of reference within which the place of language in culture and society is assessed’ (Hymes, 1967, p. 24). Among the researchers, there are many who have discussed different assumptions of context in real-life communication in general and virtual learning environment in specific. They will be analysed in detail in the next chapter.

### **2.1.3. Pragmatics**

#### **Definition**

Pragmatics is a subfield of linguistics which revolutionised linguistic studies as it considers how we understand and produce a communicative or speech act in a situation like a conversation (Leech, 1983). Pragmatics ‘explores how meaning is encoded into or decoded from a sign or a set of signs by referring in some way to the context of a given communication’ (Hurley, 1992, p.14). Leech (1983) has referred to the ability to understand these contexts and making the required communicative act as ‘pragmatic competence’ which involves our cultural knowledge about the context and also ‘social status between the speakers involved’ (p. 47). This subfield of linguistics is regarded as ‘the study of non-literal speaker meaning’ (p. 82) which shapes a major part of the theory of language and communications because the ability that speakers show in comprehending the social context is part of their competence in successful communication with the others.

Today, there is a common view among the linguists which states that the study of pragmatics, specifically in virtual environments, is essential since it focuses and discusses those aspects of meaning that even semantics has not focused on (Leech, 1983). As a linguistic subfield it has maintained its effect and independence by keeping its practicality in real life meaning (Flower and Heath, 2000). Thus we are witnessing an increasing interest in how people in different languages and cultures can understand certain pragmatic principles and what codes they use in their communication. Another central issue that should be elaborated here is the concept of culture and intercultural communication theory.

## **2.2. Intercultural Communication Theory**

Intercultural communication is regarded as comprehending and handling messages for creating meaning between different cultures. But it might be challenging to know how successful intercultural communication in the virtual environment is, especially when we regard the fact that individuals with diverse cultural backgrounds communicate through the Internet in which there is great possibility for 'misunderstanding, miscommunication and mismatch of values and expectations'(Shah, 1998, p.72). So it is critical to know what the research tells us about the possible influence and impact of 'cyber-culture(s)' and other cultures on intercultural communications on-line. While most of the research and theory papers in this section implicitly regard 'culture' as ethnic or national culture, and examine on-line communication patterns among and between members of specific ethnic or linguistic groups, a few are careful to define the concept of culture in a broader way. In particular, Belz (2007) notes that organisational and professional cultures are critical elements in the modern era of communication. She defines culture as 'a dynamic mix of national/geographic, organisational and professional or disciplinary variables' (p.85).

Belz (2003) refers to Labov's (1972) linguistic approach (or 'appraisal theory') when she evaluates intercultural communications in e-mails. In their research on theories of social networks, Young, Becker and Pike, (1970) discuss their findings with reference to theories of network communication. Long and Higgins (2000) discuss and analyse the negotiation of 'face' on-line which was based on 'face theory' by theorists such as Ting-Toomey and Korzeny (1991). Peck, Flower and Higgins (1995) explore intercultural patterns of on-line communication based on theories from sociolinguistics, genre and literacy theory. The current theoretical approaches to intercultural communication are also broadly discussed by

Flower (1996). A few recent writers here develop new theoretical perspectives on on-line intercultural communication. Hofstede (1991) suggests that a more research is needed to understand the relationship between the Internet, communication and culture and Thorne (2003) believes that a new conceptual framework should be developed to ‘draw together discursive orientation, communicative modality, communicative activity and emergent interpersonal dynamics’ (p.52).

Although research and theory in the field of on-line intercultural communication is still in the early stages, a few investigators have undertaken research with the aim of identifying vital elements that facilitate successful intercultural communication in on-line environments. Discussing current approaches, we can refer to ‘culturisation’ by Abdelnour-Nocera (2002) in which he discusses the ways and possibilities through which interaction between particular cultural groups can be facilitated. Yetim and Raybourn (2003) also take a language action perspective when discussing and offering cultural models for on-line intercultural communication, focusing on the importance of on-line culture in a virtual environment.

The definitions and the discussions on topics such as linguistic aspects, communicative competence and pragmatics were assumed to pave the way for other topics like intercultural communication theory and help the reader to understand the thread of the research better. To follow what was defined shortly in the previous section and to illustrate the research questions and aims in later sections, I have designed a discussion in two parts; first some more definitions of the most significant issues such as culture, intercultural, intercultural understanding and intercultural awareness, then there will be discussions related to Intercultural Competence (IC) and convergence.

### **2.3. Cultural and intercultural competence: a move toward making a new community**

There has been some extensive intercultural research, particularly in disciplines like culture and communication studies. Some researchers like Yetim and Rayborn (2003) refer to the term “intercultural” instead of “cultural” to stress the dialogical relationship of people from various cultural backgrounds in computer-mediated communication contexts. They emphasise that supporting intercultural computer-mediated communication (I-CMC) requires recognition of ‘both enabling aspects and obstacles of such dialogical situations’

(p.35). So, they have called for new ideas or even tools, which may support and improve computer-mediated intercultural communication. Bell (1991) states that the concept of culture involves hidden layers which themselves imply a relationship 'with the accumulated shared symbols' (p.192) that are representative of specific cultural communities. He has stated that 'culture is a symbol of life that can be transmitted, learned and shared' (p.193). Jenks (1993) provides four interpretations of the concept of culture:

1. *"Culture as a cerebral, or certainly a cognitive category: culture becomes intelligible as a general state of mind (e.g. 'the cultured woman')."*
2. *Culture as a more embodied and collective category: culture invokes a state of intellectual and/or moral development in society. This is a position linking culture with the idea of civilization.*
3. *Culture as a descriptive and concrete category: culture viewed as the collective body of arts and intellectual work within any one society. It includes a firmly established notion of culture as the realm of the produced and esoteric symbolism of a society.*
4. *Culture as a social category: culture regarded as the whole way of life of a people: this is the pluralist and potentially democratic sense of the concept"* (p. 12).

Although it seems hard to provide a specific and clarified model of the concept of culture, these four interpretations might be a useful frame of reference for the purpose of discussing intercultural discourse analysis. Referring to these four definitions, Shah (2004) has defined culture 'as an intertwined system of values, attitudes, beliefs and norms that give meaning and significance to both individual and collective identity' (p.29). Intercultural communication competence, abbreviated as "ICC", is generally defined as the interpersonal interaction between groups of people with various and different cultural background, through having some shared cultural and linguistic knowledge (Yetim and Rayborn, 2003). These differences have sometimes created the problems typical of ICC in virtual contexts due to the fact that in ICC social interactions seem to be more fragile. Since participants in ICC are seen to have 'limited communicative experience in common' (Belz, 2003, p.14), the idea that both sides have usually got similar knowledge of culture and society may be false or at least not accepted in all situations. Referring to this issue in another article, Barnlund (1998) has stated:

*"The problems of ICC become particularly noticeable when one of the partners participating in intercultural contacts only has a partial mastery of the symbol system underlying the*

*interaction - and this is not just to the degree that is typical of a particular sub cultural symbol system” (p.79).*

In this regard, Flower (1994) believes that it is difficult to reach an agreement over the exact definition of inter-cultural capability. Frankfort-Nachmias and Nachmias (1996) believe that we can consider the term ‘interlanguage’ devised by Selinker in language learning area to understand the intercultural issues better. They refer to Selinker (1994) which describes interlanguage as a “between language”, or ‘a learner language which shows a growing proximity to L2’ (p. 65). The similarity of interlanguage to intercultural is ‘a dynamic, often fluctuating process, influenced by changes in knowledge’ (Selinker, 1994 p. 45) about and how to use the related information in both sides of the communication. The interlocutor’s current state of intercultural is presented in an ability to communicate in and understand the other culture- to a degree (Selinker, 1994).

Arguably, each culture is known to have its own ‘internal coherence, integrity and logic’ (Bennett, 1998, p. 236) which differentiates it from another culture and which may not make sense to those who are not members of the same group. But it is also maintained that the experience of living within a group may improve and expand the shared cultural understanding and communication so that they can possibly experience and learn how each cultural group think, act and feel in their daily issues (Shah, 2004; Davis, 2002). This cultural understanding ties the lives of the members and produces what Bennett (1998) describes as ‘similarity-based’ patterns (p. 234). Studies on communication competence have insisted that if the ultimate aim is mutual understanding, knowing the language should be supported by cultural knowledge. Literature on ICC shows many examples of communication failure in which the interactants shared the language, but lacked the needed cultural knowledge which in many cases has led to problems in communication and understanding (Barna, 1998; Bennet, 1998; Latif, 2002).

### **2.3.1 Convergence and divergence concepts**

Convergence and divergence are two main concepts through the application of culture in which organisational setting is conceived. The convergence perspective believes that since societies are getting closer, the similarities in these societies are smoothly overcoming the differences (Kerr and Hiltz, 1982). On the other hand, divergence theory maintains that issues such as different values and behaviours or social opinions will lead to global diversity. Related to this discussion is the issue of the ‘intercultural divide’. Divergence

theory emphasises the intercultural divide as a threat, and states that intercultural difference and intergroup misunderstanding lead to tension in communications. Kim (1991) argues that cultural difference and unfamiliarity between the groups which are not culturally similar may create 'anxiety or lack of attributional confidence to the interactants' (p. 152). He emphasises the need to consider and handle 'inter-group anxiety or tensions related to culture shock' for successful inter-cultural communication (p.155). This means that successful communication needs a capacity to go 'beyond the internalised cultural parameters, and develop adaptive capacity, together with culture- specific knowledge and skills' (Shah, 1998, p.54). Regarding this critical point, Bennett (1998) has stated:

*"Although the successful culture learner will develop along this continuum, it will not necessarily be a smooth process and will probably suffer regressions before further progress is made. Intercultural awareness therefore develops dynamically; changes must occur in an individual's knowledge, feelings, attitudes and behaviours relative to both C1 and C2 for the process to progress" (P. 232).*

However, for the purposes of intercultural studies in virtual environment, the explanation that fits the concept is the idea that culture is some sort of 'social glue' which makes people closer to each other so that they might consider themselves (in spite of all other differences) 'as a cultural group in accordance with another cultural group, and which determines their interactional codes and patterns of behaviour' (Shah, 2004, p. 550). Swan (2002) is of the opinion that for improving intercultural awareness the interactants and groups need to have concern for feelings, attitudes and behaviours of each other. Chomsky (1986) has also referred to inter-cultural learning as a cognitive as well as affective and behavioural affair.

Therefore individual attitudes, motivation and commitment can be regarded as the vital elements in success or failure of communications especially in virtual environments, but they should be studied to see how they present themselves in virtual environment. Of course this argument should be discussed in the wider context of debate on the definition of "intercultural competence" and the ways of implementing it. The 2007 IALIC (International Association for Languages and Intercultural Communication) conference in Hungary on Regions and Identity and also the 2008 IALIC conference in Glasgow constitute key international fora for this debate. Referring to the growth of internationalisation, globalisation and improvement in virtual learning environments, Stringer (1996) believes that similarity-based and transferable skills might be vital factors in the acquisition or improving intercultural capability:

*“To the narrower definition of cross-cultural capability as intercultural communication, I prefer the notion of an ability to operate professionally in a foreign context, a definition which brings together skills and emotions, attitudes and employability” (p. 63).*

In other words, increasing awareness of cultural difference is regarded as a key factor in intercultural relations and intercultural discourse discussions in societies particularly in virtual learning environments (Thorne, 2003). It is clear from this conceptual diversity that this subject area, its theory and methodology, and even the disciplinary status of ICC, have until now not been clearly outlined yet and so still need to be discussed in future research. Actually this gap is one of the main reasons for choosing the discussions in this research as the study of intercultural discourse focuses on a range of factors related to successful intercultural communication (Cohen, Manion & Morrison, 2005).

#### **2.4. Challenges and discussions on ICC (Intercultural communicative competence) and Convergence**

As discussed before, in the area of cultural communication, ICC is described as awareness or familiarity with others’ attitudes, beliefs and values (Belz, 2003; Kramsch, 1998). Others such as Byram (1997) have defined it as the ability to interact in different complicated cultural situations among the people who have more than one cultural identity and language. Belz (2002) believes that the vital factor in helping people to become an intercultural speaker is ‘the ability to decenter’ (p. 71). Referring to the other researchers in this area, he states that we might witness this process when we can relativise our ‘own beliefs, perspectives, values and meanings when faced with those of the other’ (p.73) i.e. see the things from the others’ point of view. Byram (1997) in supporting this idea has stated:

*“Intercultural competence however is not the ability to adjust, adapt or disappear in a new situation and among new people. Nor it is an intuitive state but rather a conscious capacity and willingness to interact, to mediate, to reflect on the ways in which one is interacting with new people in a new situation. It is this emphasis on consciousness, not least on the ability to reflect on one’s own affective response to new situations, which can be perhaps best promoted and neutral in the ‘safety’ of the digital communication” (p. 46).*

Byram has noted that regarding attitudes, ICC may lead to re-socialisation, a process in which individuals look into the present realities in their mind and ‘re-construct (them) according to new norms’ (Byram, 1997, p. 34). The existence of a sense of common culture has been emphasised to be vital in shaping or structuring identity and community (Belz,



2002). In other words, inter-cultural communication requires individuals' own understanding and recognition 'as a doorway of cognition open from inside' (Bennett, 1993, p. 37). ICC in general and dialogue in particular, require us to regard the other side's needs or think about what matters for both sides (Wertsch, 1991). This is what Bahm (1983) has referred to as 'bringing the voices in everything home' (p. 82). In other words, the intercultural speakers may recognise the facts about the other culture, and be able to reconstruct them with information about their own culture (Belz, 2003).

Byram (1997) defines this skill in ICC as the ability to recognise important facts and factors in new virtual environment and understand their hidden meanings and relationship to other factors. These skills, as Belz (2003) has stated, are needed in situations where there is little prior knowledge of another culture. This is what she believes is an important mode of discovery in social interaction. But Belz (2002) is of the opinion that the outcome of the application of these skills is not always a 'balance of opposites or a moderate pluralism of opinions', but relating different phenomena in one culture to others in another culture may result in 'paradoxical confrontation that may need more changes in the process' (p. 81). On the other hand, in intercultural communication in a virtual environment, people might attempt to understand and appreciate others' beliefs and behaviours and not insist on their own ideas and meanings, and consider them from the viewpoint of the others (Byram, 1997). Barnlund (1998) has also used the phrase 'suspended belief' in her theories of communication in order to refer to what computer users must do in order to interact in virtual environments. Barsoum (2006) adds instances of miscommunication. Concluding his discussion, he has stated:

*Concrete curricular objectives for the component of attitudes include developing in the learner (a) a willingness to seek out interaction with the other in a relationship of equality; (b) a genuine interest in the others' point of view on phenomena in one's own culture and in the other's culture; (c) a readiness to interrogate the value systems and assumptions behind one's own cultural practices; (d) a readiness to examine one's own affective reactions to cope with these reactions; and (e) a readiness to engage with culturally appropriate verbal and non-verbal communication in the digital world (p.2160).*

He believes that the main reason that these are considered in their entirety in intercultural communication is that ICC is centrally concerned with serious attention to others' beliefs and putting aside insisting on our own ideas. In other words ICC regards 're-evaluating our

evaluation of other societies, cultures, and individuals' (Belz, 2003, p.100). Similarly, Burgess (2002) analyses the idea of putting aside disbelief about the others and remarks that an analytical move that involves treating the interlocutors as wholes is important to be regarded as the first step as it constitutes the essential first steps of any successful intercultural communication especially in virtual environments. Referring to the similar issues in human relations, McLuhan (1967) coined the term 'global village'. He talked about the ways in which the media and message can cooperatively go on to improve the dialogue among people. This idea has led to a tendency for us to study the practices of other cultures in terms of our understanding. Shah (1998) has commented on the term ICC thus:

*"If a successful cross-cultural experience involves accepting one set of beliefs, understandings and values and adjusting them with the previous ones existing in our minds through a process of cultural transition that enables us to better understand and interact with others in the 'global village', then it is essential to understand the process of culture shock and to develop intercultural competence."* (p. 35).

Regarding this aspect, Pallof and Pratt (1999) are of the opinion that the digital world and virtual communication may bring together people in new cultural environments in which they are eager to experience strategies which encourage the formation and development of collaborative groups and communities. But the main interesting questions are how we should improve our intercultural competencies and manage 'possible culture shock in an unfamiliar culture, through virtual media' (Robson, 2002, p. 23). This will be discussed later, but in the next chapter, the detailed literature on virtual contacts and virtual learning environment as a cultural situation will be reviewed in detail.

## **2.5 Conclusion of the chapter**

This chapter played the role of a guide for the reader as it went through the concepts which are critical for understanding the discussions in the thesis. It started from the review on Chomsky's ideas and Hyme's notion of communicative competence; since one of the major discussions in the thesis is on the students' attitudes in their virtual contacts, it was important to have a review on the notion of intercultural communicative competence here. Due to the importance of the concept of convergence and divergence which reflects one of the research questions, I decided to have short discussion on this concept. The final part of the chapter focused on the challenges and discussions on ICC and convergence since one of the main

targets of the thesis is to see how we can find the processes that determine the tension between accommodation and dissonance in discourse in a virtual learning environment.

# Chapter Three

## Chapter Three: Literature review

### 3.1. CMC and virtual learning environments

Computer-mediated communication has been defined as ‘a process of human communication via computers, involving people, situated in particular contexts, engaging in processes to shape media for a variety of purposes’ (Herring, 2001, p.620). Regarding this definition, it can be stated that much has been discussed of the potential of computer-mediated communication to explore its role in global, cross-cultural communication, yet few empirical research projects have been done in this field (Rheingold, 1993) specifically in the Middle East to see what strategies are used by students to manage the possible obstacles in their virtual communication. On the other hand, many of the concepts, including that of community, have been challenged by the presence of computer-mediated technologies (Wood and Smith, 2004). In recent years, new forms of data have emerged, such as using text from e-mail messages, and e-forums in which people give and take new ideas on a variety of subjects. Crystal (2008) reviewed both synchronous (real-time) and asynchronous (non-real-time) communication highlighting new developments such as virtual reality applications as well as advantages (participants can be questioned over long periods of time, larger numbers can be managed with more open exchanges).

Rheingold (1993) argues that communication technology may create bridges between nations and push them into a new type of community, and ‘narrow the differences between the experiences of their people’ (p. 6). He calls such a community a ‘cyber community’ (Fernback and Thompson, 1995) and believes this can be one of shared perfect experience. Myrowitz (1985) also believes that community might be affected by electronic media's encouraging of the relationship between people with various backgrounds. Blanchard and Horan (1998) discuss the fact that aspects of self that people present in a chat room can be studied to see if they are *real*, even though they may not discuss or disclose the same feelings or thoughts to people with whom they may be physically present. Some researchers assume these Internet communities are real because the people who choose to participate in them feel the communities are real (Blanchard and Horan, 1998; Rheingold, 1993). Through this chapter I seek to

understand and analyse the literature on the relationship building and the establishment and modes of function of a virtual environment specifically a chat room community.

### **3.2. On-line communities and computer mediated communication**

The on-line world of computer-mediated communication (CMC) has changed to an alternative for humans to communicate with each other and is developing very quickly (O'Dowd, 2003). The first virtual communities were born from the on-line bulletin board services (BBS) in the mid-1970s (Jonassen, 2000). It is believed that these early virtual environments were correctly labeled as virtual communities because the required conditions were found there. Jones (1995a) has his own definition of this new social phenomenon. He calls such societies:

*"...virtual communities that are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationship in cyber space"(p. 25).*

So the interest in knowing how interactions or relationships among people are being addressed in the on-line world is rapidly growing through proposals for building communities 'without a physical place' (Haythornwaite, 2006, p.1108); and through virtual environments that differ from face- to- face situations in which the essential verbal and non-verbal cues used in interpersonal contacts are exchanged.

One of the most important and at the same time challenging aspects of CMC and social contexts is 'relationship initiation, maintenance, and dissolution' (Spitzberg, 2006, p. 630) since it is believed that it is this aspect which requires people to be involved in the process of interchanging the messages. While the concept of "virtual community" is still challenging for many sociologists, an even more serious debate has been what exactly a virtual community means; and whether the current activities existing there can be regarded as a community issue (Liu, 1999). The problem of the existence of virtual community was directly and systematically addressed first of all in Jones' work (1997). Others, including Belz (2002), Belz and Müller-Hartmann (2003) and O'Dowd (2003) have also defined many of the obstacles for intercultural learning and communication in virtual settings. In contrast, Kasesniemi and Rautiainen, (2002a) have reported more positive experiences. Regarding knowledge of CMC and intercultural learning, Spitzberg (2006) states that people might be able to get knowledge of CMC through the use of 'on-line information-seeking strategies' (p.640). He believes that CMC

knowledge can be defined as the ‘cognitive comprehension of content and procedural processes’ (p.650) which exists in every appropriate and effective contact in the virtual contexts.

Such interaction is expected to increase in the future as technology and groupware increase the opportunities for simultaneous interaction among team members in geographically dispersed locations (Kerr, & Hiltz, 1982). So it seems that people are increasingly bringing CMC into their daily interactions and relationships (Katz & Aakhus, 2002a) and ‘the value of CMC to relationship-development is likely to increase’ (Spitzberg, 2006, p. 630). Here virtual environment is seen as a space for interaction, dialogue, and the construction of communities with various cultural backgrounds which might provide ‘a flexible structure for the negotiation of different ideas’ (Hamilton and Feinberg, 2005, p.32). Of course virtual intercultural communication has traditionally focused on ‘knowing other cultures and finding ways to bring about more harmonious interaction’ (Belz, 2002, p.72) but it can also be considered as taking place in a situation where participants use their different cultural positions to negotiate better understandings (Rheingold, 2002). Also some researchers go further and believe in a deeper relationship between people and the internet. According to Strangelove (1994) ‘a mutual relationship exists between the Internet’s core technology and its core cultural characteristics’ (p.7). He believes that this new form of communication in the world of technology can have a radical effect on every aspect of our life even the social, economic, and political structures of our cultures.

Although many scholars still consider this virtual world as something ‘outside the realm of "real" community’ (Haythornwaite, 2006, p. 1110), studies of on-line virtual environments have already explored that we may construct new community and create strong relationships through electronic media (e.g. Baym, 1995; McLaughlin, Osborne & Smith, 1995; Reid, 1995; Rheingold, 1993), specifically by considering the reality that ‘face-to-face communication is becoming less common’ among the new generation (Fernback and Thompson, 1995, p. 18). In this environment everybody can have instantaneous communication with many other people through CMC technology. Social constructivism states that ‘the facts of the world are not independent of us as observers and that scientific knowledge is always the result of a situated perspective’ (Paccagnella, 2005, p. 41). So people construct or one might say ‘create their own

reality through an iterative process' where man is in direct contact with a new form of society (p. 43).

The majority of the research on virtual communication has been theoretical or philosophical (Liu, 1999) and few of them are domain-specific and empirical in which just a description of field observation is seen. Of course some research has been done for studying different aspects of a virtual group's life; group communication (Reid, 1995), networked interactivity (Rafaeli, 1990), identity as a psychosocial phenomenon (Bruckman, 1992), language and culture (Paccagnella, 1996). An extensive description of the social characteristics of these virtual environments can be found in Dillon, Wang and Tearl (2007). The less complicated functionalities of virtual environments have been described 'as a playground for group activities which has provided many possibilities for self-expression and group interaction' (Liu, 1999, p. 27). In a similar discussion, Hagel and Armstrong (1997) say that the first virtual communities included scientists using the Internet or virtual environment 'to share data, collaborate on research, and exchange messages' (p. 23). They believe that the way in which the technologies - the web boards, chat rooms, and on the whole the V.L.E provides means and opportunity for communication, both synchronous and asynchronous is worth to be studied and explored (Haythornwaite, 2000). This aspect of virtual interaction is also mentioned in a study on interactivity in newsgroup communication by Rafaeli (1990).

Reviewing the previous research on virtual communities, Jones (1995a) argues that they are more than just a series of computer-mediated communication (CMC) messages, but they need to be examined in order to 'determine when an aggregate of computer-mediated messages meets the requirements of community' (Liu, 1999, p. 783). Also Rafaeli's effort of arguing this concept was mainly based on social aspects of virtual environment, and therefore, of computer-mediated communication (Liu, 1999). He states that people in virtual communities may use the screens to exchange ideas or knowledge and engage in intellectual discourse, and make future plans (Rafaeli and La Rose, 1993). Other researchers have studied and paid attention to the connection between varieties of cultures and virtual community. Fernback and Thompson (1995) believe that virtual communities should be studied deeply to see if social relationships can be born in virtual learning environment 'through mutual contacts' (Jones, 1995a, p.18).



### **3.3. Intellectual communities in the V.L.E**

In recent years many people in the world of on-line cultural communication, specifically the younger generation and scholars in CMC have paid a lot of attention to intercultural learning and its final goal 'intercultural competence' (O'Dowd, 2003, p.130); however, their exact meanings are still under debate and lack agreement (Abdelnour-Nocera, 2002). Some researchers have focused on community building in on-line settings and analysed how and to what extent a virtual community can be shaped and developed. One theory of community-building emphasises the signs of community as making friends or acquaintances, involvement in long on-line discussions, and development of mutual friendships (Smith, 2003a). Hu (2000) and Negretti (1999) and Lee (2004) have presented 'overviews of cognitive, affective, and skill-based aims' (Abdelnour-Nocera, 2002, p. 22) while others have focused on interculturally-oriented system (Neuner, 1997) and the activities needed for developing intercultural competence. Edmondson and House (1986) believe that intercultural learning in a virtual environment needs a clearer definition because some have defined it as 'a learning objective', and some others as a 'learning process, or as a particular form of communication' by some other researchers (O'Dowd, 2006, p. 90).

Early studies of virtual communication among students (e.g. Connelos and Oliva, 1993; Cummins & Sayers, 1995; Warschauer, 1996a) showed its abilities for assisting intercultural understanding in virtual environment, while later accounts (e.g. Fischer, 1998; Kern, 2000) stated that on-line communication may not automatically lead to cross-cultural understanding (Kern, Kayany and Wotring, 2004) and further studies are needed to find the strategies applied by the people in virtual environment. The results of other studies imply that we may need a radical change in our concepts of what makes up a community of human beings (Macfadyen, 2008; Jones, 1997) since it seems that group communication does not necessarily need face-to-face contacts any longer. Studies on virtual community have often discussed about what might take place within such communities, and where they can be found (e.g. Smith, 1992). So, in this environment the focus is not on a single culture but on intercultural communication in which the central attention is on interaction among participants who might identify with different cultures at the same time (Hewling, 2002). Abdelnour-Nocera (2002) believes that it is very important to consider the fact that the behaviour of people in this environment should be 'judged from within that context and not by the learners' own

cultural standards'. This, he says, 'will bring intercultural sensitivity' (p.12). About this ability and its critical role in understanding virtual communities Abdelnour-Nocera (2002) has said:

*" This ability to step back from one's own cultural background and critically identify the original cultural reasoning behind beliefs, actions and behaviour is described by Bennett as "constructive marginality" and reflects much of what other writers have described as "critical cultural awareness" (Byram,1997), intersubjectivity and "cross-cultural capability" (Killick, 1999)" (p. 17).*

Some studies suggest that in this environment learners may no longer need to reject their own culture and totally accept the target culture, but rather to find what Kramersch (1993) describes as a "third place" which is a place between the home and target cultures (Abdelnour-Nocera, 2002, p .14) and is much similar to the description of the "third space" offered by Bhabha (1994). But Thorne (2003) has carried out further research of this exchange among students, saying that although communicative practices are highly dependent on their medium, they may not easily adapt themselves to the new environment (p. 53) in addition to the fact that cultures of use surrounding a communication medium (e.g. discussion forums, e-mail or messenger services) may be different across social, cultural or even institutional groups.

In another study Hewling (2002) refers to Scollon and Scollon (2001), when he discusses culture, saying 'Cultures do not talk to each other; individuals do' (p. 138). Hewling discusses that through the increasing virtual environment, people may achieve cultural hybrids or "third identities" that require the interpenetration of at least two national cultures. Hewling (2002) is also of the opinion that studies should be done to see how virtual participants can create 'a new "third" culture precisely through their distinctive involvements on-line' (p.32). So, he concludes, a new shift to analysing virtual intercultural communication is needed. Kramersch (1993) suggests that in such cultural environments we need to regard ourselves in a place which locates us 'between the cultures we grew up with and new cultures we are being introduced to' (p. 236). This suggestion intensifies an important aspect of virtual communication. Abdelnour-Nocera (2002) believes that such descriptions 'underline the learners' possible distance from both the home and target cultures' (p.14). Focusing this point, Dixon, Kuhlhorst and Reiff (2006) believe that interaction among students in on-line environment is one

of the most spectacular features of virtual space which should be studied widely. They have also discussed the issue of interaction in this context and say that a virtual environment is a place which may encourage people to undertake 'experimentation, sharing of ideas, increased and more distributed participation, and collaborative thinking, but there should be empirical studies to see how this might happen' (p.32).

Regarding this concept Jones (1995a) believes that interactive communication is a necessary condition for presenting the existence of a successful virtual community. This condition was actually first analysed as a fundamental communication concept by Rafaeli in 1988 in which he tried to describe various communication forms and to make a link between this environment and interpersonal communication (Rafaeli, 1988). Other examples include Smith (1992) who defines virtual community as a growing system with many-sided contacts that mainly occur in and through CMC. Rheingold (1993) states that there might be 'sufficient human feeling' (p.34) in virtual communities which is able to construct a net of personal relationships in virtual space which require interactivity by nature. In another study on the students in a virtual learning environment Smith (2003a) found that communication in this environment offers a sort of solution to 'the constraints posed by time and space on geographically dispersed organisation seeking to communicate with each other' (p. 42). Please see tables 8 and 9 in this study to know what successful strategies the students used to overcome such issues. The notion of virtual community and creating it is discussed in the following part.

### **3.3.1 Creating virtual communities**

Interaction has been regarded as one of the vital components of learning experience either in traditional education or the new distance system (Dixon, et al., 2006). Regarding the creation of new communities in a virtual environment Thurlow, Lengel and Tomic (2004) have stated:

*"That relationship-building and social intercourse are both central to, and facilitated by, technologies for communication should be in no doubt even though popular opinion still feeds on the once-popular scholarly idea that computer-mediated communication is necessarily asocial and/or antisocial for a discussion of these arguments"(p. 78).*

In these researches the term "virtual community" is much used to refer to the active participation of people on the Internet (Seddon and Postlethwaite, 2007; Hagel and

Armstrong, 1997; Hof, Browder, and Elstrom, 1997). The emphasis on 'creating community' is supported by the studies that show the positive results of interaction of individuals and the learning communities in this environment (Liu, 1999). These studies show that accepting the concept of virtual community can increase the willingness to share information and resources and 'set the stage for collaborative learning' (Haythornwaite, 2000, p. 210). Haythornwaite has also found out that existence of strong communal relations may improve the exchange of information and support among all members; this might bring 'commitment to group goals, cooperation among members, and satisfaction with group efforts' (p. 212). But he has also stated that trust in the community might not necessarily increase contribution and support in the new environment. Raybourn, Kings and Davis (2003) refer to the issue of trust and say that it can create a culture from the participants' 'co-creation of narratives and the subsequent communication events transpiring in the virtual space' (p. 106).

In another study by O'Dowd (2003), the emails and on-line contacts of the students were analysed and he found out the students who had a successful and interculturally strong relationship with their partner were those who had exchanged e-mails in which they had asked questions which encouraged feedback and reflection from their partner and tried to 'develop a personal ("friendly") relationship with their partner'; as opposed to studies in which the participants were simply focusing on the tasks they had been given (Abdelnour- Nocera, 2002, p.16). O'Dowd (2003) says that in their contacts the students recognised what their partners needed and reacted to them, answering their questions and encouraging them to write more about the topics which interested them. However, as also stated by O'Dowd (2003), communication is not the only significant aspect of cultural and individual life, but it is vital to be discussed in detail. So it is worth studying how students become successful in making a strong community in such virtual environments. Regarding effective communication and the keys to this issue in on-line communications, Gudykunst (2002) believes that virtual communication can be successful when partners interpret the message and understand what others meant by what they said in the message and attach a similar meaning to it. Haythornwaite (2006) believes that in this way people enjoy their community membership by feeling a greater sense of well being and happiness so that they are more eager to support others in times of need.

Understanding these specific features of the virtual community, where people construct their own way of life by means of a language contact, Abdelnour- Nocera et al. (2007) believes, needs a methodology and an epistemology that clearly shows the notion of a 'multiple-face, a non-physical person who is able to create as many personalities as "worlds" he or she accesses' (p. 168). His study shows that in spite of the disappearance of their physical space, participants in the group have improved interpersonal relations and understanding because they learn how to deal with and resolve conflicts (Liu, 1999). He believes that these learners provide each other with multiple resources; information, encouragement, social and emotional support as they both get involved in giving and receiving these resources (Haythornwaite, 2000). O'Dowd (2006) has got a different viewpoint and states that virtual communication is often 'highly strategic' and partners sometimes decide to communicate 'in strategically ambiguous ways' (p. 92), so that they may create more obstacles than supports. For clarifying this aspect it is worth reviewing the studies on space and identity in virtual environment.

### **3.3.2 Space and identity in virtual environment**

Regarding virtual space in general and identity discussions in such spaces specifically, Usher (2002) believes that it has become 'a complex and contradictory notion' (p. 17), but at the same time it is stated that this is useful as it might extend our understanding of social relations in virtual space. Benzie (2004) refers to Kern as one of the first to recognise the renewed importance of space that developed a 'trialectic' of space (p.3). He later on divides this space into three kinds, based on the ideas discussed by Soja (1996).

*"The perceived or 'real' space, the conceived or 'imagined' space and the lived space, a combination of both the 'real' and the 'imagined'" (Soja, 1996, p. 10).*

This multidimensional perception of space focuses on the process of the 'production of space' rather than space itself (Shield and Hower, 1999, p. 167). These considerations of the complex relationships of spatial perception opened up different ways of thinking about virtual space particularly in terms of social relations (Benzie, 2004). Benzie (2002) continues:

*"Thus categories that are very different can work together to generate new knowledge and understandings in a 'third space'. Thus 'third space' acts as a scaffold, a way of*

*seeing connections and empowering the inhabitants of social spaces. It is not a static or fixed space but one which is continually open to challenge and change” (p. 67).*

On the other hand, if ‘third space’ can be a useful concept in understanding intercultural communication what can it offer to an examination of such virtual environment? An examination of the texts created by the students might indicate what is happening in virtual intercultural communication. Some of the studies of how users have adapted to the medium or the topics they choose (Bloch, 2002) provide some insight into the development of relationships but this can be extended by using a more detailed discourse analysis of the students’ texts or chats (Benzie 2004). The analysis can indicate if participants are attempting to break down the boundaries between their different cultural positions or ‘reinforcing power differentials’ that might exist in the relationship (Doherty, 2004, p. 9). The analysis can search for any attempts to explore the potential provided, both by the virtual space and by third space, ‘to enhance virtual communication’ (Roed, 2003, p. 168).

Research in this area has also been influenced by the spatial theories of Bhabha showing the virtual to be ‘a cultural space where the knowledge(s) of students from different cultures may be shared in a ‘separate thinking space beyond the usual learning environment’ (Williamson and DeSouza, 1991, p. 160). In his definition the positive nature of this creative virtual space is also recognised to improve the learning and communication experience ‘by helping to engage students, by opening up an affective channel thus providing a new dimension not found in face-to-face communication’ (Sutherland, 2002). Moran and Havisher (1997) have focused on the type of freedom that can be created in virtual spaces and say that it may allow students and academics ‘more freedom to construct a range of possible selves that actually enhance their roles as student and teacher’ (p.92). Supporting this idea, Ma (1996) says that a new self may be developed and participants can share their thoughts ‘without being distracted by other social cues’ (p.179). Regarding this aspect, in his (1994) book Bhabha adds:

*“It is in this struggle for identity that ‘newness enters the world’ and the productive nature of the third space is realised. Rather than stereotyping and making assumptions about how the ‘other’ should act, the ‘third space’ allows each to search for an understanding of the world of the ‘other’. This process frees the mind to explore new*

*possibilities for relating that rely on mutuality and reciprocity* (Bhabha, 1994, p. 212).

Thus, these studies state that virtual space can be characterised as a space where there is 'a multiplicity of possibilities and potentialities' rather than as an empty space (Usher, 2002, p.51). However, Benzie (2004) has a different version of this idea. He believes that because of the lack of visual cues available to communicators, virtual space is seen more as 'neutral territory that might not allow additional identity positions to be explored' (p.4). But he also refers to the point that 'one of the most dramatic intersections of CMC and virtual contexts is in the arena of relationship initiation, maintenance, and dissolution' (Spitzberg, 2006, p. 643). Related to this aspect are the results of an investigation of what is taking place through virtual interactions. The results have shown the potential for elements of third space interaction which can 'inform a more inclusive climate for interactions between students and also the instructors' (Erlich, Erlich-Philip and Gal-Ezer, 2005, p. 481). However, Erlich et al. (2005) state that the results of their research could not point to practical strategies for the V.L.E users and thus to 'enhance intercultural communication' in the university on-line discussions (p. 480).

It is worth noting that these papers in search of common definitions have served merely to reveal the many different interpretations of these on-line communications, as well as the different levels of importance which we may feel should be given to this goal. So, it has become a main point of discussion in the literature on intercultural learning and communication, thereby confirming to a great extent its 'relevance and practicality' (Abdelnour-Nocera et al., 2007, p. 163).

### **3.4. On-line Discussion Forums**

On-line discussion groups tend to have a social element to them similar to other forms of communities. The use of a virtual environment for social support is an area of major social research. Burrows, Nettleton, Pleace, Loader and Muncer, ( 2000) outlined a research agenda for British social policy in relation to one aspect of the V.L.E use, that of on-line self help and social support which they term as virtual community care. These studies show that virtual environment can be very dynamic; many means are used in this environment separately or in combination, including text-based chat rooms and forums that use voice, video text or avatars. Specific characteristics of virtual social

support, compared to traditional social support (friends, family, therapists, etc.), are: anonymity; discussion of embarrassing or deeply personal issues and not having to physically see the faces/reactions of people while communicating (Crystal, 2008). Murphy and Levy's study (2006) shows that some students were successful in the process of building relationships online through textual dialogue, although some others were not. He believes that using the discussion forums in the V.L.E might provide unique ways of expressing self and constructing social reality, but he also believes that we certainly need more empirical studies to prove this. So a discussion of the social relationships in virtual communication would not be complete without mentioning the space in which these contacts happen.

#### **3.4.1 The rooms**

In Discussion Forums, spaces for talking are often created in the form of rooms where members can contact with each other. Internet chat rooms are becoming more widespread and focus on numerous topics. The nature of these places reflects the general character of a "given board" since those who get involved in virtual communication may know more about 'the culture of their communication partners than those who do not about the same culture' (Herring, 2001, p. 620). In other words, those from different cultures engaging in the discussions in the virtual environment do not have a common physical place, so they are not limited 'by any particular set of cultural rules' in the new environment (p. 621). Furstenberg et al. (2001) in another study found that the strategies the students used in communicating with each other in chat rooms differed from one student to another, which might reflect the nature of their contact. Gumperz and Drucker (1992) also note that the traditional idea of physical space co-occupied by communicators is replaced by electronic space or rooms, which might reflect the students' problems or success in their on-line communication. As such, it is recognised that these virtual spaces or rooms may show 'communities of interest rather than of geographical proximity or of historical or ethnic origin' (Furstenberg et al., 2001, p.78).

#### **3.4.2 The language: the written discourse**

Email and (written) chats are often regarded as speech written down or as a hybrid linguistic form and thus 'they require on-line written conventions that do not apply in other writing contexts' (Facer and Furlong, 2001, p.459). Many studies have addressed the question of how we can promote negotiation of meaning on-line (Kern and



Warschauer, 2000). Some analysts like Antaki (1994) examined how particular rhetorical and conversational devices are used in virtual contexts. It has been suggested that virtual communication might provide an ideal space for everybody to have better interaction and communication, since the written nature of the situation ‘allows greater opportunity to attend to and reflect on the form and content of the communication’ (Kern, Kayany and Wotring, 2004, p. 108). Yet most of the early studies on the linguistic nature of virtual communication focused on counting or categorising students' comments rather than qualitatively analysing how and in what ways students actually ‘negotiated meaning’ with each other (p.106). Of course some researchers have recently studied on how speakers may have shared understanding or interpretation in this environment (Blake, 2000). Antaki (2004) has also noted that:

*“There are a variety of terms to describe the sort of discursive resources that speakers may share in such environments. For instance, Potter and Wetherell (1987) refer to shared ‘interpretative repertoires’, Bijker et al. (1987) and Castells (2003) to ‘ideologies’ and Parker (2002) to ‘discourses’. Each signals a different set of theoretical and analytic assumptions” (p.32).*

As it can be seen from the quote, Antaki, like some discourse analysts, has considered it important to study the strategies or message elements the students use in their virtual communication. Also, it is worth mentioning here that some researchers regard the messages in such forums as written discourse (Thurlow et al., 2004). In written discourse it is necessary to identify ‘the source of a message’, usually at the beginning of the communication (Schegloff, 1999, p. 567). These message elements are necessary for clear understanding when communication takes place between persons separated geographically, hierarchically, and/or socially (Potter and Wetherell, 1994). In electronic written conversation, the students may find a space in which, they can use the language without anxiety and don’t ever think of themselves as writing sentences: they raise serious questions, ‘make points, offer evidence, ask questions about others’ points, and so on’ (Newlands, Anderson, and Mullin, 2003, p. 338). Thurlow et al. (2004) says that we need to observe and analyse the language of these chats in its own terms since linguistic and communicative practices of these virtual communications which might emerge from ‘a particular combination of technological affordances, contextual variables and interpersonal priorities’ (p.25) have not been studied so far.

Regarding the importance of studying the language of virtual environments Thurlow (2001b), in a discussion on the genre of such contacts- either on-line or offline, says that ‘all genres are necessarily and always hybrid’ (p.116). Keeping on this discussion, Thurlow et al. (2004) add:

*“Nonetheless, these contacts are communicative events characterised not only in terms of their linguistic form but also their conversational or interactional function. Although some appear more informational or content-focused, the vast majority of which are clearly relational - so much so, that this solidarity function becomes an almost genre-defining rule”* (p. 68).

So, it is worth mentioning that successful virtual communication depends on the use of language and the strategies. This is also the case when even two participants in such virtual channel have private contacts and exchanges to each other while chatting in the same channel. Liu (1999, p. 790) believes that addressing a specific participant in the virtual public forum by including his/her name at the start of chat line, while having message references in content (referring to what that person said in his or her previous message), makes interesting patterns of interaction. This aspect of chat room characteristics will be discussed more in later stages of this review. In another discussion on the language in such environments, Thurlow (2001b) has interestingly added that what gives these chats and messages a distinctive generic feel is ‘the combination of their comparatively short length (in lines), the relative concentration of non-standard typographic markers; and their regularly ‘small-talk’ content and solidarity orientation’(p.12). In order to clarify this linguistic point of the virtual environment, the next part will focus on the interaction in this environment.

### **3.4.3 Interactive environment**

In some studies there is a focus on the informal interaction that is possible in such environment and how it can help develop relationships (Swales & Feak, 2004; Bloch, 2002). This implies the possibility of improved educational and cultural outcomes, as students build relationships with each other and academic staff as well (Benzie, 2004). Dynamic and interactive communication, based on Haythornwaite (2006), has also been related to ‘increased satisfaction, performance quality, learning, sociability, and cooperation’ (p. 1106). Regarding this aspect of the discussion, Liu (1999) states that the people having contact in this space may find each other later in virtual places again

and interact as a group in a different route or they may keep their contact channel live for future communications but, he adds, to see if this happens, we need to do more research in virtual communication among students as previous research has not clearly proved this. Of course it is believed that any attempt at analysing a virtual environment and its on-line activities without first comparing its features against empirical characteristics of community is not methodologically accepted (Liu, 1999). Although this research does not deal directly with distinguishing virtual communities from face-to-face communication settings, it has strong implications for such studies.

Thurlow et al. (2004) shows that students in virtual environment experienced the potential of the new environment to close the gap between them in their educational settings. But Walther and his associates (Walther 1996; Walther, & Parks, 2002) argue that, virtual communication might not allow relational development. So, based on Benzie (2002), there should be an attempt to see if this environment can create an additional space that 'adds an affective dimension to the relationship' (p. 38). She states that one reason that this might happen is because the medium allows direct contact to others 'without requiring a gatekeeper, as would have happened in the past' (Ma, 1996, p. 179).

There are some studies which look at meaning negotiation focusing on linguistic and cultural realisation. Pellettieri (2000) studied task-based real-time computer interaction by analysing the modifications that learners made in response to negotiation signals as well as to corrective feedback. Using patterns taken from oral interaction, she discussed how computer-mediated interaction provided 'a useful mechanism for helping learners achieve higher levels of cultural awareness' (Kern and Warschauer, 2000, p. 13). Kitade (2000) also tested how students of Japanese benefited from situations in which they had interactions with native and non-native speakers in synchronous communication. She found that learners used strategies such as 'self-correction and collaboration' to exploit the linguistic and interactional features of on-line chatting (p. 154).

Another study of relational communication in this context indicates that the 'depersonalising effects of the medium' are limited to initial interactions and that changes in relational communication might occur as a result of developed interactions (Walther & Parks, 2002, p. 64). According to Hakken (1999), since some

communication barriers common to FTF communication, such as race, physical appearance and language accent do not exist in computer-mediated interactions, 'a more egalitarian situation is created in which people judge each other's mind rather than appearance, race, accent, etc' (p.130). He believes that this should be regarded as the most important criterion as the students in the V.L.E tend to be more at home than they are in FTF situations. Reid (1995) argues with this and notes that in virtual contacts it is not immediately apparent what forms of social etiquette are appropriate at any given time. He believes that the idea of expressing oneself more strongly in a virtual environment than one would in other communication settings should be studied more to be proved. On the other hand, Kötter (2003) discovered uninhibited verbal behaviour in computer-mediated decision-making groups; while Wu and Hiltz (2004) identified 'the frequent occurrence of extreme verbal disinhibition (aggression and self-disclosure) in virtual contacts' (p. 142).

Finally, the growth of on-line interactions beyond geographical, linguistic, cultural, social, and institutional lines strongly invites researchers to undertake more detailed investigation into what Toyoda and Harrison (2002) characterise as the 'discourse level of negotiation of meaning' (p. 89). Ware (2003) in her study of asynchronous interactions between German and American students found out that the occurrence of meaning negotiation itself shows an important fact that there should be a strong willingness 'to maintain prolonged engagement in interaction, even in the wake of cultural misunderstandings that can occur at the discourse level'(Kern et al., 2004, p. 112).

### **3.5. The relationship between virtual and non-virtual communities**

Intercultural communication competence (ICC) specifically in virtual environments has been focused on by some researchers, particularly those who are in the field of communication studies (Warschauer, 2002; Tolmie and Boyle, 2000; Smith, 2003a; Dillon et al., 2007; Crystal, 2008). In the last twenty years, there has been a growing interest in studying ICC in virtual environments which involves 'the knowledge, motivation, and skills to interact effectively and appropriately with members of different cultures' (Wiseman, 2001, p. 62). There are a number of implications involved in this conceptualisation in virtual communications; for example it is argued that it might lead to a new era of more democratic cooperation and united community (Shah,

2004). In other words, in engaging in this contact of cultures, the students are involved in a very worthwhile process in an experiential system (Smith, 2003a) that may form an understanding of 'different values, attitudes and customs which leads to a rethinking of one's own cultural values' (Lee, 2004, p. 89) and can provide students with a wider perspective from which to view their own experiences. In addition, there has been some argument that a virtual community is different from a real life one and that it ought to be treated differently in terms of size (Liu, 1999). Some researchers in the V.L.E believe that a group, as a community:

*“ must have a large number of participants to allow some interaction to happen -- not just one or a few incidents of interaction between only two individuals, but a significant level of interaction among many individuals”* (Lee, 2004, p. 90).

But there are other studies which reject this and say that, in spite of the disappearance of ordinary physical space, participants in the group can develop interpersonal relations and continue their talks and also friendship in another virtual place or even in face-to-face situations (Liu, 1999). This idea may lead us to the view of the V.L.E as a space in which culture can be constantly 'created and recreated' (Abdelnour- Nocera, 2007, p.162). Supporting this idea, Byram (1997) suggests that in this environment people need to be able to 'elicit from an interlocutor the room concepts and values of documents and events and to develop an explanatory system susceptible of application to other phenomena' (p. 53). In this way students may be able to construct a new perspective towards the others with different cultural and linguistic background (Baym, 1995a). The other very important point which seems to be significant in here is the fact that the binary position which positions one side or category as dominant and the other deficient was not seen in some studies which focused on students' on-line communications (Schegloff, 1997). Regarding the importance of this aspect Benzie (2004) says:

*“The us/them binary puts in place boundaries that leave no space in between, no potential for a 'we' in which working with cultural difference can produce new and creative meanings”* (p. 49).

On the other hand, Benzie (2004) says that her students showed the potential to 'draw selectively and strategically' from the two opposing categories to open new alternatives (Soja, 1996, p. 105). Supporting this view, Tella and Mononen-Aaltonen (1998) have

regarded on-line dialogue as 'interaction between self and other and the incorporation of the latter's conceptual horizon to one's own perspective' (p. 13). They believe that in this way the students might experience a new perspective to express the deeper cultural and contextual meaning which is different from their cultures (O'Dowd, 2006). While doing this, they consider what these cultural behaviours actually mean to them and their partners. Reid's (1995) study contradicts this so that he notes that in virtual communication it is not very clear 'what forms of social etiquette are appropriate at any given time' (p.170), although this environment may provide them an important practice in improving skills of interpreting and connecting cultural symbols as well as realising what Byram (1997) describes as 'critical cultural awareness' (p. 63).

### **3.6. Theoretical discussions on the virtual relationships**

The embeddedness of virtual community in daily life experiences and its impact on the communication practices and construction of identity, as discussed previously, has made on-line community a widespread research area which demands increasing investigation and theorising (Benzie, 2004). One of the relational questions of virtual communication has always been whether such mediated relationships are different qualitatively from real life relationships (Ingram et al., 2000). Different ideas and theories on the virtual relationships are reviewed in this section.

One theory (e.g., Walther, 1996) predicts the V.L.E. to be able to help improvement of intimacy because of 'participants' hyper personal affordances' (Spitzberg, 2006, p. 632). McKenna et al. (2002) hypothesise that the V.L.E can make greater intimacy because of it's: '(1) anonymity, (2) lack of gating barriers (e.g., physical attraction cues), and (3) facilitation of locating those with shared interests' (p.26). Also Jones' "virtual settlement" theory (1997) discusses specific conditions for the existence of virtual community. These features are predicted to increase 'self-disclosure and expression of true self' (Spitzberg, 2006, p. 642). By using the term "virtual settlement" he is actually referring to the cyber-space (virtual environment) in which a virtual community operates. In this theory Jones has discussed the fact that virtual settlement is 'a prerequisite condition for the emergence and existence of a virtual community, and that existence of a virtual settlement is proof of the existence of a related virtual community' (Jones, 1997, p. 23). But at the same time he emphasises that this should be proved in an empirical research.

Other researchers in this area (e.g. Walther and Parks, 2002; Whitty, 2002) believe that virtual interactions, compared to FtF contacts, do not appear to show greater self-disclosure and depth. Their survey revealed that just one-third of people believe it is not hard to express frank and unpleasant ideas in the V.L.E, which is ‘an important benefit for openness in family and friend relationships’ (Spitzberg, 2006, p. 643). But other studies show that when community is regarded as what activities people do together, rather than where or through what means they do them, it becomes clear that community can exist out of geography or physical neighborhoods (Wellman and Gulia, 1999). Haythornwaite (2006) says that in this environment people might be able to create relations and ‘community with otherwise unreachable others’ (p. 1109), perhaps based on a mutual interest shared with other people around the world. Some research also shows that virtual relationships can establish ‘closeness and intimacy more quickly than do real-life relationships’ (McKenna et al., 2002, p. 20). On the other hand, other research showed that virtual interaction could not clearly increase enjoyment of the interaction among the participants. For example, McKenna et al. (2002) found that the relationship between liking and the processes of uncertainty reduction and depth of revealing the ideas was not greater in virtual interactions than in FtF.

In the case of the V.L.E, the interactivity of the technology is one of the aspects of the physical environment that has received the most attention. Most current studies agree on at least one central point, that ‘the more interactive, rich, or adaptable a medium is, the more it should facilitate socio-emotional, personal, complex, and subtle communication processes’ (Spitzberg, 2006, p. 658). This might support the idea that longer-term interactions apparently allow the V.L.E to strengthen social and relational interaction (Smith, 2003b) especially when identification with the group as a whole rather than individual difference among members is important. Indeed, the virtual Internet-formed relationships were as stable over a 2-year period as FtF relationships in comparable studies. Similarly, Parks and Floyd (1996) studied the V.L.E-based relationships and found consistent evidence of relationship development and intimacy which were above the midpoint of criteria that they had regarded in people contacts (Spitzberg, 2006). Here, the notion of interactivity is shown to be central to virtual settlements. So virtual settlements, as stated by Jones (1995a) can be defined as:

*“...a cyber-place that is symbolically delineated by topic of interest and within which a significant proportion of interrelated interactive group-CMC occurs” (p. 31)*

In another study it was found that, in both virtual and FtF relationships, people accepted their relationships as satisfying and as providing opportunity for their personal and social growth (Cornwell and Lundren, 2001). This study might reinforce the idea that as virtual relationships improve over time, ‘attributional confidence’ in respect to on-line relations might gain greater equivalence with FtF relations (Walther and Parks, 2002, p. 338). In summary, research demonstrates that in some cases the V.L.E has provided a better situation for the pursuit of relationships, their development, and their management, although the results of some other research contradict it (Lea and Spears, 1995). Therefore, a thorough understanding of the role of the virtual environment in opening a new chapter in human relationship and also the strategies the people use in solving their problems in their virtual communication has become a priority for current researchers.

### **3.6.1. The socio-cultural aspect of virtual communication and on-line communities**

Many studies have focused on the question of whether a virtual environment has powerful impacts on social relationships among the people (Kollock and Smith, 1996) as can encourage wider participation without concerns over the social status of the people. Some studies believe that social hierarchies are vanishing and that ‘flatter, more egalitarian social organisations’ are emerging (p.118). These studies indicate that networked communications, can lead to a renewed era of open participation and revitalised community (Kollock and Smith, 1996). Collaborative dialogue, which is a significant factor in any successful social contact and is normally based on a culture-sensitive and respectful inquiry process, is seen to be present in some of the previous studies in which conflict parties tried ‘to suspend their own assumptions regarding the conflict situation’ (Toomey, 1999, p. 210). It is worth mentioning that different aspects of the discourse quality in virtual contacts have also been studied (Kern, 1998; Smith, 2003b). The findings demonstrate, among other things, that in some cases the V.L.E has been able to promote negotiation and intercultural exchanges among the people. These studies have their origins in the global learning networks established by Freinet (1994) in France in the 1980s and later by Lodi in Italy in the 1990's (Cummins and Sayers, 1995).



Other studies on virtual learning environment show that sometimes in these environments the community's culture is seen as shared social knowledge and practice produced inside a dynamic space (Belz, 2003; Shah, 2004; Paccagnella, 2005); this includes sociability, giving power to the interaction flow and a normative dimension which can shape the identity of the group. But other studies say that more research is needed to see if communications such as text-messaging, email or on-line contacts can be regarded as systems which can improve sociability (Thurlow et al., 2004, p. 86). Other researchers, for example Flavian and Guinaliu (2005, p. 410) came to the idea that a virtual community stresses a communality of interests that can lead to a 'communal spirit and apparent social bonding', since, they believe, in this environment culture is regarded as a process of 'ongoing negotiation' (Hewling, 2005, p. 32). This negotiation can be seen in educational interaction, which is visible on-line in various forms. Studying culture in such an environment, he believes, is not about finding definitions but, rather, a matter of seeing how, when, and why definitions are made. It is believed that in this new space culture is not static, but 'an active process of meaning making and contest over definition, including its own definition' (p. 25). Thus, such studies state that in virtual environment culture might evolve, as an ongoing process of 'sense-making at any particular point in time (Gee, 2000, p. 188).

From this viewpoint, the virtual environment as a context within the social world is a space where many elements, e.g., people, places, ideas, beliefs, hope, etc., come together as a context where every activity is undertaken to position and organise everything into meaning (Hewling, 2005). These meanings then feed our understandings for further communication and negotiation (Gee, 2000). Some studies of on-line communities show that members have not displayed behaviours that might identify the presence of community culture. In these studies, on-line participants in e-mail networks or chat rooms have not been able to support common goals and a strong commitment to the purpose and tone of their community (Baym, 1995; Reid, 1995; Rheingold, 1993; Dillon, 2008). But the results of other studies state that members in the virtual environment feel they share a common history and a common meeting place. Smith (2003b) believes that members try to socially 'construct behaviours, and enact community rituals' (p.41). He believes that this might provide an identity for the group and 'a way of knowing how to behave and how to anticipate the behaviour of others' (Haythornwaite, 2006, p.1108), as well as identifying those who do not belong to the

community or who are new to that environment (McLaughlin, Osborne and Smith, 1995).

It is therefore important to ask what the vital points in the intercultural interaction in virtual environments are and more over what is the potential of viewing these moments as moments of cultural production (Scollon, 2004). Reeder and Macfadyen (2004) believe that the key situation is the on-line discussions amongst participants in an emerging on-line community since these are 'the manifestation of cultural production' (p. 89). To view understandings based on these ideas they analysed some asynchronous discussion board behaviour of some students within a joint interactive environment in which they found out that as a result of interaction among all the members a new "third" culture is being emerged (Hewling, 2005). This will then provide a shared context of understanding according to 'the quality and nature of the interactions' (Reeder et al., p. 40).

### **3.7. Culture and virtual communities**

Lindsay et al. (1999) discuss the role of culture in group environments such as the V.L.E and say that culture manifests 'groupness' within a virtual space. They have also discussed this view in another form, emphasising the role of culture in technology. They believe that technology has got a special culture for itself, so that with the many types of group that may emerge on-line, 'another dimension of groupness has become available' (Levy, 2007, p. 193) which has provided new opportunities for groups and communities to be created and maintained (see Kim, 2000). On the other hand, Walther and Parks (2002) argue that, regarding its limitation in the transmission of nonverbal cues, 'virtual culture might not allow relational development' (p.39). Levy and some other researchers have disagreed with this and focused on the identity questions in groups in such virtual environments. They have indicated that:

*" On-line groups require us to revisit questions of identity, membership and community and the ways in which individuals become members of such groups, and how their messages contribute to the group's identity and culture" (Levy, 2007, p. 188).*

Levy (2007) has also stated that a whole system of culture learning can emerge from interactive exchanges, rooted in virtual environment which allow for action and reflection and urges a "dialogue" in the people's mind. One claim often made for the V.L.E is that its new structure of discussion lets students silenced in traditional

classrooms talk and express their ideas easily (Yetim and Raybourn, 2003). For example, Bateson notes that in a networked classroom, students do not have to 'compete for the floor' (1988, p.188), a point which was later emphasised by Cooper and Selfe (1990) in the context of an e-mail conference.

Regarding general definition of culture in the V.L.E, it should be mentioned that the conceptualisation of culture has undergone a serious change in the field of ICC and virtual communications (Wiseman, 2001, p.199). In the traditional approach, researchers typically use aspects such as race, nationality, ethnicity, or geographic region to operationalised culture. But the recent perspectives based on Collier's (1996) 'cultural identity theory', believe that the constructs of culture and cultural identity are concepts that are created through interaction with others and 'take the forms of patterns of meanings, interpretations, and rules for behaviour' (Wiseman, 2001, p. 146). In this perspective the focus is on appropriate communication including the use of language that is expected in a given context, and actions that are appropriate for that situation. This criterion requires the participants to show that they understand what an acceptable behaviour in a given situation is.

Warschauer (1999) and Kinginger (2002) go further and see networked cultural communication as being particularly suited to dialogic interaction as, they believe, 'it allows knowledge to be socially constructed through interaction with others in various on-line environments' (Abdelnour-Nocera, 2002, p. 16). These new definitions of culture allow for the possibility of virtual-based communities and many sociological definitions of community have included the possibility that virtual communities are new forms of community (Belz, 2003; Cononelos and Oliva, 1993). Having a more practical discussion on this aspect of the culture in virtual environment, Levy (2006b) says:

*"The on-line environment adds further layers of complexity to the culture concept. Regular participation in on-line cultures simultaneously dilutes and expands our individual cultural orientation. Our cultural profile is not static and grows and develops through such cross-cultural experiences"* (p. 32).

The results of these studies show that ideologically, virtual communities might appear to emphasise a shared belief in the principles of free situation, equality, and open access (Levy, 2007). Some other media researchers are of the idea that 'virtual environment is

both an interpersonal, one-to-one medium of communication and a one-to-many or even many-to-many form of mass communication' (Flavian and Guinaliu, 2005, p. 408). Supporting this idea, Ma (1989) has stated that fewer barriers and greater equality have been associated with virtual conversations than with FtF conversations.

Of course, it is worth mentioning that the environment, place, or situational facets of virtual interaction are regarded, in a large part, to be 'instantiated by the features of the media themselves' (Spitzberg, 2006, p. 641). O'Sullivan and Flanagin (2003) view the new media of communication as a meta-communicative message in itself. Of course the idea is not strictly limited to on-line interaction, but it applies to any interpersonal communication process mediated through computer-assisted technologies (Thurlow, 2001). On the other hand, Strangelove (1994) has argued that it is still hard to say that cultures will soon integrate the virtual environment into their social structures and adopt the systemic features of the Net. Other researchers, for example Cumming and Jones (2002) and McKenna et al. (2002) believe that people are increasingly integrating virtual environment into their horizons of relationship development.

The literature therefore indicates that with the huge number of users worldwide (Calem, 1992) virtual environment might be able 'to affect the nature of social life in terms of both interpersonal relationships and the character of community' (Flavian and Guinaliu, 2005, p. 420). Thus it seems apparent that cultural research in virtual environment has not only focused on intercultural collision phenomena, but also on 'cultural construction from inside the Net' (Abdelnour-Nocera et al., 2007, p.154). Referring to e-mail exchanges as well as other on-line learning activities, Warschauer's (1999) ethnographic study of four different groups emphasises that this environment should be studied more to see if it has the potential to allow interactants to explore their own social and cultural identities as, he believes, the previous studies do not illustrate this important aspect clearly. Studying this factor to see how important this role is, O'Dowd's (2003) research which followed an e-mail exchange involving five pairs of students located in Spain and the UK over a 1-year period identified the particular characteristics of an exchange that led to intercultural learning (see also O'Dowd, 2006). In this study he found out that virtual communication is an interdisciplinary field of study that should not be considered only 'as data channels and banks, but also as spaces for meeting and interaction' (Abdelnour-Nocera et al., 2007, p. 171). Other

studies show that in virtual spaces students might be able to shape social and cultural realities without even physical presence and reveal their more frank, unpleasant (Pew, 2002), or "true" selves (McKenna et al., 2002), even if this seems to be based on task-oriented interaction than FtF interactions (Walther and Parks, 2002).

Supporting this view, Rheingold (2002), emphasises that virtual communities should be studied more to see if they can 'form webs of personal relationships in virtual environment' (p. 84). It is obvious that this concept provides a cultural and social vision to the research in this area. Marvin (1995) suggests that virtual communities can be regarded as cultural groups that construct their own cultural and social standards. Focusing on this cultural aspect, Benzie (2002) says:

*"In order to look at how this intercultural relationship could be strengthened it is first necessary to explore the notion of 'third space' and its role in enhancing intercultural understandings."* (p. 33).

Actually Benzie's study is suggesting that in these virtual environments, interactants may be able to establish networks of relationships which construct the identity of the community's members shared by the virtual community. He believes that this notion is critical, for it supports the cohesion and the sense of the group's life which might lead to a cyber culture. Other studies are more cautious in expressing such ideas and say that in these 'webs', although students work together, we need more studies to see if they can construct their cultural, social and psychological realities so that they are regarded as a responsible creative group with its own history (Belz, 2002; Abdelnour-Nocera, 2002; Dillon, 2002).

These studies show that, as in the real life, every achievement in a virtual community is a collective one and each member inside it can 'recreate, reproduce and change it' (Abdelnour-Nocera et al., 2007, p. 170). This vision and its analysis of the living environments can take our attention to meaningful systems in which we live, whether virtual or real (Hron and Friedrich, 2003) since, it is argued, research in virtual environment, as any other social and cultural inquiry, is part of the reality-producing struggle (Anderson, 1992). Thus, some researchers believe that cyber culture is considered as 'an inter-subjective space' (Levy, 2006a, p.13), but they form the identity of the group's members (Levy, 2007). There is some research which goes further and

looks at virtual environment as a constructive environment, in which there is a collaborative dialogue. These researchers state that the on-line communications, either written or oral, are based on a culture-sensitive and respectful inquiry process in which ‘parties try to suspend their own assumptions regarding the conflict situation’ (Goodyear, 2002, p. 72) and invite the other parties to talk about their expectations, ideas and needs. Gudykunst (2002) has discussed this aspect of virtual environment and says:

*“This constructive intercultural environment requires us to communicate effectively and appropriately in different situations, which necessitates adaptation. Here, constructive conflict management requires us to be knowledgeable and respectful of different worldviews and multiple approaches to dealing with a conflict situation”* (p. 33).

From this quote and also what the others stated, it can be said that scholars have lately shifted to approaches which regard the symbolic and cultural dimensions more than the other aspects (Paccagnella, 1996). In a concluding but still ongoing discussion, Levy (2006a) accepts the complexity of the argument in this area and says:

*“Undoubtedly, with a concept as complex and multifaceted as virtual culture, further work needs to be completed to clarify order and prioritise the dimensions of the concept. A robust, but flexible, pedagogical framework is required that is theoretically well-founded”* (p. 90).

Supporting this idea, Wandergriff (2007) has also stated that although the different media and their associated constraints are complicated issues in the research on the virtual world, they are ‘hypothesised to impact the collaborative effort that speaker and listener, sender and recipient, expend on establishing and advancing common ground’(p. 86).

### **3.8. Conclusion of the chapter**

This chapter has presented a review of the literature and research into: virtual learning environments, on-line communities, intellectual communities in the V.L.E, creating virtual communities, space and identity, theoretical discussions on the virtual relationships, the socio-cultural aspect of virtual contacts and finally relations between culture and on-line communities. The main purpose of this chapter was to situate the present study in the relevant literature, mainly in on-line communication. Although off-line and geographically closed communities (Wenger, 1998) were also discussed, the

main focus of the literature was on the on-line communities since the cultural factors discussed here apply to on-line communities as well. The studies which were advanced by other researchers and are needed to be regarded in any attempt to explore the communication in virtual environments were also discussed. In the first few sections several cultural and social perspectives with their background in communication studies were outlined. In other words, the literature showed the importance of the cultural factors in recognising the realities of the culture in the V.L.E. Among the most important points discussed in the literature were the studies and research informing the present study: (1) Social constructivism and its perspective in the virtual environments, (2) Bhaba's theory of third space and its relations to the V.L.E in general and this research in particular and (3) intercultural communication theory, which collectively emphasises participation, agency and social context. The literature also discussed the importance of this context as a constructive environment, in which a collaborative dialogue; the on-line communications and dialogues might happen.

This review might be regarded as a useful guide for the research in this area and as means for realising the culture and socio-cultural factors which could be effective in making virtual communities. So it could highlight the issues that the students might face in this new environment which actually paves the way for analysing and interpreting the data of the research.

The following chapter presents the theoretical and methodological framework of the study and also reviews the methods and techniques used in the study. It starts by reviewing the research on theoretical and philosophical frameworks which are based on an interpretive perspective and the rationale behind this usage. The methods used for collection, refinement and analysis of the data in all three Phases of the study are presented and discussed there.

# Chapter four



## **Chapter Four Methodology**

A review of the philosophical stance of the research draws on the social constructivist approach as an increasingly popular methodical complement to communication in the virtual world. Until recently, the Middle-Eastern research on virtual environment was conducted by doing social science research; all with a positivist background, through isolated and controlled variables with quasi-experimental methodology, and conducting the research for results that are generally repeated given the same conditions and situations (Cohen et al., 2005). Many in the field of culture and communication now agree that humans and the process of communication in general, and virtual communication in particular, are much more complex, interrelated and inseparable than can be studied by the restricting system of positivist research that has ‘control, isolation, objectivity, reliability and validity at its core’(p. 53). By contrast, this research with its aim of studying intercultural discourse in a virtual environment is based on the interpretive paradigm which is collaborative and qualitative rather than scientific (Cohen et al., 2005).

### **4.1 The research paradigm**

The following chapter will focus on the methodology and the theoretical framework which supports and shapes the research. It begins with the reasons and rationale why an interpretive paradigm is chosen and the philosophical reasons behind it. Also the discussion of the choice of the methods in the three phases of the study is added here followed by issues such as credibility in qualitative research and the ethical considerations which underwrite the whole study. Also this chapter will discuss what methods were used in different phases of the study and why these methods were applied here.

#### **4.1.1 Interpretive paradigm**

The Interpretive paradigm believes in giving a necessary voice to participants so that they do not feel they are silenced, disengaged, or even disconnected from the research (Cohen et al., 2005). Moreover, such a paradigm requires that alternative or various voices be heard in a context of research. In other words it means that the researcher needs to have increased self-awareness in the research process and feel this personal and social transformation. This awareness enables the researcher ‘to understand his or her psychological and emotional states before, during, and after the research

experience' (Lincoln, 1995, p. 280). This is what is regarded as one of the advantages of research based on this philosophical paradigm as it is believed that such research involves sharing the information and space between the researcher and those being researched which can be viewed as shaping the new epistemological view in the research on human sciences. It means that the researcher who bases his research on the interpretive paradigm 'respects the collaborative aspects of research and makes spaces for the life of others' (Lincoln, 1995, p. 284).

Actually a researcher with such a perspective views culture 'as an active ongoing process of sense making, and she/he is offered a view of culture beyond binary oppositions' (p. 285). Keeping this cultural perspective in mind, an interpretive research paradigm with a qualitative approach to research was chosen, since it best describes what I seek to explore, in order to contribute to the existing body of research on the topic of technology integration in communication and culture. Patton (1990) firmly urges researchers to consider first what one wishes to find out about, before deciding on what type of paradigm to consider, adding that the point of using qualitative approach is to understand 'naturally occurring phenomena in their naturally occurring states' (Patton, 1990, p. 41).

To add to the rationale behind my choice I should say that interpretive paradigm was chosen for this study for the reasons which were discussed by Cohen et al. (2005) regarding qualitative research. They said the 'main concern of the qualitative researchers is with process, rather than outcomes or products' (p.136) and this study was concerned with the process of community-building in a virtual environment; it chose a qualitative approach towards its system of research and an interpretive paradigm in its philosophical view towards the context and the participants of the study. Hoshmand (1989) has also supported this idea of qualitative research and says 'qualitative research methods are particularly suited to uncovering meaning people assign to their experiences' (p.55) and this was actually the aim in designing this study: uncovering meaning. Lincoln (1995) acknowledges that 'qualitative research serves the purposes of the community in which it was carried out' (p. 238). So I was careful in the design of the research and judicious in choosing the approach it needed as having a picture of an approach of the research 'shapes the language of the research design procedures in a study, especially the data collection, and the analysis phases of design'

(Creswell, 2005, p. 64). Creswell (1994) describes a qualitative researcher as trying 'to view the nature of reality as subjective and as seen by the research participants' (p.135).

Regarding the epistemological aspect of the qualitative researcher it should be said that researchers are normally seen to be 'part of and to interact with their subjects so that the values and biases are all reported' (Creswell, 2005, p. 4). From a personal viewpoint what convinced me to choose a qualitative approach was the reality that I had experienced living with quantitative ones and positivistic views for more than thirty years. This resulted in my viewing the world of research so that I saw everything in terms of numbers and percentages, which led to massive overgeneralisation of the outcomes of research - a situation which is still dominant in the Middle Eastern countries. But studying qualitative approaches in the UK taught me how to look for a deeper understanding of the perceptions and actions of the individuals rather than presenting numbers or statistical analysis (Blaxter et al. 1996, p. 28).

Supporting a qualitative view of research, Creswell (1994) focuses on the methods of research in such approaches and defends them by referring to a system which is inductive without the biasedness of the researcher which provides 'rich context- bound information leading to patterns or theories that help explain a phenomenon' (p .7). It should be added here that regarding the fact that this research was going to be carried out in a virtual environment, approaching these virtual symbolic spaces where users may build their own way of life, required a methodology and an epistemology that best suited 'the notion of a multiple-face, a non-physical person who is able to create as many personalities as "worlds" he or she accesses' (Creswell, 2005, p.95). Also Packer (1985) supports this approach in social and educational research and expressed the idea that it seeks to 'elucidate and make our practical understanding of human actions explicit by providing an interpretation of these actions' (p.74). Other researchers such as Wenger (1998) have discussed the rationale behind application of the qualitative research and its benefits in detail:

*"Since we are social beings, learning and communication is actually a living experience of negotiating meaning so the enquiry approach should be the one that regards human being active and present in the research"*(p. 174).

Thus Wenger emphasises that the main aim of qualitative research is to achieve a holistic view of the complexity of human life in its natural situation. This philosophical view begins with a different set of assumptions about learning, education and communication. It believes:

*“Our personal world is constructed in our minds and these personal constructions define our personal realities. The mind is the instrument of thinking which interprets events, objects and perspectives rather than seeking to remember and comprehend an objective knowledge”* (Jonassen, 2000, p. 16).

Another distinctive point which distinguishes this approach from other positivistic ones is the methods used by this approach to collect and analyse the data. Vulliamy (1990) has considered this point and supports this idea in saying that many of the questions in education ‘are better addressed by a qualitative approach’ (p.153). Based on the above discussion this study can be described as exploratory in nature, as it intends to study ‘what and how’ of the communication strategies in virtual learning environments. Thus the best approach for this context was the philosophy and methods of the interpretative paradigm. The first reason was the fact that a virtual learning environment and the discourse in this context is a new area of research in Iran which has not been studied yet. Based on Creswell (2005) and Marshale and Rossman (1995) the best approach for research and study in such environments is a qualitative one.

The second main reason was the fact that although the literature reviews some ideas on intercultural communication and community building, mainly focusing on the experience and studies of other researchers, I did not want to test any pre-defined hypothesis but wanted to rely on ‘what could be inferred from its subjects and documents –induction’ (Cohen et al., 2005, p. 43). As will be discussed later on, induction is mainly regarded as the process which is dominant in a qualitative approach since it ‘begins with data collection and ends with formulation of an idea’ (p. 96). The third reason for this choice was the point that the data was based on field work, being collected from university students in Iran which was regarded as a natural setting for the study. The final reason was the well known saying that refers to the ‘human instrument as the primary instrument for data collection’ (Creswell, 1994, p. 174) and the data are mediated through the human instrument rather than machines. In other words, in my context full understanding of virtual communities had to be gained from

in-depth interpretations as it is believed that this kind of qualitative data-gathering and analysis ‘opens new horizons onto the educational and social dynamics of public and private life within the group’ (p. 92). The most important philosophical assumption of this approach is that:

*“Knowledge is a function of how the individual creates meaning from his or her experiences; it is not a function of what someone else says is true. Each of us conceives of external reality somewhat differently, based upon our unique set of experiences with the world and our beliefs about them”* (Jonassen, 2000, p.16).

Other researchers have also supported this philosophical approach in research and believe that in such qualitative approaches the real sense of "active" learning and communication is not only showing up the correct view of reality, but rather ‘participating in and interacting with the surrounding environment in order to create a personal view of the world’ (Crotty, 1994, p. 31). Bruner (1990) also argues that by doing the research with this philosophical framework one actually means to discover and to describe formally ‘the meanings that human beings create out of their encounters with the world, and then to propose ideas about what meaning-making processes were implicated’ (Bruner, 1990, p. 12). He also believes that meaning is the understanding that we get from these processes; it is a reflective form of knowledge. So the need for including research and learning in real-world situations (Jonassen, 2000) is felt today; a context in which people play as a part of a community of practitioners helping to solve real-world problems (Lave and Wenger, 1991).

#### **4.1.2. A social constructivist approach**

Through the whole research I tried to have a wide overview of the research enquiry and methods to adopt and struggled with the idea of traditional consistency in the research. So that it seemed unusual to have a different methodological system in a PhD research. I tried to advocate a social constructivist perspective that includes ‘emphasising multiple realities, and the complexities of particular views, and actions’ (Charmaz, 2006, p. 682). Constructivist theory, according to Charmaz:

*‘...lies squarely within the interpretive approach to qualitative research with flexible guidelines and assumes that language is used for negotiation of meaning and conceptual delimitations* (p. 683).

Before elaborating more on this approach I should first say that researchers in the area of human sciences are of the idea that human sciences research has witnessed a

revolution in which its philosophical foundations are being replaced by a constructivist epistemology (Jonassen, 2000). According to constructivist learning theories:

*“How we construct knowledge will depend on what is already known. What we know depends on the kinds of experiences that we have had and how we have come to organize these into existing knowledge structures”* (Kanuka and Anderson, 1998, p. 72).

This implies that this approach supports reflective and experiential processes and students might then build meaning, understanding, and relevant practice together. In other words these environments might be able to help collaborative groups construct a common understanding of the issues and negotiate the most appropriate solution to any possible problems (Kanuka and Anderson, 1998). So a focus on theory develops that depends on the researcher’s view, on the embedded, hidden networks and relationships, and ‘making visible hierarchies of power, communication, and opportunity’ (Charmaz 2006, p. 49). This definition requires people engaged in a process of message interchange in which the medium of exchange is computerised, as more and more media involve digital technologies. This aspect of the research is called interpretative flexibility by Paccagnella (1996) who gives us this insightful definition:

*“The very concept of interpretative flexibility is a cornerstone of a perspective based on social constructivism, which is not solely an approach to technology study, but also a wider epistemology conceived in reaction to the logical empiricist methodology and the bid to apply that framework to the social sciences. Social constructivism claims that the facts of the world are not independent of us as observers and people create their own reality through an iterative process where man is at the same time producer and product of the social”*(p. 462) .

Vygotsky who is regarded as a pioneering figure in this approach also emphasises the effect of cultural and social contexts in learning (Kanuka and Anderson, 1998). In this view, we construct meanings actively and continuously in a social context (Young and Sachdev, 2005). Meanings emerge from the patterns of our social experiences that occur over time in a ‘contextual, situated, and continually changing synthesis’ (Creswell, 2005, p. 34). To explain how people construct their version of reality from their unique experiences, Kelly (1995) compares human beings to researchers who usually carry out their own personal experiments, ‘construct hypotheses and actively seek to confirm or disconfirm them in the process of seeking knowledge’ (p. 174) . Gradually, they build up their own concepts about the world which they come into

contact with, and create their own personal understanding of things. This understanding will always vary from person to person. In this regard Jonassen (1992) believes that the mind is instrumental and essential in interpreting events, objects, and perspectives on the real world, and that those interpretations ‘comprise a knowledge base that is personal and individualistic’ (p. 4). In this view, we all have a different understanding of the external world based on our individual experiences and beliefs about those experiences (Crotty, 2003).

However, crucially, this research was carried out in a virtual environment. The strength of virtual learning environments is hidden in the fact that ‘constructivist learning tools and environments manifest their capabilities to support conversation and collaboration’ (Allen, 1996, p.182). Here the participants can work together to solve problems, argue about interpretations and negotiate meaning (Charmaz, 2006). While working together, the learner is involved in discussion and interaction with others in a process of social negotiation (Belz, 2007). It is believed that owing to the nature of activities in these environments, knowledge construction might occur when students ‘explore issues, take positions, discuss those positions in an argumentative format, and reflect on and re-evaluate their positions’ (Blake, 2000, p. 126). Considering the possible outcomes of communication and contact in these environments it should be stated that ‘as a result of contact with new or different perspectives, these activities ‘may contribute to a higher level of learning through cognitive restructuring or conflict resolution, leading to new ways of understanding the material’ (Harasim 1990, p. 48). Sharing knowledge in a virtual environment can also aid the overt exchange of thoughts and opinions with other on-line learners in order to solve collective or individual problems. It is worth ending this part with a quote which insists on the rationale for taking social constructivist approaches in research like this:

*“Constructivism can provide theoretical bases for unique and exciting distance learning environments. These environments should emerge from authentic tasks, engage the learners in meaningful, problem –based thinking, and require negotiation of meaning and reflection on what has been learned. Computer-mediated communication is able to support constructive learning” (Jonassen, 2000, p.15).*

This view and the corresponding choice of methodology in the research is intended to draw attention to the role of computer-assisted convergence in the technologically-mediated processes of communication. This research set out to place more emphasis on the views, values, beliefs, feelings, assumptions, and ideologies of individuals than on the methods of research.

#### **4.2. Epistemology**

According to Intercultural Communication Theory, by communicating with people and their experiences and knowledge, we might be able to ‘construct or reconstruct meaning’ (Reason and Bradbary, 1994, p. 298). Practically speaking, the research intends to help the participants to find themselves or ‘to invent their reality’ (p. 299). Regarding this background, it was assumed that this research might be useful especially in situations where people need to make changes thoughtfully. The reason behind this view is the fact that human beings and their environmental and social life ‘have been regarded both individualistically and also in the social realm’ (Pring, 2000, p. 38). The research tries to understand practice ‘from inside - from the perspective of individual practitioner as well as being part of social system’ (p. 94); even more significant in this aspect, is the fact that participants may ‘make and learn from changes they make’ as they go on (Denzin and Lincoln, 2002, p. 138). So this study did not aim to have a controlling view, but rather to help the participants to understand and realise the nature and consequences of what they do in a better and more clarified way (Reason & Bradbary, 1994; Wellington, 2004) based on constructivism which maintains that ‘knowledge is not simply a transfer of knowledge from the knower to those who do not’ (Radnor, 2003, p. 49). This movement’s supporters believe that learners are like researchers who constantly make hypotheses to construct their own knowledge from their own experiences. The followers of social constructivism believe that constructing knowledge involves social interaction and people will play a certain role in shaping their experiences (Crotty, 2003). Here, based on this epistemological view, it is maintained that:

*“Learning and communication is necessarily a social, dialogical process in which communities of practitioners socially negotiate the meaning of phenomena. That is, learning is conversation, and the thinking and intelligence of a community of performers or learners is distributed throughout the group”* (Radnor, 2003, p. 36).



The research is based on the belief that knowledge is possible through interpretive processes, so I have not seen 'the subjects' attributes and behaviour as external to themselves' (Crotty, 2003, p. 174). In other words, I emphasise the 'equality of the participants, with respect' (p. 86), because the interpretive researcher's task is to understand the situation by the people who are part of it (Wellington, 2004). Also in this kind of interaction between researchers and the participants, understanding is created, and meanings are constructed and interpreted as the World Wide Web and virtual learning environment becomes 'the primary medium through which construction of meaning and also social interaction takes place' (Pring, 2000, p. 36). So epistemologically this factor could enable both sides, me as the researcher and the participants to understand the position in the field of study or let's say their community and give them the framework to interpret their world and their actions (Radnor, 2003; Wellington, 2004).

Therefore, the research studied the opening of a virtual environment in which people could construct new social and cultural realities even without physical presence (Abdelnour-Nocera et al., 2007). In this approach, learning and specifically conversation is developed by collaboration. Individuals and groups must communicate for solving their problems, as meaning is not described as conceptual knowledge and it involves 'reflecting on what is known, what needs to be known, the viability of various plans, and their potential effectiveness'(Denzin and Lincoln, 2002, p. 164). As the primary investigator for this research, I aimed to adopt and keep a stance of 'empathetic neutrality'. Neutrality, according to Patton (1990), means that 'the investigator does not set out to prove a particular perspective or manipulate the data to arrive at predisposed truths' (p. 55). In this respect, empathy means being able to understand the feelings, experiences, and worldview of others which, in this research, developed as a result of having continued contact with the participants through interviews and observations of the participants' on-line communication. Patton further argues that these two terms may seem to be contradictory when used in conjunction with each other; however, empathy is 'a stance towards the people, while neutrality is a stance towards the findings' (p. 56).

Paccagnella (1996) further believes that this form of study on meaning moves inquiry not into a simple discovery or a critical method of analysis, but into 'a complicitous

partner within the meaningful systems in which we live, whether virtual or real' (p. 16). And it is worth noting that cyber research, as any other social and cultural inquiry,

*"...is part of the reality-producing enterprise in which culture and cultural studies are regarded 'as a process of ongoing negotiation' and there is a meaningful difference between the individual and social focus"* (Anderson, 1992, p. 26).

In other words the focus is not on an 'objective standpoint' since it presents the view points of the people practising in the environment, but on individuals in a social context and the changes they make to their practice and communication (Seddon, 2003).

### **4.3 Ethical Issues**

One of the most important criteria for research is that it should be ethical (Wellington, 2004) and researchers need to pay special attention to ethical issues during their planning, data collection, data analysis and reporting. This matter guides the researcher as to how to work in relation to their participants. But researchers in the field of virtual communication are concerned with the ethical issues of conducting research on human interactions in this virtual context, and it has proved difficult for common ethical guidelines to be established (Herring, 1996a; Reid; 1996; Paccagnella, 2005). It is believed that the researcher has the major responsibility for keeping the research participants' issues or concerns in mind (Liu, 1999). But the researchers in this area are faced with a problem of whether to comply with the participants' rights or to regard their professional aims; searching for the truth (Cohen and Manion, 1994). There is an agreement among researchers that any piece of research should be ethical, but currently there is no agreement to the kinds of codes or principles applicable in a virtual environment.

There have been many discussions on the issues related to the ethics the most significant of which is British Educational Research Association (BERA) whose guidelines are discussed here. In this study the data collection procedures addressed issues of participants' permission and the researcher's promises to maintain their privacy, as well as the effect of the research on the participants. Issues such as collaboration in building mutual trust and understanding were clearly respected. Issues such as informing the participants of the results and how the data would be stored were discussed with the participants. Also, the methods planned were discussed with the

groups of participants, which was important and in line with BERA guidelines which state that the participants have the right to be informed about the aims, purposes and methods of the research. Additionally, I sent some of them the interview schedule, as well as personally visiting some of the participants and telephoning others to give more clarification and assurance. In this regard Blaxter (1996) claims that:

*“Ethical research involves getting the informed consent of those you are going to interview, question, observe or take materials from. It involves reaching agreement about the uses of this data, and how its analysis will be reported and disseminated. And it is about keeping to such agreements when they have been reached.”* (p. 146).

The major ethical considerations are discussed in detail in the following.

#### **4.3.1 Gaining access**

To get permission to enter the research field, I had to get permission from the authorities in the Ministry of Higher Education in Iran as participants might feel intruded on and insecure if this did not take place. So, before starting the research I had gained access to the field by obtaining a letter from the Ministry of Higher Education explaining my intention.

#### **4.3.2 Informed consent**

The participants were briefed on the research purposes and the conduct of each stage. I also tried to clarify any procedure-related doubts, and told them that they may withdraw from the research at any time. Before the data collection, I made sure that the participants fully understood the process. Furthermore, I had also asked their permission in an earlier email sent before the interview to ask if I could use a tape recorder to record the interview. Participants were also informed of the likely publication of findings as an outcome of the research and of the possible political consequences for them.

#### **4.3.3 Anonymity**

Anonymity refers to the fact that ‘the participants or their organisations are not identifiable by the information given’ (Denzin and Lincoln, 2002, p.94). So to achieve anonymity, the participants’ real names and identification were replaced with aliases or coded numbers (Frankfort-Nachmias and Nachmias, 1996). Even in the interviews they are called ST to refer to the students then a number which just tells me who he/she was.

#### **4.3.4 Confidentiality**

It was also important to maintain the privacy of the participants. To do this, although I knew who gave what information and was able to identify participants from the information given, I assured them what they do or say would not be known publicly (Cohen et al., 2005).

### **4.4 Research Design and Data collection**

#### **4.4.1 Research design**

It is widely accepted that virtual learning environments ‘offer tantalizing potential to increase access to education and to educational experiences’ (Robson, 2002, p. 74). The growing research in these territories demands careful consideration of research methods in virtual environments, particularly concerning cultural issues. So it seems crucial that every researcher should know the nature of the context. In this study the main challenge in methodology was on how to create contexts for intercultural interchange and interaction in which ‘reflection on the very processes of this engagement is facilitated, and the implications critically considered’ (Robson, 2002, p. 33). To achieve these aims the study employed a variety of methodologies for different phases, using various research instruments and techniques, thereby also creating a "mixed method" (Caracelli & Green, 1993) study. The methods used by the researcher included a survey instrument, on-line discussions and interviews. The data from each method was used to triangulate and authenticate the interviews and analysis of the on-line discussions. So in this section the details of the research design for each of the methods of data collection and analysis will be given.

In order to formulate a coherent strategy for conducting the research, many approaches to undertaking the study were reviewed and considered. An organised, systematic and understandable research plan was needed which met the aims of the study and its objectives, and hence was able to guide me in answering the questions. After reviewing the aims and questions, a mixed method approach was felt to be most appropriate. Allwright and Bailey (1991) state:

*“...there is ,of course, no compelling reason why both quantitative and qualitative ways of collecting and analysing data should not be deliberately combined in any one research project and every reason why both approaches should be harnessed at all times”(p.68).*

So, a mixed-method research strategy was constructed to fit the specific research site and the defined research-time frame. The strategy was constructed so as to be the best fit for purpose in relation to the factors noted and specifically the research setting and participants. The methods and all the techniques chosen to apply there are described in detail in the following section. Since the chapters are divided based on the phases of the research, more detailed analysis of the approach and methods related to each phase of the study is given separately as each phase is discussed.

#### **4.4.2 Methods**

In choosing the methods appropriate for this study I regarded the literature relating to methods of studying intercultural issues. For example it was suggested that cultural issues and beliefs or ideas cannot be measured through direct observation but can be inferred (Dillon and Gayford, 1997; Roed, 2003). It is believed that by triangulating between methods we can get clearer understandings of the social and cultural factors. In addition, the use of triangulation of methods could make me sure that the data generated are not simply artifacts of one specific method; also it could help to overcome the problem of ‘method-boundedness’ (Cohen et al., 2005, p. 124). In my view, dependence on a single method would be risky in such a complicated study as it only ‘provides a limited view of the complexity of human behaviour and the situations experienced by human beings’ (p.87). This study includes three phases and in each one, as stated in the introduction, different important points of the research are studied and explored. Here I have referred to the phases briefly since each phase will have its own specific chapter in which every thing is discussed in detail.

##### **4.4.2.1 Phase 1: The Structured Survey (questionnaire)**

This phase was designed to take the views of a large number of university students. So, a questionnaire was chosen as an appropriate data collection method so as to help me in designing a forum for them to contact each other in the next stage. Since questionnaires are effective and practical research tools for collecting the required information ‘quickly and cheaply’, they can provide not only quantitative but also qualitative data for a research (Cohen and Manion, 1994). In support of using a questionnaire in qualitative studies, Nisbet and Entwistle (1970) regard it as a kind of interview on paper. This method is widely used, but is not without drawbacks. For example, as stated by Cohen et al. (2005), when the sample is very large and it would be difficult to interview everyone in the limited time available for a study such as this, self-completed

questionnaires provide an economical and relatively quick way of gathering information. Another positive point in using them is that they allow the researcher to administer questionnaires in a number of different ways, such as posting, verbal contact through telephone and face to face (Cohen and Manion, 1994).

Furthermore, in the first phase of a study, the students may be anxious about the research, so starting the study with a survey questionnaire put less pressure on them and their immediate answers and gave respondents the feeling of anonymity, so they felt that 'no one could know who said what' (Cohen and Manion, 1994, p. 38) and could reveal their opinions and views regarding the important issues such as their success and failures in on-line communication. When designing the questionnaire, consideration was given to ease of and time for completion in order to 'help participants minimize the likelihood of incomplete questionnaires' (Scollon and Scollon, 2001, p. 29).

#### **4.4.2.2 Phase 2: Students' on-line discussions**

One of the main goals of the research was to know the culture constructed in a virtual environment and explore how participants create and maintain interpersonal relations and whether these ties have built a 'sense of community' in this environment. To help the participants contact each other in the virtual environment two distinctive types of forums were designed for them; one for their contacts with their tutors and university staff for official contacts and another one, which was actually designed by the university for supporting my study, was for their daily contacts with their classmates. The data from the participants' on-line discussions could develop ideas about the main issues in their communications which could answer the research questions as well. A total of 100 separate chat discussions by the students in University of Science and Technology, a virtual university in Iran which offers all the courses on-line, were recorded by participants, which were transferred as accurately as possible into a single electronic document. The details of the context and the software, the number of the students, and their intentions in using the forum and also the course they were enrolled in are explained in detail in the second phase of the study.

#### **4.4.2.3 Phase 3: Semi- structured interviews**

Interviews play a central role in the data collection in a qualitative study and are generally seen as strong for a cross-cultural work (Cohen et al., 2005, p. 86). An

understanding of the interviewees' culture by the interviewer has great significance for all phases of interviewing including access, conducting interviews and making meaning (Shah, 2004). For this reason interviews are widely used when the research is looking for detailed and personal opinions (Denzin and Lincoln, 2002) especially when focusing on values, beliefs and attitudes of the participants. In other words, an interview can be regarded as a 'conversation with a special purpose which is seeking distinctive information' (p. 81) so that it can focus on the heart of the research. In this study, I used well constructed questions in the interview to help in getting data which addresses the objectives of this phase of the study. Another important aspect of the interviews is that they can gather information through 'direct face to face or verbal interaction between the interviewer and the interviewee' (Cohen and Manion, 1994, p. 166). It is also believed that interviews can help to create friendly secure relations with participants and 'certain type of confidential information may be obtained that an individual might be reluctant to put in writing' (p. 164).

The schedule for the interview questions was prepared in advance, but with the semi-structured interview there was more flexibility in the interviews as they gave the participants great freedom to express their thoughts and ideas. In addition, they not only allowed me to clarify and explain any misunderstandings of the pre-planned questions but also gave me the opportunity to seek clarification and comments on any interesting responses since the focus of the interview was on the life and culture of the participants. The interview was essential for this study since Iran has just joined the community of distance education in the world and some of the required data is not well elaborated in documents and in this part of the study I needed to know what was happening in the minds of the participants after experiencing a new virtual community.

#### **4.4.3 Sampling**

The discussions related to specific sampling issues for each phase are described in chapters 5, 6, and 7. In order to clarify the theoretical aspects behind the sampling procedures in each phase, I refer to some of the main ideas in the literature related to sampling issues. Borg and Gall (1994) argue that:

*"The sampling procedure should be specified in detail so that another investigator would be able to replicate the procedure. Sampling is an inescapable issue in research, whatever the approaches and methods used"* (p.86).

In this study, both purposive sampling and simple random sampling techniques were used. Simple random sampling was used in the first phase of the study since it is believed that ‘it is the most reliable technique to ensure the representation of the whole researched population’ (Borg and Gall, 1989, p.219). More detail of this is discussed in chapter five. In the second and third phases, due to the sensitivity and importance of the procedures of the research in those two stages, I decided to use purposive sampling which meant choosing the participants who could take part in the study for the sake of the research itself and were interested in those stages of the study. In other words, I picked out some of the participants who I thought had something to contribute to the main investigation either because they had as their native language another language apart from Farsi (Persian) and that they could contribute to the research aims better or they were interested in the subject. Cohen and Manion (1994) clarify this point by saying:

*“...in purposive sampling, researchers handpick the cases to be included in the sample on the basis of their judgment of their typicality. In this way, they build up a sample that is satisfactory to their specific needs”* (p. 89).

Borg and Gall (1994) claim that, when selecting a sample, a researcher should choose the sample which provides the information needed. Neglecting this is likely to result in sending the questionnaires to a wrong person or interviewing people who do not have the desired information.

#### **4.4.4 Data analysis**

Data analysis is one of the essential components of any research. Dey (1993, p.30) has argued that ‘while our impressions and intuitions certainly have their place in analysing data, we can also benefit from the more rigorous and logical procedures of analysis’. So, it was very important to decide how the data were going to be analysed from the start (Robson, 2002). The procedures which were to going to be employed had to be relevant to the study, in particular with respect to the data to be analysed and the aims of the study. Data analysis involves a detailed examination of the data, or ‘an act of constructive interpretation’ (Powney and Watts, 1987, p.158). Hitchcock and Hughes (1995) believe that in data analysis, the researcher tries to sort out what the data are about, why and what kind of things might be said about them. The specific techniques of data analysis related to each phase of the study are stated in their own chapter but for



a general review of what was carried out, I refer here to some of the procedures done in the data analysis of the three phases.

#### **4.4.4.1 Analysis of the questionnaire**

The questionnaire contains four major parts; the first one contains personal information about the participants; the second part about the students' experience in contacting with others in the V.L.E. These include both their classmates and the teachers (please see Appendix 2). The third part includes the questions related to their aims of using virtual environments and the final section focuses on their ideas on the different roles of the V.L.E in social life. The questions were designed based on the aims of the study and the research questions; so that the answers could give me a general view of what and how the students thought about virtual contacts and behaviours and how much experience they had in managing the possible obstacles in previous on-line communications. The procedures for analysis were planned during the development stage of the questionnaire. As the first step in the analysis, the returned questionnaires were checked for completeness and then the items were coded. Then the coded responses were transferred to the computer program SPSS. The data were then checked and re-checked for errors during the transfer process. However, this study did not carry out a complex statistical analysis since the quantitative method used in the study is subsidiary and not the main method. Therefore, only descriptive statistics such as percentages were utilised to assess the significance of the result. This was an important stage in knowing the students and making them ready for the next stage. The detailed results of the data analysis are set out in chapter five.

#### **4.4.4.2 Analysis of the discourse of the students' on-line talks**

It is assumed that in virtual contexts student's talk can be seen as an indicator of what a student might recognise to be appropriate behaviour. So, in this study, there was a need to 'examine critically, and together, what the chat content is saying' (O'Dowd, 2006, p. 92). This is based on the idea that in virtual communities, besides common conversation, 'most actions are performed through written discourse' (p. 102). So, the main substance of analysis for the forum discussions was their language behaviour, which was expressed through text-based discourse and 'the participants' interaction was taken as a text to be analysed and understood' (p. 104). The data were first analysed quantitatively in which the discourse functions and codes used by the students in their on-line chats were statistically analysed and shown in different tables and

graphs. Then a qualitative analysis of the chats were done; a simplified coding and content analysis was applied in early analyses of the chats which consisted of coding the data looking for themes in students' experiences, and analysing the characteristics of the themes and categories that emerged. The details of the coding system used in this phase, both quantitatively and qualitatively, are discussed in the second phase of the study.

#### **4.4.4.3 Analysis of interviews**

This study utilised several strategies and employed a number of procedures to analyse the qualitative interviews, ranging from informal to formal analysis. Informal analysis was undertaken while data collection was still going on, whereas formal analysis procedures were carried out immediately after the data collection period (Hitchcock and Proceđu, 1997). For the ease of understanding the themes which emerged from the data I followed the following four steps in analysing the data: data familiarisation (informal data analysis); data organisation (formal analysis); analysis of the content; thematic creation.

##### **4.4.4.3.1 Data Familiarisation**

The process of data familiarisation is meant to help the analyst with a broad picture of the collected data before starting formal analysis. As a strategy to gain an overview of the gathered material, I wrote notes after each interview, recording any non-verbal cues and jotting down general ideas before I listened to the tape. The next step was to listen to the interview from the tape twice before transcribing each interview. After transcribing, I read the interview several times listing key ideas and recurrent themes (Miles and Huberman, 1994; Ritchie and Spencer, 1994). A final step during the familiarisation procedures was to judge the data and to note what needed more exploration in the light of the research aims. Ritchie and Spencer (1994) have supported this step by saying:

*“During the familiarization stage, the analyst is not only gaining an overview of the richness, depth and diversity of the data, but also beginning the process of abstraction and conceptualization. While reviewing the material, the analyst will be making notes, recording the range of responses to questions posed by the researchers themselves, jotting down recurrent themes and issues which emerge as important to respondents themselves”*(p.179).

#### **4.4.4.3.2 Data organisation**

Data organisation is believed to facilitate intensive analysis, and without organising the collected data, of course, analysis will be chaotic (Ritchie and Spencer, 1994). Therefore, in order to make data manageable, by the help of word processing, I accumulated all the interview transcripts on one file since this step was meant to form a data base for qualitative interview data (Merriam, 1998). The next step in organising my data was to create a file for each interview question by word processor. This was an accumulation of the data for one issue in its own file labeled according to the main issue of that question, a cross-case analysis according to Miles and Huberman (1994) and Patton's (1990) classification. Constant comparison method was used to compare the responses of the students to a particular issue. Guba and Lincoln (1981) described this method as the following four stages:

1. comparing incidents applicable to each category
2. integrating categories and their properties
3. delimiting the theory, and
4. writing the theory ( p. 114).

The final step was to omit redundancy and irrelevant information, performing minor editing, bearing in mind Marshale and Rossman's (1995) warning that 'careful attention to how data are being reduced is necessary throughout the research endeavor' (p.113).

#### **4.4.4.3.3 Analysis of the contents**

Reading all the participants' views on a particular issue, I was able to extract the recurrent themes and to create patterns and categories, as the process of generating categories involved noting regularities in the answers (Marshale and Rossman, 1995). My approach was an inductive one; not to provide a prior set of categories or patterns but to use the "indigenous" ones which were created and expressed by the participants where possible and to construct categories as part of the analysis process. In this study the categories emerged from the data and were well defined. In order to examine categories which emerged I tried to work back and forth between the data looking for points which fit to particular categories. In addition, I tried to create alternative categories and tested them against the initial ones, as a strategy which revealed that the initial categories were suitable ones.

#### 4.4.4.3.4 Thematic creation

The final strategy in this qualitative analysis was to create ‘thematic issues’, which is ‘collecting categories of related issues under one theme which will be tackled during the construction of the thesis and is related to the research aims’ (Rossman and Wilson, 1994, p. 320). Figure 2 shows these steps and the framework for analysis of the qualitative interviews.

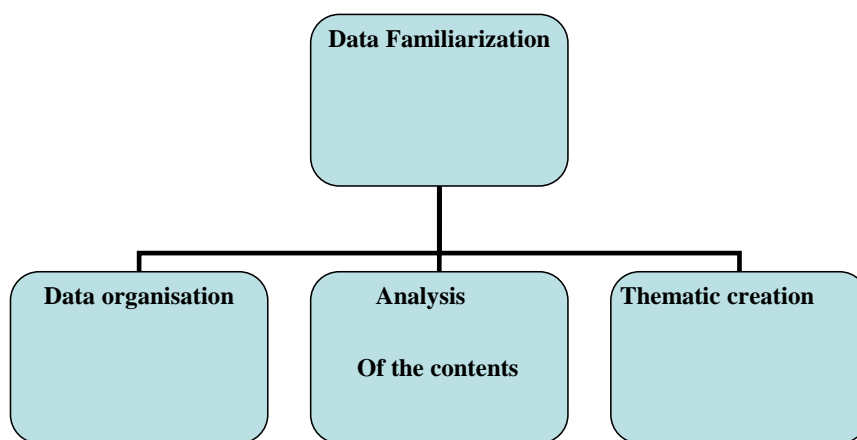


Figure 2 Framework for the analysis of the qualitative interviews

#### 4.5 Credibility, authenticity and trustworthiness

Normally research is assessed according to the criteria of its validity and credibility and trustworthiness, but before starting this discussion it should be mentioned that ‘credibility and authenticity in a qualitative study are, of course, much different than in controlled, experimental research’ (Le Compte and Preissle, 1993, p. 76). Regarding the importance of validation in qualitative research, there are many perspectives. There have even been some challenges on the definition of it or finding some terms to describe it. To establish the “trustworthiness” of a study, Lincoln (1995) used unique terms – which have now become commonplace, such as “credibility,” “authenticity,” “transferability,” and “dependability,” as the equivalents for “internal validation,” “external validation,” “reliability,” and “objectivity” (p.238). Instead of using the term “validation,” Eisner (1991) discusses the credibility of qualitative research. Angen

(2000) suggests that within interpretative research, validation is ‘judgment of the trustworthiness or goodness of a piece of research’ (p. 387). There has always been a debate between researchers regarding the idea that ‘qualitative research cannot be replicated by another researcher at another time’ (Lincoln, 1995, p. 237) which is a serious point in the difference in the ideas of these two perspectives of the research. But regarding this research I think the triangulation and multi-method approach that were applied in the study could increase the credibility and trustworthiness of the study. Regarding this aspect, Merriam (1998) believes that:

*“...regardless of the type of research, credibility and trustworthiness are concerns that can be approached through careful attention to a study’s conceptualization and the way in which the data were collected, analysed and interpreted”*(p.165).

Credibility is similar to generalisability; it is the extent to which the research can have the same result in the event of replication (Creswell, 1994). I believe that the procedures and steps which were taken during the construction stage of the study, field work, and the steps and procedures of data analysis were able to enhance the credibility and trustworthiness of this research. In other words, the internal trustworthiness of the research was supported by the multi-method strategy which enables triangulation of data (Cohen et al.; 2005; Silverman, 1997). All the procedures of triangulation were employed in the study to overcome any drawbacks and disadvantages of any single method or any deficiencies in a data source.

#### **4.6 The research timetable**

Table 1 is the timetable of the research over the four years of the study which includes the dates I designed the chapters, piloted and conducted them and analysed the findings. It also includes the papers which were taken out of the different phases of the study and presented in international conferences or published in journals.

Table 1 Timetable for the research

<b>Date of the study</b>	<b>Type of work</b>
May 2005	Designing the methodology of the research
July 2005	Designing the first phase of the study / the survey
October 2005	Piloting the questionnaire
December 2005	Conducting the phase
December 2005- February 2006	Data analysis of the phase
March 2006	Designing the second phase of the study : a university on-line forum
May 2006	Piloting the Phase
Jun- December 2006	Conducting the Phase ; on-line discussions
January – march 2007	Data analysis
May 2007	Designing the third Phase of the study; interviews
July 2007	Piloting the Phase
September- October 2007	Conducting the interviews
December 2007	Presenting a report of the first phase in IALIC 2007, Gyor, Hungary
December 2007 -April 2008	Data analysis
May 2008	Presenting a report of the second phase in GLOCAL 2008 , Skopje, Macedonia
May 2008	Presenting and publishing a general report of the study in Pragmatics Conference, Lodz, Poland
Jun 2008- January 2009	Thesis writing up
May 2009	Publishing the paper “ Intercultural Discourse in Virtual Learning Environment” in International Journal of Information, Science and Management, Vol.7, No 2.

#### **4.7 Summary of the chapter**

A broad range of issues from the theories and philosophical assumptions of the methods and research strategy were discussed in this chapter, and the required justification for each of the decisions in each phase of the study was set out. These issues are compelling in the light of the findings and the factors identified in the literature. In addition, the rationale behind designing three independent chapters was discussed; the threads of connectivity that explain the very complicated inter-relations between the issues in three phases were shown and discussed.

# Chapter five



## **Chapter Five Phase one: questionnaire results**

This chapter focuses on the phase one of the research. It describes the aims, the method and the results of this part of the study. As was discussed in previous chapter, this phase played the role of a guide for the researcher in answering the questions about the background of the participants and how they had experienced this virtual context before.

### **5.1 The aims**

The first phase of the research had the following aims:

- a) To establish background information about the respondents such as, age, gender, qualification, and their college.
- b) To ascertain the participants' beliefs regarding their co-learners from other cultures in a virtual learning environment.
- c) To gather documentary evidence of the problems facing the participants in their daily virtual contacts.

### **5.2 Questionnaire design**

A questionnaire (Appendix 2) was designed with 39 questions to find out the following: students' previous experiences in their communication with each other; their ideas about their virtual learning environment and their new learning systems; their perceptions of the advantages and drawbacks of on-line learning and communication. The first section of the questionnaire asked students to provide brief information about themselves, including their gender, major course, qualifications, first language, virtual friends, and the frequency of their communication in the V.L.E. The first part ended by asking them if they had ever had any miscommunication on-line and, if so, what the reasons were. So a range of statements were constructed to measure the participants' attitudes towards the following categories (Figure 3):

1. Interest and belief in the role of the V.L.E;
2. Their own personal experiences either positive or negative in this environment;
3. Consequences of the virtual learning environments;

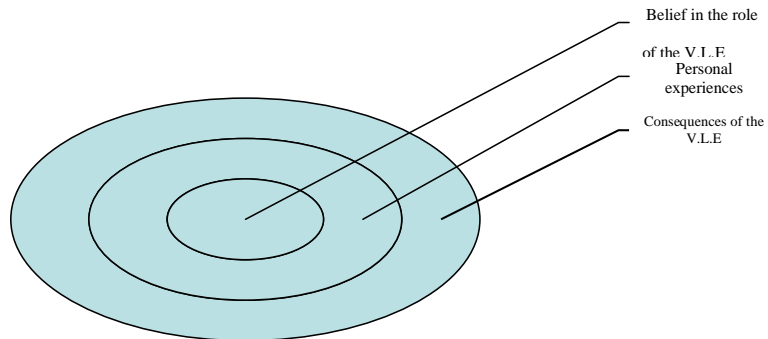


Figure 3 The main categories in measuring the students' attitudes

The questionnaire was relatively detailed, including 39 items connected to:

- 1- Participants' attitudes about on-line communications
- 2- The V.L.E usage and experience
- 3- Beliefs regarding the V.L.E and its role
- 4- Their personal experiences with others in the V.L.E

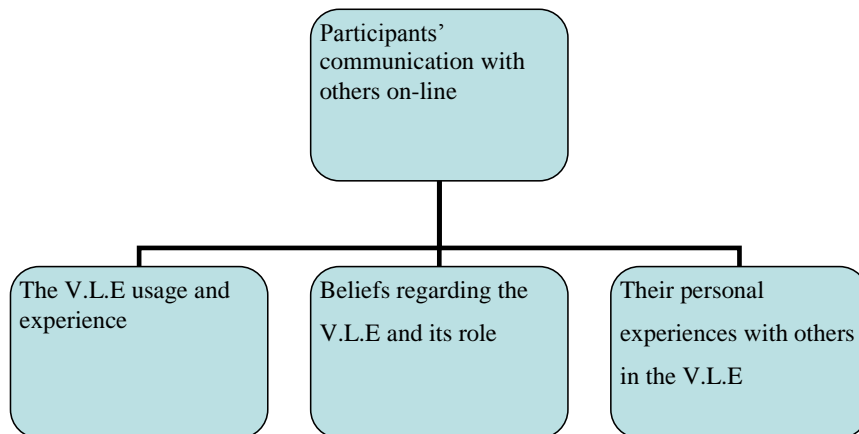


Figure 4. The four main subjects being focused in the questionnaire

As stated before, a five- point scale was used to design the tables of questions in order to make it completely understandable for both the participants and also for the researcher to make sure what each question addressed. I was careful with the way the instructions were communicated and this demanded clear wording in the questionnaire.

### **5.3 Participants of this phase of the study**

There were a total of 200 participants in this phase of study. These included students taking courses in Information and Communications Technology, Software Engineering, Industrial Engineering, Simulation and Process Control, and Management of Information. All the participants were enrolled on the university's on-line program and received most of their classroom instruction through the schools' Internet-based delivery system.

### **5.4 The Pilot study**

The validity and reliability of the instrument was trialed through a pilot study. The purpose of the pilot study was to determine if there were any problems caused by formatting, ambiguity, or the clarity of the items. The questionnaire was sent to three university faculties for validation. They were asked to evaluate the content of the instrument and to comment on the clarity and appropriateness of the items. Then the pilot test was administered to 80 students. Initial analysis brought to light several important points. The most important point was the fact that reliability of some of the questions was lower than the acceptable rate ( $r = > 0.05$ ). So, after reviewing and analysing the questions, it was decided that five questions should be deleted and replaced to increase the reliability of the questionnaire. When these five questions were replaced, the questionnaire was retested for reliability and the results emerged as acceptable ( $r = < 0.07$ ). The revised questionnaire could then be fully implemented in Phase One (see Appendix 3).

### **5.5 Procedure for analysis of the questionnaire**

The questionnaire provided quantitative data that were analysed using appropriate statistical methods. Descriptive statistics were calculated for the response of the learners on the closed-answer survey items, and analysis was conducted using Statistical Package for the Social Sciences (SPSS). Simple frequency tables and descriptive statistics were used to get an overview of the mean levels and distribution of all the related factors.

## 5.6 The results of the phase

### 5.6.1. ICT usage and experience

This category of the survey asked the participants about their personal experience in using ICT in general and the V.L.E in particular. When they were asked how much they talk (chat) with their friends or instructors on line, 41 percent said they sometimes had such communication and 20 percent said it was usual, 31 percent seldom while only 8 percent said never (Figure 5).

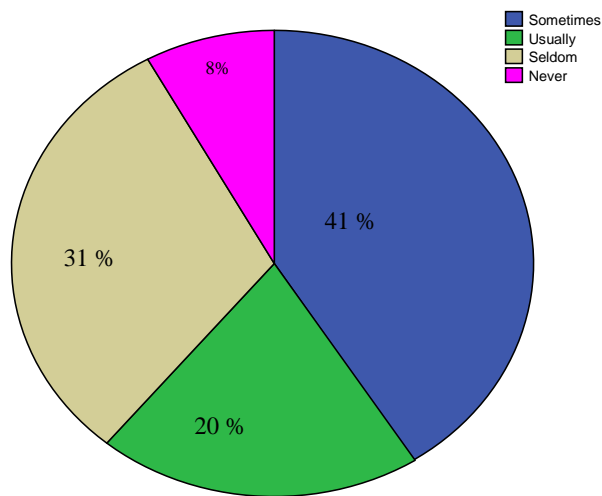


Figure 5 Personal experiences of the participants in using the V.L.E

When they were asked if they had any communication with their teachers via e-mails, 47 percent said that they had it termly and 10.5 percent stated that it was monthly, 3 percent weekly and 4 percent daily, but 34 percent said they had never had such form of communication. Regarding the usage of email for discussion about their lessons, 25 percent said it was only termly , 35.5 percent said it was monthly, 9 percent weekly and for only 8 percent of them it was a daily usage, but 22.5 percent stated that they never used email for discussion about the lessons.

About using the V.L.E for problem solving during an academic term, 7.5 percent said they never used the V.L.E for problem solving and 12.5 percent said they had used it termly, 27.5 percent monthly, 30 percent weekly and 22.5 percent of them said they

used it daily. Adding all the percentages together, we can see that most of the students used the virtual environment for communication and discussing their problems. This shows that they had experienced a virtual environment as a context in which they can express themselves. Finding out this aspect was very important for the research in this phase as it could help me consider some important points such as ease of communication, in designing the forum in the next stage.

When asked about the amount of time in a week they spend on the Internet outside their professional duties, 20 percent said it was between 0-5 hours, 38 percent between 5-10 hours, 20 percent between 10-20 hours and 22 percent stated that they used it more than 20 hours. It was always a major concern for me to know how much they have got the experience in communicating with each other in virtual environment, as it could show how much the study could improve in the next stage. The answers to this question were very important for the study since I could find out how much the students are active in using the virtual environment; the results showed that the average number of hours they used this environment was 10 hours in a week which helped me know about the educational level of the students and how they can use the V.L.E in the second phase of the study.

#### **5.6.2. Communication with others on line**

When asked about the harmonious atmosphere for the students with different cultural backgrounds in the V.L.E, 78.5 percent of the students showed their agreement on this and only 4 percent showed their disagreement; of course 17.5 percent of the students were neutral about this question (Table 2. q.1). When they were asked if the V.L.E is able to introduce new and better ways of communication, 76 percent of the students either agreed or agreed totally while only about 11 percent disagreed and the rest of the students did not have any idea about this (Table 2. q.2). In this part since I had not decided to predict anything and was dependent on the answers, it was very important for the research to find out the students' beliefs and ideas regarding the role of the V.L.E in making them closer to each other; 76 percent of the students believed that a virtual learning environment had a significant role in filling the gap between them. So I could find out what possible questions could be asked in the interview with them in later stages and how I could help them have a better communication with each other in the discussion forum.

When they were asked if they ever used the V.L.E to exchange information with others, 65 percent of them agreed and only 20 percent of them did not agree. Of course 15 percent were neutral on this question (q.3). The answers to this question showed how the internet and virtual environment have changed the way the students in developing countries like the Middle East communicate and socialise. Actually 65 percent agreement to this question could illustrate the fact that they have started the long way to making a virtual community. Of course the significance of these answers to the whole research is discussed in the discussion and conclusion chapter, but with these answers I was getting sure that the research is moving in the right path as they clarified the ideas of the students regarding this environment, before starting their communication in the discussion forum.

The next question asked the students about comparing face to face and on-line talks and asked them if face-to-face communication is more effective. The answers were interesting because 30 percent said they did not have any idea about this and 35 percent agreed while exactly 35 percent disagreed on this (q.4). When they were asked if their chats always start from their educational needs, 33.5 percent agreed on this, but 42.5 percent disagreed and 24 percent did not have any ideas about this question (neither agreed nor disagreed) (q.5). I think 42.5 percent disagreement is meaningful here for the research since it can show that their intention for their virtual communication is not always educational and they might have other social or cultural reasons for their virtual contacts.

### **5.6.3. Beliefs regarding the V.L.E and its role**

In this category, the students were asked about the psycho- social role of the V.L.E and what they believed about this role. When they were asked if the V.L.E can introduce new ways of learning and teaching, 85 percent of the students agreed about this role and 10.5 percent did not have particular ideas and only 4.5 percent disagreed about this (q. 6). The question about the role of the V.L.E in making the people closer to each other was the next one in this category. 73 percent of the students agreed on this role and 9.5 percent did not have any ideas, but 17.5 percent disagreed about this role of the V.L.E (q.7). Then they were asked if the V.L.E can encourage independence in learning. 72.5

percent of them agreed about this and 18 percent did not have any ideas, and only 9.5 percent disagreed about this role (q.8).

Then, as a main aim of the V.L.E, they were asked if the V.L.E can encourage the students to have better understanding of each other's views. 72.5 percent agreed, 16 percent did not have any ideas and 11.5 percent disagreed about it (q.9). When they were asked if the most important role is to prepare students for the professional world, 56.5 percent of them agreed or totally agreed, but 23 percent did not have any ideas on this role and 20.5 percent disagreed (q.10). This part could show a positive point for the research; they had practiced personal relationship building on the Net before participating in my research and they were not beginners in virtual communication. In addition to this, their positive idea regarding the new environment was important for this research; to see how they look at the establishment of personal relationship in virtual environment.

#### **5.6.4. Their personal experiences with others in the V.L.E**

Regarding the miscommunications on line and if they have ever had any miscommunication with other people in this environment, about 80 percent of the students stated that they had experienced a kind of miscommunication with others in this environment. And when they were asked if the miscommunications were related to language differences, 52 percent agreed but 35.5 percent did not have any ideas and 12.5 percent disagreed about it (q.12). But in answering the question if they worry about having miscommunication when they are talking with others in the V.L.E, only 23 percent agreed and 53.5 percent disagreed. Of course 23.5 percent did not have any specific ideas on this question (q.13). This might indicate that the majority of them had the intention to make this net of on-line friendship, though having some worries or problems in their communication. The answers to the next questions supported this idea.

Being asked if they had negative experiences in communicating in the V.L.E, 28.5 percent disagreed or totally disagreed and 20 percent did not have any ideas on this, but 51.5 percent agreed about it (q. 14). Finally they were asked if the miscommunications were mostly related to ethnic and cultural differences; 30.5 percent did not have any ideas, 34.5 percent agreed or totally agreed on this, but 35 percent disagreed or totally disagreed (q.15).

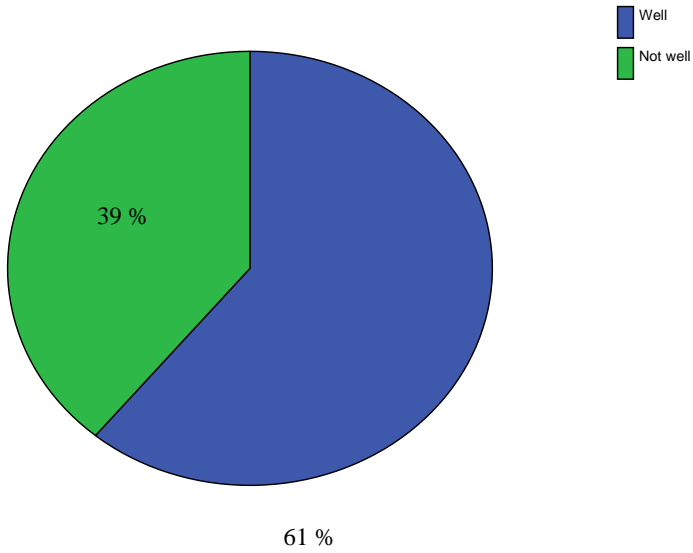
Table 2 Categories of communications, beliefs and experience of the students

CATEGORY	Question	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Communication	V.L.E can promote harmony among the students with different cultural backgrounds	46.0	32.5	17.5	3.0	1.0
Communication	The V.L.E is able to Introduce new ways of communication	39.0	37.0	12.5	8.5	3.0
Communication	I use the V.L.E to exchange information with others	30.0	35.0	15.0	13.0	7.0
Communication	I believe face to face communications are more effective than talks on-line	7.0	28.0	30.0	29.5	5.5
Communication	My chats always start from my educational needs	4.5	29.0	24.0	37.0	5.5
Beliefs	The V.L.E can introduce new ways of learning and teaching	40.5	44.5	10.5	2.5	2.0
Beliefs	The V.L.E can make people closer to each other	27.5	45.5	9.5	15.5	2.0
Beliefs	The V.L.E can encourage Independence in learning	23.5	49.0	18.0	8.0	1.5
Beliefs	The main aim of V.L.E is to encourage the students to have better understanding each other's views	32.5	40.0	16.0	11.5	0.0
Beliefs	The most important role of the V.L.E is to prepare the students for professional world	4.0	52.5	23.0	14.0	6.5
Beliefs	Instructors can track pupils' learning performance in V.L.E better than traditional system	8.0	47.5	30.5	11.0	3.0



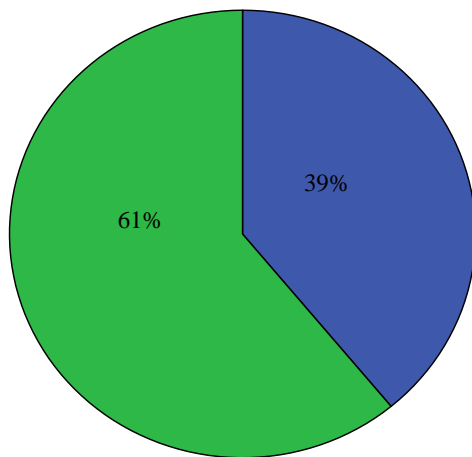
Experience	Miscommunications have been mostly related to language differences	12.0	46.0	35.5	8.0	4.5
Experience	I worry about having miscommunication when I am talking with the others in V.L.E	5.0	48.5	23.5	16.0	7.0
Experience	I have negative experiences in communicating in the V.L.E	4.5	47.0	20.0	23.5	5.0
Experience	The miscommunications I have had so far have been mostly related to ethnic and cultural differences	2.0	32.5	30.5	31.5	3.5

Finally the students were asked how well they had communicated with friends/classmates with different ethnic (religious and political) backgrounds. 61 percent answered 'WELL' and the rest said 'NOT WELL' (Figure 6). This might indicate the students' attitudes towards each other; in an area like Iran when the students virtually contact with each other, it is always possible that the chat room includes four or five different languages and cultures, so the possibility of misunderstanding or confusion is always high. But the answers to this question indicated how the students look at this issue in a new perspective.



*Figure 6* Successful communications of classmates with different ethnic backgrounds

But asking about how well they communicated with the same people with different linguistic (language) backgrounds, just about 39 percent said ‘WELL’ and the answers of the rest was Not WELL’ (Figure 7).



*Figure 7* Successful communications of classmates with different linguistic backgrounds.

## **5.7 Conclusion**

The above finding led me to manage the project better so that I could design the next two phases with a better understanding of the context; participants' ideas, perceptions and attitudes. Doing this phase was essential in the thesis as it could help me understand the context of the study better. This phase was separately done to see how the participants look at the virtual environment and, based on their previous experiences, what the concept of virtual communication means for them. The next phases of the study will be concerned with: (i) how cultural identities of students are co-constructed in a virtual learning environment; (ii) the nature of the community that arises from the co-construction of identities, (iii) how virtual forms of interacting lead to creative ways of experiencing and communicating.

# Chapter Six

## **Chapter Six Phase two: analysis of on-line students' chats**

### **6.1 Introduction**

Based on the theoretical perspectives of the study and as a bridge to the more practical stage of the research in knowing how intercultural communication is realised in the V.L.E, two distinctive types of on-line language contact were illustrated with data from on-going research on virtual learning environments in universities of Iran. As the term proceeded, I collected the students' chats and began developing ideas about what the key issues were. A total of 100 separate chats were recorded by participants, which were transcribed as accurately as possible into a single electronic document. For the most part, I followed Grounded Theory procedures (Charmaz, 2006; Glaser and Strauss, 1967) in organising and interpreting participants' chats. While carrying out the research, I attempted to let the themes and issues emerge from the material, as opposed to testing what particular theories might be confirmed or rejected by the data; this is an approach well-suited to the descriptive analysis of open-ended or qualitative textual data such as mine (Bauer, 2000). The details of the data collection and analysis in this phase have been discussed in the following sections.

### **6.2. The aims of Phase 2**

The main aims of Phase 2 were:

1. To find out if virtual forms of interacting- mainly chats here, lead to creative ways of experiencing and communication and are capable of supporting meaningful social interactions.
2. To find out the nature of the virtual community and see how intercultural communicative competence is realised in the V.L.E.

### **6.2.1 The subsidiary aims of the phase**

It is believed that the collaborative and interactive nature of on-line communications requires that attention be paid to intercultural communication where the focus is on 'interaction among participants identifying simultaneously with multiple cultural frames of reference' (Smith, 2003b, p. 44). In this regard, the main goal of the research in this phase was to get to know the culture constructed which supports collective life within the virtual learning environment. So, the participants' interaction is taken as a text to be analysed and understood. This stems from the belief that virtual communication systems are thought to have powerful effects on social relationships (Jones, 1995a; Sutherland, 2002); and many claim that this new form of social interaction might encourage 'wider participation, greater candor, and an emphasis on merit over status and that stronger social communications emerge'(Herring, 1996 b, p. 31). So the major goal in this phase was to explore how these students create and maintain interpersonal relations in such an environment, how these ties are important for maintaining them through the program, and whether these relations have built a 'sense of community' in this environment (O'Dowd, 2003).

The goal here was to learn the strategies the students use for coherent, fluid interactions in the virtual community under study since in virtual communities, besides common conversation, 'most actions are performed through written discourse' (Scollon and Scollon, 2001, p. 138). Since it is assumed that there are cultural issues in the virtual environment that transcend cultural borders to shape a new cultural structure for large numbers of students, regardless of their nationality, in this phase it was decided to find out how the electronic communications could show the nature of the participants' interactions as group processes. The ability of the students to build up a personal relationship with their partners via such contacts, their attention to their partners' needs and communicative style, and their capacity to produce engaging, serious and responsible communication were found to be key aspects of the chats which may lead to the successful development of intercultural communicative competence in the exchanges.

## **6.3. The method**

### **6.3.1 The Data for Phase 2**

The data in this phase of the study came from analysing the students' communications in the on-line learning environment, which used a method influenced by grounded theory to look at on-line discussions and messages from on-line classes.

### **6.3.2 The context of the study; the sample and the situation**

#### **6.3.2.1 The context**

Iran University of Science and Technology has established the E-Learning Centre on 2004 as one of the first higher education centres in Iran which undertakes to admit and educate students via advanced technology of communication and Internet network. The main objective of this centre is to admit and educate students in academic programs by using the electronic environment (Virtual). The students of this centre are formally admitted to the University after successful passing of all courses of the first semester. Except the final term examinations in each academic semester, the students pursue their educational activities electronically and via Internet. The educational services are offered through Internet and therefore, the centre can be termed as an online or virtual centre. The fundamental advantage of the E-Learning Centre is not only in the method of offering services, but also in the employment of innovative educational practices.

#### **6.3.2.2 The courses**

At present, bachelor programs of Computer Engineering and Industrial Engineering, and master programs of Computer Engineering, Communications and Information Technology, Industrial Engineering, Simulation and Process Control, and Management of Information are offered virtually by the centre. Except some special courses which are typically handled during summer, all courses of the academic fields are prepared and produced in electronic form. The course subjects of each session, after being presented in the centre, will be posted in the network at the disposal of the students for a limited time. After observing and studying each session of teaching, the students may put their questions via email, chat room or online classes and address the respective instructor. The following table shows the programs of study and the number of students who cooperated in this phase of the study.

**Table 3** Programs of study and the number of students

	<b>Title</b>	<b>Number of participants in Phase one</b>	<b>Number of participants in Phase two and three</b>
1	Information and Communications Technology	50	4
2	Software Engineering	50	4
3	Industrial Engineering	58	4
4	Simulation and Process Control	22	4
5	Management of Information	20	4

### **6.3.2.3 The sample and the situation**

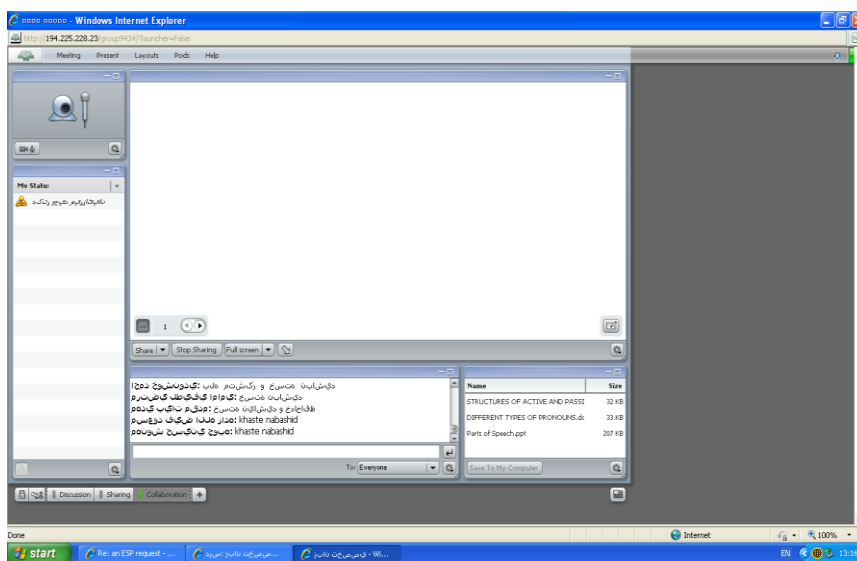
It was necessary that the candidate population consisted of approximately the same group of participants for the whole period of the data collection (Smith, 2003b). These were all the students who had taken the course ESP- English for Specific Purposes- officially and communicated with each other until the end of the phase. Taking part in the forum was primarily designed to be part of their duty in the course and they were supposed to have three sessions of chats each week. Yet their purpose in joining the chat room initially may have been solely for instrumental reasons, e.g., to gain some knowledge and techniques to deal with their educational issues. As the research went on, it became clear that students were not only using the forum as a platform to express their ideas, but they were also using the interaction with their partners (both in their own virtual in-class debates and in their interactions with others) to test out and develop their ideas on the other cultures with different background. This is the issue with which students have always had problems in Iranian society, specifically when they are concerned about their freedom of speech in society. So they felt they had a strong intention or reason for going on their contacts virtually.

### **6.3.2.4 The forum; chat rooms**

This phase of the study focuses on the virtual community in which most, if not all, members of the chat room have never met in person before entering this community. They are studying in one virtual university but geographically dispersed. Through the research, a forum was created in which students experienced their learning and communication as growing out of their collective activity. The forum comprised various channels that indicated the subject matter being discussed within in order to manage the traffic flow resulting when many students used the forum simultaneously. During live



sessions, all students gathered virtually in the internet class rooms. To further protect participants' identities, I created pseudonyms all of which were available to class participants. Students used the forum to communicate with each other or the instructors; whatever they asked from the class chat room was visible to all members of the class and this is why they had a virtual common room for themselves. The chat room was open to the others, but the identities of participants were unknown, and a statement on the home page cautioned participants against disclosing information of a very private nature. 'Private Messaging' is an option that is available to chatters so they can choose to converse with only one member of the chat room and no one else can see their conversation. In addition to text, participants may use voice to express themselves depending on software availability. They can also use webcam if they feel safe and trust the others on line. Picture one shows a page of the environment in which the students start their chats.



Picture 1 A page of the chat room facility

The guidelines posted on the home page of the forum say participants are expected to "...make an effort to give as well as receive support." Although the support given is not in-person, but through text and images on a computer screen, chatters are expected to get

support from others and to provide support as well. Upon reviewing the chat room guidelines, I saw that all participants are expected to participate, to give as well as take feedback. The forum was active for 16 weeks by the time the total of hundred chats and discussions had been carried out and as it was stated before, twenty contributors from different ethnic and linguistic backgrounds took part in discussions. Table 4 shows the number of the students who took part in this phase based on each language and culture and also gender.

Table 4 Classification of the students based on their language, cultural, and gender

Language	Number of participants	Gender
Persian	5	3 male +2 female
Kurdish	5	4 male+ 1 female
Arabic	5	2 male + 3 female
Turkish	5	3male+ 2 female

At busy times, 5 or more participants could be chatting at the same time, and at times two or more different conversations were going on and the lines of chat intermingled. However, sorting out lines of chat is not difficult, since the person's nickname precedes each line of chat submitted by that participant. For example, Ali and Merry were having one conversation; and Fati and Hamid were having another conversation, seeing the person's nickname associated with their lines of chat, made it relatively simple to follow.

#### 6.3.2.5 Access to the chat rooms

To access the chat room, a person needs connection to the Internet and his/her private I.D. and pass word. They can be anywhere to access it. Possibilities include family room, dormitory, school, library, work; anywhere one could have computer access to the Internet. During one chat, several participants identified their locations as the capital city-Tehran, while in another one participants stated they were in different cities in Iran. So, because of this geographical dispersion, there was no face-to-face contact between the students. The chat room has no physical walls; however, virtual boundaries do exist. When a person enters the chat room, instead of visually seeing someone entering through a doorway, a message is automatically displayed that says the nickname of the person who has just entered. The newly arriving person typically types "hi" and usually includes the nicknames of people already in the chat room; greetings such as "hi Jamshid," "hi

Kamal," "hi Fati." The other participants usually reciprocate. A similar situation occurs when someone says they are leaving the room. Most of the time the chat room is available for open discussion, sharing of ideas, feelings, difficulties, and day-to-day happenings. The students were asked to send me copies of all their discussions they sent or received from their partners. This detailed record made the task of analysis easier.

#### **6.3.2.6 The channel operator, moderator and teacher assistant's role**

The students in this virtual environment had a moderator or teacher assistant and also two channel operators. The moderator had to take on 'contextualising, prompting, synthesising, and facilitating functions' (Thurlow, 2001b, p. 281) and in some cases an active leadership role, to provide enough potential to engage participants and 'enough openness to admit them into dialogue' (Kerr and Murthy, 1995, p. 91). The moderator did not interfere in the students' talk, but was cautious to maintain a coherent and directed flow of dialogue. This means that there was no pressure on the students and their communication; they were free to communicate at any time they agreed and the moderator did not have any role in making decisions for their contacts. In other words, he was not present in their chats. The channel operators only monitored for rule violations and provided supportive comments. The Chat-room Guidelines state, "Discussion of impolite, unethical or illegal issues is not allowed in chat". The chat-room rules on social behaviour provide standards of behaviour. Those who deviate from the rules are subject to sanctioning by the channel operator. These violations are considered serious because they can affect other chatters. Channel operators offer verbal forms of support in response to chatter's conversations, as do other chat-room participants. The University IT Rights states, "You have the right to talk to a channel operator on duty if you are having a problem in the chat room or write to the administrator (at the website) for any reason." Chatters are provided facilities to request assistance with problems encountered in the chat room.

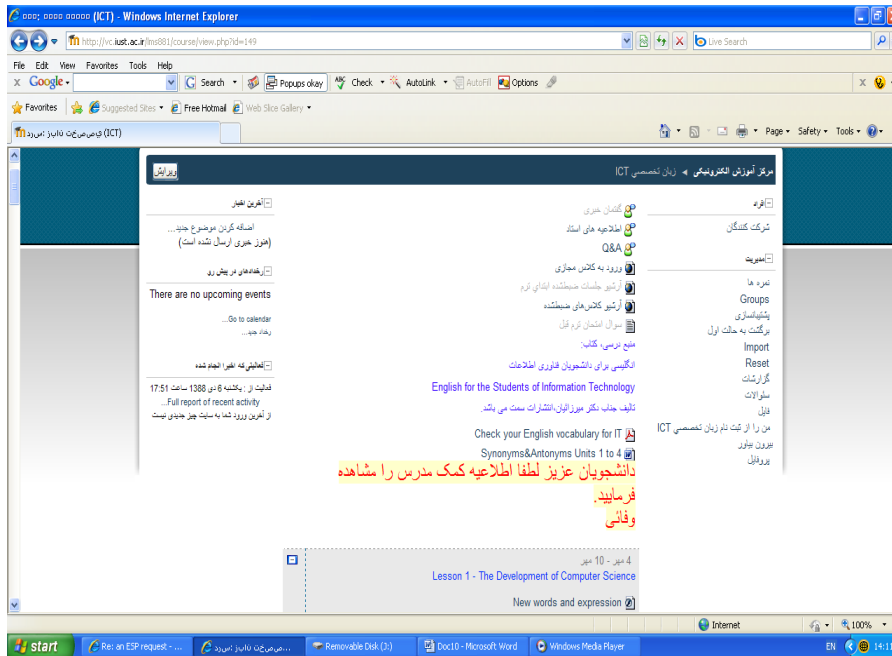
#### **6.3.3 The software used; LMS- Learning Management Software- Portal**

The students were briefed how to use the facilities and the software LMS- Learning Management System- for their communications. Basically, LMS portal facilitates online creation of knowledge, its transfer and assessment. It also provides a place for networking and developing a community of scholars online. LMS portal is a virtual learning environment which offers a combination of learning, teaching and support materials together with new methods of communication with other students and

instructors. Students can access information that is customised to their program and support needs without having to search the website to find information relevant to their studies. Learning Management system (LMS) portal is a technology-driven platform that enables educational institutes to move teaching, training and learning initiatives and programs on the Internet for e-learning to take place. It provides Internet-based infrastructure for teachers, instructors, trainers and program directors to manage and track a student's participation and performance in e-learning. The focus of LMS portal is to have an e-learning platform that is program specific and conveniently scalable to changing needs. LMS portal aims at complementing the key tasks of the university. It facilitates online creation of knowledge, its transfer and assessment. It also provides a place for networking and developing a community of scholars online. Some of the main features of the university LMS Portal include communication tools such as:

- Communication between instructors and students via email, discussion groups and chat facilities; it allows students to ask questions and discuss them with other students or the instructor.
- Shared group areas that allow designated groups of students to upload and share files as well as communicate with each other. This can be especially useful for communication between students at different places.
- Delivery of learning resources and materials through the provision of learning and teaching materials, links to other web resources, and on-line discussions.

Picture two shows the first page of a course in which they can choose the course, the time, the lecturer and also the facilities designed for them in the site.



Picture 2 The main page of an on-line course

Social rules of interaction were to be regarded around the environment while participants communicated with their classmates. Participants could directly address the whole group or a subgroup on the public forum. They could alternatively communicate, still in the public forum, to one particular individual by including that person's nickname at the start of the line.

The practice of addressing a specific participant in the public forum by including the person's name at the start of chat, in combination with references in content created complicated patterns of interaction. For instance, a question could be targeted at one specific person and refer to what that person said in his or her previous chat. On the other hand, a message could be specifically targeted but not refer in any way to anything that was said in the past, or it could be directed to one person and refer to something said by another. Like any other CMC users, they actually exchanged information in text in ways that were more written- than speech-like. Zuboff (1988) describes this situation as 'the textualisation of sociality through CMC' that is, the

V.L.E users may be bringing ‘their literate production practices to an interactive, social and orally-oriented interaction’ (p. 33). As students became more integrated with other V.L.E students, they moved from a position of isolation to confident membership in their community which is in keeping with results of research on social support in other settings. Throughout the exchange I was in regular contact with the instructor of the class in Tehran. Our messages often involved reporting on how our students were reacting to the exchange and what they were learning from it. Since I had no access to their resources or private spaces, I could not see if there is cultural movement between themselves in their very private contacts, but the following sections show a general view of their development in their communication.

## **6.4. Data analysis**

### **6.4.1 The main substance of the analysis and the system of analysing the data**

#### **6.4.1.1 Coding Categories used in this phase**

The chats examined here come from two classes in one virtual learning environment. As a virtual community, besides common conversation, most communications were performed through written discourse. Although it has been argued by some researchers that text might not represent a person’s motivation or values and feeling (Kramsch, 1993), there is great amount of research which show that, in spite of appearing cold, text can visualise the students’ emotions in communication with each other (e.g. Petty and Cacioppo, 1986). So, here the main substance of analysis for the forum discussions was their language behaviour, which was expressed through a text-based discourse and the participants’ interaction was taken as a text to be analysed (Warschauer, 2000a).

The data of twenty four -60 minute- synchronous discussions were analysed and coded according to the ideas derived from previous research by aka IRF - initiation, response, feedback- model (Birmingham School). This model was created by Sinclair and Coulthard (1992) as a model for analysing spoken language, which was developed as a tool for ‘systematic study of classroom discourse, concentrating mainly on interactions between the teacher and individual students’( p. 30). I thus coded for 10 different discourse functions that could be easily identified in these electronic discussions as students engaged in active and informative student-centred exchanges. It should be stated that the data was not analysed based on a pre-defined set of codes, but these

codes and themes emerged as I analysed the data, both quantitatively and qualitatively. These represent "electronic moves" or units of discourse which encode specific functions, such as greetings, initiations, asking, requests, responses, expands, comments, adversarial moves, proposing and closings. For a conversation in a virtual environment to take shape, learners had to jointly construct a discourse structure, which meant initiating a request to be followed by a response or perhaps another move (request for information, clarification request, and explanation). In recognising their primary functional orientation, the chats were coded in terms of the major performative speech acts (discourse functions) which are explained in the following table.

Table 5 Discourse Functions in Synchronous Communication using IRF model

<b>A</b>	<b>Speech acts performative</b>	<b>Explanation</b>	<b>Example</b>
1	Greeting	Opening move in a synchronous discussion	"Hi every body"
2	Salutations		"Hope everything is ok".
3	Initiate	Suggesting a topic in a synchronous discussion	"Let's talk about our new space today"
4	Ask /requests	Clarification requests Explanation requests Comprehension checks	"Is that only the case with virtual universities?" "Why did she feel that Mahmud was responsible for her loss?"
5	Response/reply	Agreement Elaboration Explanation Clarification Apology	"Ok. You right". "I can work on it". "It actually refers to it" "I really meant this" "sorry about that"
6	Expand	opens what has been said by himself	"I should say that..."
7	Comment	Giving comment on what others said	"What you mean is ...."
8	Proposing		"Why not moving on for it?"
9	Adversarial moves/ challenges	Electronic speech acts where one participant challenges another	"Do you only watch such cheap programs?"

10	Closing moves		“Ok see you later/ lets talk about it tmw”
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As part of this systematic process of coding, I then clustered them into broader categories. So, I began the process of developing a coding scheme with concepts from my research objectives and, as a result, I regarded some exploratory categories to be found in the chats. The following table shows this coding design better.

Table 6 Exploratory categories in Synchronous Communication

<b>B.</b>	<b>Exploratory categories</b> <b>Content</b> <b>(semantic) ;</b> Specific electronic speech acts [Long, M.H. (1981)].
1	Experience
2	Consolidation/ Consensus
3	Continuation
4	Clarification requests Explanation requests Comprehension checks
5	Agreement Elaboration Explanation Clarification Apology
6	Motivation / Engagement / values/encouragement
7	Affirmation/ acknowledgment
8	Misunderstanding/ Disagreement Ups and downs
9	Question
10	Relationship

The following table is an example of a coded chat based on the speech acts and exploratory categories used by the students, the number of the episode, the focus of the episode; which is actually the title of the chat I chose to distinguish each one from the



others, and finally the themes which emerged at the end of the reading and analysing the chats. There is also a column which shows the speaker and the turns.

Table 7 A sample of an analysed chat

#### IV. Behaviour of students online

Speaker	Categories Aka (speech) acts	Exploratory categories	Episode number	Episode focus	Themes
	Performative	Semantic	iv	Behaviour of students online	Semantic
					Compromise/ social grouping/cooper ation/sharing thoughts
01 Akbar: hi every body.  01.2 Do u like to talk about the sort of people we contacted to on line?	Greeting  Initiate	Intention	iv	The behaviour of students	sharing thoughts
02 Nazenin: yes why not. It should be very exciting as a new experience.	Response/reply	Agreement	iv	The behaviour of students	co-operation
03 akbar: ok. What sorts of students did you have virtual contact to during the last week?  03.1 Did you ever talk about your aim or intention for these sorts of	Ask  Ask	Explanation  request  Motivation	Iv	The behaviour of students	sharing thoughts

contacts?					
<p><b>04 Nazenin:</b> well I myself believe that I have some personal link to the cause, and enjoy a particular task or activity.</p> <p>04.2 Some said they enjoy sharing their information, knowledge or qualifications to help make improvements to others and some others said they enjoy this activity as it fills in spare time and gives them a sense of self worth.</p> <p>04.3 And u Ali, what do u think of this sort of contact? What is your intention?</p>	<p>Response/ reply</p> <p>Expand</p> <p>Ask</p>	<p>Motivation/ encourage- ment</p> <p>Motivation/ encourage ment</p> <p>Motivation/ encourage ment</p>	iv	The behaviour of students	<p>sharing thoughts</p> <p>sharing thoughts</p> <p>co-operation</p>
<p><b>05 Ali:</b> well I like to be community minded. And sharing.</p> <p>05.2 But I asked my virtual partners about this as well and I honestly think most have that sort of community-minded values and ethics.</p> <p>05.3 I'm sure they are from other religions or cultural backgrounds.</p>	<p>Response/ Reply</p> <p>Acknowledge/ comment</p> <p>Expand</p> <p>Comment</p>	<p>Motivation/ encourage ment</p> <p>Values/ encourage ment</p> <p>Values/ encourage ment</p>	iv	The behaviour of students	<p>social grouping/ sharing thoughts</p> <p>sharing thoughts</p> <p>compromise</p>

<p><b>06 Akbar:</b> Can you describe a person who is spending time hours and hours in this place to contact and exchange ideas with you?</p>	<p>Ask</p>	<p>Motivation/ encouragement</p>	<p>iv</p>	<p>The behaviour of students</p>	<p>Sharing thoughts/ Cooperation</p>
<p><b>07.1 Ali:</b> well they are passionate about a cause and devote all their spare time to it.</p> <p>7.2 They are selfless, generous hearted, hardworking. I think we are gradually finding a common reason for going on well here.</p> <p>7.3What about you saeed what do think?</p>	<p>Response/ reply</p> <p>Comment</p> <p>Ask</p>	<p>Motivation/ encouragement</p> <p>Motivation</p> <p>Continuation</p>	<p>iv</p>	<p>The behaviour of students</p>	<p>Cooperation</p> <p>Sharing thoughts</p> <p>Sharing thoughts</p>
<p><b>08 saeed:</b> I think we can mix practicality and idealism here if we want to go on seriously here.</p> <p>08.2 I mean you must be at least a bit stubborn – refuse to admit defeat, we can change things!</p> <p>08.3It helps keep you going when things get tough especially when we don't agree in some issues in our on line arguments like political issues....</p>	<p>comment</p> <p>comment</p> <p>comment</p>	<p>Continuation</p> <p>Ups and downs and problems</p> <p>Continuity</p> <p>Ups and downs and problems/ misunderstanding</p>	<p>iv</p>	<p>The behaviour of students</p>	<p>Cooperation</p> <p>Compromise</p> <p>Compromise</p> <p>Compromise</p>

09 <b>Saeed:</b> but to be honest as I said, I found most of them with a community-minded spirit 09.2 devoting plenty of spare time for answering questions or comments.	comment  comment	Certainty/ Continuity  Motivation/ encourage ment	iv	The behaviour of students	Cooperation  Sharing thoughts
11 <b>akbar:</b> we should wait and see how it goes on.  11.2 We are still at the beginning of this road.	Accept  Expand	Agreement  Continuity	iv	The behaviour of students	Compromise  cooperation
12 <b>Ali:</b> yes we should. Ok talk to u later. I should go	Acknowledge Closing moves	Agreement	iv	The behaviour of students	cooperation
13 <b>akbar:</b> ok bye	Closing moves		iv	The behaviour of students	

## 6.4.2 A quantitative look at the data

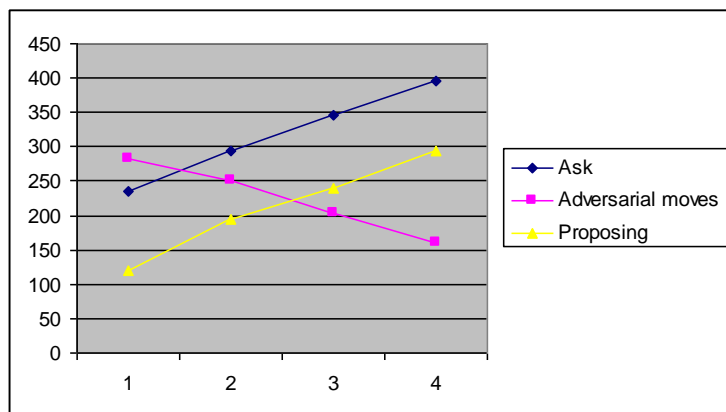
### 6.4.2.1 Discourse functions (speech acts)

In order to help the readers understand the process of data analysis in this stage, I have focused on the most frequent discursive codes- speech acts- in the data; those which can show more progress or less development of the process of community building so as to help me find out if the data have answered any of the questions in the research. Of course this analysis was not frozen in the quantitative stage and I did a qualitative analysis on the chats as well which are discussed later on. In this regard, Discourse Functions were the most practical ones to focus in the primary analysis of the data since they could show what strategies the students had chosen in order to reach to their aims in their virtual contacts. I have summarised the tables of categories to the most important ones, but the main tables are stated in the Appendices (e.g. please see appendix 6.1). These tables show speech acts used by the students and also the

frequency of their usage in each month. In another stage, I analysed the exploratory categories in their own tables.

Table 8 The most significant categories (discourse functions) used by students

Duration	Total in the first month	2nd month	3 <sup>rd</sup> month	4th month
Categories (discourse functions)				
Ask	236	293	346	396
Adversarial moves	304	250	203	102
Proposing	89	194	240	327



Graph 1 The most significant categories (discourse functions) used by students

As shown in the table and the graph above, 'Asking strategy' starts from 236 in the first month and leads to 396 in the fourth month. This can demonstrate the road the students had chosen for their communication since asking can indicate how much they have trusted each other. This also shows that exchanges were successfully taking place in their electronic space; indicating how the interactions can reflect the students' socio-cultural

development in the V.L.E. Adversarial moves could be another strong indicator of success or failure of the communications in this virtual space. These types of ‘interactional modification moves’ were strong indicators of what was happening in this virtual environment and how they presented themselves in the synchronous data. The usage of these moves starts from 304 which seem high in daily conversations, as they mainly show the challenges, but we can see the monthly decline of this move so that it has reached to 102 in less than 4 months. It can show how the students have been serious in resolving their problems and building this new community. This image gets clearer when we look at the proposing category. The number of time this strategy was used in the first month was 89 while in the fourth month it has increased to 327 which is a strong indicator of the progress in the process of development in this space and how intercultural communication competence is realised and understood in this virtual environment.

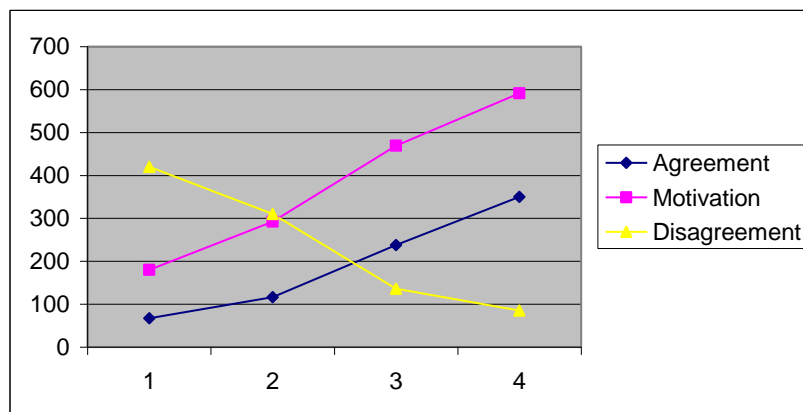
#### 6.4.2.2 Exploratory categories

To find out more about how intercultural communication competence can be realised in a more extensive way, I did another analysis on the most frequent exploratory categories found out in the chats. The following table shows the number of times these categories have been used and how the students have used these strategies in their communications.

Table 9 The most frequent exploratory categories used by the students.

<b>Exploratory categories</b>	<b>Total used in the 1<sup>st</sup> month</b>	<b>Total used in the 2<sup>nd</sup> month</b>	<b>Total used in the 3<sup>rd</sup> month</b>	<b>Total used in the 4<sup>th</sup> month</b>
Agreement	67	116	238	350
Motivation/ engagement/values/ encouragement	180	292	469	591
Disagreement / Misunderstanding/ Ups and down	420	310	136	85

The following graph shows the application of the exploratory categories and the number of times they were used by the students in the period of four months.



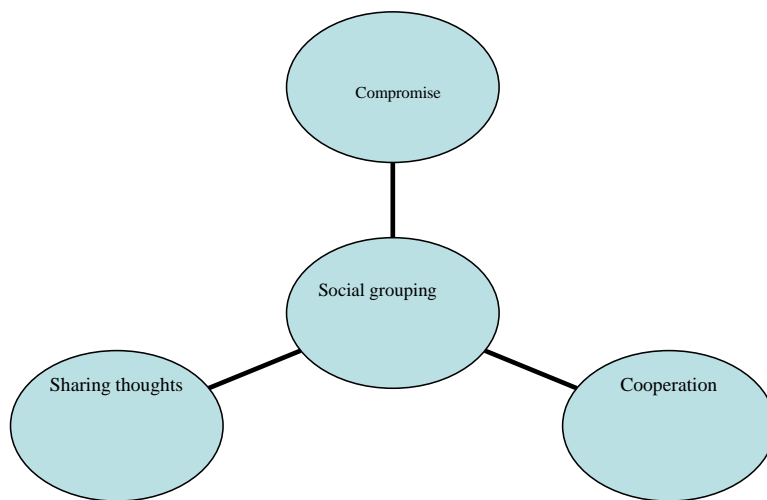
Graph 2 The most frequent exploratory categories used by students during four months

#### 6.4.3 A qualitative look at the data

In qualitative analysis of the chats, I sought to follow the ‘guidelines of explicitness’ stated by grounded theory (Straus and Corbin, 1990) and provide recognisable descriptions of, and examples for, the different categories, as in such contexts students’ talk or messages are indicators of what they think is an appropriate behaviour. So, I needed to examine critically what the chat content is saying since I aimed to see how students behave in these on-line situations and if their chats could reflect ideas of ‘suitable behaviour’ that they bring into this environment (Straus and Corbin, 1990, p. 74); this could help me find out the relationships between students’ intercultural communication in the V.L.E and their attitudes.

As a result, a simplified coding and content analysis was applied in early analyses of the chats. In later analyses, consideration of explicit content became secondary to examination of the work being done by the messages. It is from the later analysis that the examples below are drawn. It should be stated that analysing the data consisted of coding the data looking for themes in students’ experiences, comparing across students for commonalities and differences, and analysing the characteristics of the themes that emerged. In this way, examining the chats revealed ‘negotiation and cultural production’ (Abdelnour-Nocera et al., 2007, p.166), compromise, social grouping,

sharing thoughts and cooperation in their on-line space (fig. 8) which may offer insights into not only the intercultural activity among the participants, but also how they interact culturally with the people from other cultures (Felix, 2003).



*Figure 8 Major themes emerged in the chats.*

#### **6.4.3.1 The chat review and analysis**

Analysing the openings of chats, the first on-line discussion session (comparing) was used 'to explore and elaborate issues, gain familiarity and create confidence' (Strauss and Corbin, 1990, p.63) in the students. In the chat room newcomers were often indirectly asked to give some information about themselves. For example, one of them may say "let me introduce myself; I'm "Nafisa 82" and the chat room usually stays quiet, or other regular members introduce themselves to the newcomer, while waiting for the newcomer to introduce himself or herself. Extract 1 can show these points clearly:



**Extract 1**

1 Donya: hello
2 Nafise: How are you?
3 Donya: how are u
4 Donya: tanx
5 Donya: good
6 Nafise: Thanks... excited of the new talks....
7 Nafise_: No worries
8 Donya: ok
9 Donya: why not bad
10 Nafise: Because I catch cold.
11 Donya: oh sorry
12 Nafise_: Let's start
13 Nafise_: My name is Nafise
14 Nafise_: My student number is 84312.....
15 Nafise_: And my student ID is 84313.....
16 Donya: my name in Donya
17 Donya: and my student number is 8431.....
18 Nafise_: And now let's have a chat about our problems or issues as a virtual student.
19 Donyai: good
20 Nafise_ what's your idea about our university?
21 Donyai: not bad
22 Donya: it has some problems
23 Donya: but it can improve
24 Nafise: I agree with you. We can improve the situation as a family.

In this extract we see that the opening to their chat dealt primarily with 'friendship work' such as words of support and thanks and also they often assist the matching process which is a significant fact in constructing the communities (Hammond, 2005) by incorporating the name of the person they are replying to (line 13). The first

message also draws attention to the situation where a student comes on line not knowing what is expected of him or her in terms of the norms of behaviour for a particular facility within the class—in this case "chat." This is why the immediate question starts with something like "idea about our university". In this first contact we can identify an instance where the chats are being used by friends as means of resolving and, possibly, instigating conflicts (turns 18, 22, and 23). In the course of the exchange, some key issues emerged which were influential in the extent to which students became more aware of the differing perspectives and interpretative systems of the other cultures. I was aware of this situation and also the fact that it is sometimes necessary to help participants practise 'how to respond in such challenging environments' (Garrison and Anderson's, 2003, p. 82). The following extract of the chat shows this aspect more.

**Extract two**

1 Nafise.: Something is wrong with these virtual classes.
2 Donya: yeh
3 Donya: usually some students can't understand that you have the right in expressing your ideas here
4 Donya: whats do you mean by that?
5 Donya: i mean some times my friends force me to accept their ideas in discussions
6 Donya: although some times I think
7 Donya: the situation seems much better in the virtual classes.
8 Nafise: please explain more about your problem? Do you mean that when you're talking with a student he does not tolerate your idea?
9 Donya: yeh
10 Nafise: oh
11 Nafise: You're right. There should be more understanding in these cases
12 Donya: I think we need more practice of tolerance here

Here, we see that a partner announces a problem which requires comment and requests it (turn 3) which can be regarded as 'initiation' and the addressee acknowledges the problem, its legitimacy and the need for comment (turn 8); they accept the need to comment on their ideas (turn 12), which seems to be a sort of 'acknowledgment'. It is this finely-tuned arrangement-making which demonstrates one of the clearest instances

of the nature of V.L.E communications shaping a new, distinctive style of social interaction (Garison and Anderson, 2003). Ling and Yttri (2002) propose that this type of 'mundane, micro-level organising might allow for both the structuring and rationalisation of interaction' (p. 144).

As each group member had a specific role within a group, the 'scaffolding' that each member provided was different. In other words, they started to use their skills of interaction to express their understanding of the others' cultural behaviour in a way which is interesting and understandable to them in this stage. It means that students engaging in these exchanges from different cultural backgrounds have been realising intercultural communicative issues in their thoughts and ideas in a way that their virtual partners will understand it which, I believe, is a significant sign of the meaningful interaction in this environment. This analysis also accorded much greater attention to these talks since they seem to illustrate that for the students there is a mutual understanding between what they see as the purpose and practice of virtual discussion forums and what they are actually experiencing when using them.

In the analysis of extracts that follow I will analyse what, in terms of understanding the cultural context that is the on-line classroom, we can conclude from studying this short, but complete, thread from a larger discussion.

### Extract 3

01 Donya : i think some students are very kind
02 Donya: like mariam
03 Nafise: how do you think so?
04 Donya: She's always ready to help others.
05 Donya: someone really concerned
06 Donya: yeh
07 Nafise: ye
08 Donya: and mr Ali is too
09 Donya: he has different idea in many cases from me and we have had challenges in those social cases but whenever I needed help he has been ready to help me...
10 Donya: ye especially about our lessons
11 Nafise: I see
12 Donya: he spent his time a lot for me and some times taught me on-line
13 Nafise: Ok
14 Donya i: but some students are not used to doing that
15 Nafise_: ye
16 Donya: do u know many students in virtual uni finished another field in another uni?
17 Nafise_: ye ya some of them are my friends
18 Nafise: Ok
19 Nafise: It's very good.
20 Nafise: I'm sure that they're so active and smart.
21 Nafise: But most of the people in Iran think that virtual students aren't smart at all.
22 Nafise: Because they don't take KONKOOR ( university entrance exam) and they come to virtual university without KONKOOR.
23 Donya: I don't think most of the people in Iran think like this. I think this is the idea of less educated people.

As can be seen in this extract, the students have repeatedly shown that they are more deeply sensitised and aware of not only their own opinion on a variety of cultural matters, but the range of opinions that particular issues or topics might generate. The supportive examples in this regard are turns 20-23 in which they start talking over their concern about how the people think of them as virtual students. Here, the students appear to consider themselves to be intimates. Thus, as explained in the previous example, they see others' problems as partly their problem, without any imposition. Smith's (2003a) view is that discussion of personal experience and also problems is 'an important element in the development of cohesion in the virtual contacts' (p. 52). Thus, the synchronous aspect of this medium has enabled the participants to:

*"...experience the immediacy of communication and power to exchange ideas quickly as the give-and-take of real-time, human-to-human communication and bridges between learners, those who do not otherwise meet"* ( Ingram, Hathorn and Evans, 2000, p. 29).

As the research went on, it became clear that students were not only using the forum as a platform to express their ideas, but they were also using the interaction with their partners (both in their own virtual in-class debates and in their interactions with others) to test out and develop their ideas on the other cultures with different linguistic and cultural background. This is the issue with which students have always had problems in Iranian society, specifically when they are concerned about their freedom of speech in society. So they felt they had a strong intention or reason for going on their contacts virtually. Extract 4 illustrates this issue.

#### Extract 4

01 Tah: has joined the conference.
02 Tah: hi
03 h_kas58: hi, and welcome to our conference
04 I think Mohammad had some problems. ok Mohammad, ask if you have any problem
05 h_kas58: yes
06 leila_as11: im leili
07 leila_as11: ok
08 mha_200: i am Mohamed
09 h_kas58: ok, u can ask ur problems with text if u like
10 leil_as11: thanx mr mosa
11 mha_200: thanx mis Kais for guiding me
12 mha_200: it is verry good
13 h_kas58: no problem, we are here to help
14 raz: yea, we are virtual students but we know each others' problems better no problem what culture or language we come from
15 raz : and we know that it is a real shelter for us !!!! although with many different cultures in it
16 leila_as11: people may think we are wasting time here, but it is a real life since we learn how to communicate with friends who seem very different from us!
17 mha_200: yes my friend it's quite a real story I wish we could sort it out
18 mha_200: we should let them know that this is a new shape of a society with many dif. and even opposite cultures in it
19 Leila_as11: yes I know but we can not really change such opinions so quickly or by force ha ha...
20 Mha_200 yes you are right
21 mha_200 oh who can help to me?
22 mha_200: i don't have voice!

Here, it seems the students felt that they should have been engaging in more interaction together than simply completing their work (“we know it’s a real shelter for us”). They seemed eager to construct new ideas and to consider an alternative perspective. It was

noted on several occasions that such dialogues and talks among participants in a channel are important evidences of interpersonal interaction e.g. turns 14 and 15. It is interesting to note in this chat how Leila ends by presenting the environment in a way that almost assumes that the V.L.E is really a part of their social life by using terms such as “ real life, communicate and very different”. The fact that she does not explain what she means by these terms seems to imply that she expects her partner to be already aware of the situation. For this reason, she perhaps thinks that the others need to further develop an attitude which Byram (1997) describes as ‘interest in discovering other perspectives on interpretation of familiar and unfamiliar phenomena ... in other cultures’ (p. 50) and shows the nature of the community that is being arisen here. Turns 14 and 15 of the extract indicate a significant point that, Raz is an example of a learner's attitudes towards other cultures being developed through interaction; his perspectives are indeed being constructed through interaction because he directly refers to the fact that knowing each others’ problems is a very important issue for V.L.E students here. This reflects a development in attitude, moving away from ‘negative stereotyping, where cultural difference is ignored in the belief that we are deep down all the same’ (Bennett, 1993, p. 92).

This, I believe, is a move toward addressing the main aim of this phase of the study in answering the question about how intercultural communicative competence can be recognised in virtual environments; what helped their feeling of membership into the community was being part of a long, thoughtful, threaded discussion on a subject of importance to all. Inclusion in this discussion was important to students because the ideas they offered were accepted by others and were considered worthy of further discussion. They also felt a kinship with those who had participated -- like they really were part of a community. In the chat above, we also see that there are some signs that make it particularly interesting in the context of examining culture in the on-line classes. They gained knowledge about a cause of misunderstanding and disagreement between the people outside and the educated people inside e.g. turn 16. This is an important aspect of the intercultural skills of interpreting and relating (Byram, 1997, p. 52) and indicates that students took time to inquire about the personal lives and problems of other students, even though many of these individuals had never met face to face. What is of interest in looking at this thread is the work that is being done by

these students through the process of discussion. In other words, all the participants are negotiating new cultural issues by means of their discussions.

Leila approaches her explanation in a sensitive, tolerant way, such as in her comment in the last part, “yes I know but we can not really change such opinions so quickly or by force!” She also lets her partner know that she understands that other people are ignorant of the V.L.E. This fact is shown on most of the students’ words. We have seen many examples supporting this point, specifically the last example relating to Leila can indirectly show how such cultural identities are co-constructed in this environment. The following chat has been done in another situation by the students.

#### **Extract 5**

01 Amir_: hi everybody
02 Woodiwoodibaker: hi again
03 Kas58: shall we continue our discussion?
04 Amir_: please continue
05 Shahin_k51: or i prefer to not speak and just type
06 woodiwoodibaker: ok
07 Shahin_k51: all right everybody lets give some ideas
08 Woodiwoodibaker: about relationship?
09 H_kasiri58: yes, that’s great
10 H_kasiri58: we made this society
11 TGH: yes
12 H Kasiri: and then relation
13 TGH: yes
14 H Kasiri: let's divide relations in society. What is the relation in our society?
15 TGH: relation was started from family
16 H Kasiri: the first relation is between mother and child
17 H Kasiri: then the family
18 H Kasiri: what else?
19 TGH: relation between god and us
20 TGH: between teachers and students



21 TGH: and between people in out

22H Kasiri: yeah when the child goes to school he thinks

23 H Kasiri: he has entered into a vast society

24 TGH: but we can't separate it

25 H Kasiri: yes of course

26 GH this is exactly how I feel now do you believe that?

It is pertinent at this point to evaluate what impact this cultural contact and the presence of the V.L.E had on the communication process. First and foremost, we notice that the chats were clearly addressed and the students knew with whom they were talking to and what they were talking over e.g. turns 01, 07 and 08. This pattern of 'greeting' mirrors what was used by many in this forum. It serves to make a direct connection to those who have already specified their views on the subject they are talking about, and to recognise they are part of a larger entity that is the virtual class e.g. turns 10, 11 and 12.

Before Shahin embarks on the substantive content of his chat, he does some enactive work to establish his right to have a position in the ongoing discussion. He starts by establishing his credentials as a potential speaker "all right everybody lets give some ideas" (turn 07). Actually he is asking the group for some space. Then we see that Kasiri supports him and confirms the major idea of their talk by the sentence "yes, that's great we made this society" The confirmation is stated in plural form and she follows up with enactive work in support of how she personally understands the context. She validates her idea by using "we" to refer to the 'new environment by implication' (Thurlow, 2001b, p. 208). I took those statements to be evidence of the personal response to group participation that is said to characterise a feeling of group cohesion as 'the common bonds and sentiments that hold a group together' (Brilhard and Galanes, 1992, p. 174). Brillhard and Galanes believe that cohesiveness is fostered partly by the extent to which members know and like each other as individuals. This aspect is demonstrated in the following extract.

**Extract 6**

01 h_kasi58: let's continue?
02 woodiwoodibaker: :) ok
03 woodiwoodibaker: a relationship between computers and people
04 Shahin_k51: At present, independent community media (independent from the market)
05 Shahin_k51: face a big challenge
06 Shahin_k51: We must bear in mind the importance of supporting alternative and community experiences.
07 Shahin_k51: This will be the only way to oppose to the monopolistic uniformity of the discourse if the laws of viability are dictated by the market.
08 woodiwoodibaker: yes
09 Shahin_k51: did you know Multiply, a growing social network, announced last month that it features the first search engine that finds information that's been published in one's social network.
10 woodiwoodibaker: what do you mean?
11 Shahin_k51: Multiply's search returns content published by people that have a relationship with the person searching, and relevance is based not just on the content, but also on the social relationship of the content owner to the searcher.
12 woodiwoodibaker: content owner?
13 Shahin_k51: yah. The search algorithm uses Multiply's proprietary proximity index
14 Amir: could you plz explain more about this search? i came late
15 h_kasi58: i think if we talk without any preparation is better don't u think so?
16 Shahin_k51: yah sure, Multiply Social Network offers Social Relationship Search Engine
17 Shahin_k51: but i think we must it's better to talk without preparation
18 h_kasi58: this is discussion, we have to say our opinions and let the others tell as well
19 Shahin_k51: i wanted to talk about that search method but now it's not the time.
20 h_kasi58: ok,go on, what's the search about
21 Shahin_k51: free your minds and chat on-line
22 woodiwoodibaker: so return to discussion
23 h_kasi58: what do you mean by free our mind?

24 woodiwoodibaker: what?
25 Shahin_k51: i will continue while you're chatting
26 woodiwoodibaker: we were talking about relationship
27 Amir: which aspect of relationship do u want to talk
28 Shahin_k51: The search algorithm uses Multiply's proprietary proximity index, as well as traditional ranking systems, when sorting results. Rather than measure how socially close people are only by "degrees of separation," as many other social networks do, Multiply takes into consideration numerous real-world dynamics such as the real relationship between people (wife, roommate, co-worker, etc.) and the number of mutual relationships two people may share.
29 h_kasi58: could u explain it?
30 Shahin_k51: this will expand the relationship between people in different situations
31 woodiwoodibaker: yes you right
32 h_kasi58: so, how we can sort these relationships?
33 woodiwoodibaker: it's really great happening
34 Shahin_k51: People often turn to Multiply first as an information resource because search results are more personal, trusted, and interesting than what one would find in a generic web-search on sites such as Google and Yahoo and is the only place you can find these types of personal search results
35 Shahin_k51: that was the interesting part that i wanted to tell you
36 Shahin_k51: now i would be glad to see your opinions. How about the others? Amir, woodi, mha?
37 woodiwoodibaker: about this subject that you said?
38 Shahin_k51: share your thoughts
39 woodiwoodibaker: which relationship is the most important?
40 Shahin_k51: relationship is important for every human being
41 Amir t: i think all of them are important
42 woodiwoodibaker: yes
43 Shahin_k51: all kinds i think
44 woodiwoodibaker: but at first
45 h_kasi58: we have many kinds of relationship, which one is in your mind?
46 woodiwoodibaker: yes you right i mean the new form of relationship between the people in the nets. This type of relationship has been extensively growing and led to new fantastic communities in the world

Here, we may ask what might lead a student to assume that he/she needs to seek permission to speak in this forum. We may imagine that there could be no reason for Kasi to ask about her right to "speak"(line 1). Indeed, given that the forum has been set up by the institution and the tutors have previously posted messages encouraging students to use it, it can be said to be an expectation of the class that they can speak using this tool. Admittance to this on-line class accords her not just the right but the

expectation that she will take as much measure as she needs to make whatever contribution she feels necessary. And it is curious that in the process of keeping on the discussion, there was anxiety over just how interaction should be "done" in this context. e.g. "relevance is based not just on the content, but..." (Line 11). It is also interesting that here the students emphasise their point by using bearing in mind "the importance of supporting alternative and community experiences" (line 06).

In other parts of the chat we see that Shahin's talk is much less tentative than before and he uses emphasis to break up the different stages of the position he is presenting. He begins enactive work for his overall view by stating this sentence "free your minds and chat on-line", (turn 21). He does indirect enactive work for his views by summarising 'the critical points of commonality' between the two disputed sides of the discussion. This also serves as 'recognition work' (Iwasaki and Oliver, 2003, p.70) for his own final statement "all kinds I think" (turns 44-46). This conclusion appears as yet another indicator, with which he finishes his message. The conclusion makes clear not only his own perspective ("I would say ...") but also what else might be concluded from following his line of argument.

Two other aspects of these chats merit attention in cultural terms. These talks occur at the very end of the threads for this forum and well after the group has reached a consensus that they accept that "all kinds of relationship are important for them". In other words, it seems they have perceived their partner as being interested in their descriptions of their cultural idea or social behaviour. In other words they have been able 'to connect the other into a shared every day world' (Jordan, 2001, p.121) so they have had the opportunity to extend to the 'sharing of intimacies, problems, perspectives and values' (p. 110). We can find this fact in the rest of the chat in which the students have focused on this specific context and their duty in keeping on their relationship here which indirectly emphasises the significant role that the context has had in constructing this new identity:

48 Amir: yes relationships can be different in different environments but this new one is something else. Actually in ours, students really feel closer to talk about their ideas and likes and dislikes in different aspects.
49 Shahin_k51: and be aware we must keep that relationship forever
50 Amir : for example?
51 Shahin_k51: ;) you know what i mean
52 woodiwoodibaker: relationship is not just environment
53 Shahin_k51: all kind of feelings and thought
54woodiwoodibaker: yes
55Amirt: completely agree with you

After all, the virtual community in this study began without the benefits of any face-to-face initial meetings. Unlike other human communities, such communities are created not as a physical presence but, as a shared understanding of ‘interrelatedness among the participants’ (Wood and Smith, 2004, p.42).

## 6.5. Conclusion

This phase showed how the participants could create a collaborative and non-threatening environment where they could construct meaning and mutual understanding in real time. Chat-room interactions sounded personal and the individuals had many stages to pass successfully in the process of community building (e.g. please see the discourse functions and exploratory categories in the quantitative analysis of the chats). Relationship-building activities were noted in the chat room and included performative and exploratory strategies, supportive comments, and the maintenance of a cooperative and safe environment. In addition to all the strategies used by the students, the themes ‘social grouping, sharing thoughts, cooperation and compromise’ emerged in the qualitative analysis of the chats. This helped me come to a better understanding of the strategies the students use in their on-line communication in the Middle Eastern cultures; the strategies which helped them in their move towards convergence in this new environment. While the discussions examined above came from one class in one virtual learning environment; nonetheless, they offer some new perspectives on the building of a culture based on a certain “groupness” in that context that could inform

current views on community building in the V.L.E. In other words, this phase could illustrate how intercultural communication is practiced and shown in virtual environments and how the students make a link between their attitudes and the process of intercultural communication. Supporting this viewpoint, the next chapter will focus on the interview and the results in phase 3 of the study.

# Chapter Seven

## Chapter Seven

### Phase 3 of the study: semi- structured interviews

#### 7.1. Introduction

Interviewing is used here for data collection due to its ontological and epistemological relevance to the nature of intercultural inquires. Also interviews play a central role in the data collection in a study which draws on grounded theory. There is abundant literature on interviewing (Burgess, 2002; Levinson, 1983) but here there is a specific focus on intercultural interviewing and its implications for data collection and data interpretation. In other words, it is generally believed that an interview is a 'social event' (Habermas, 1989, p.174) - a multi-phase activity which involves interacting in many ways. An understanding of the interviewees' culture by the interviewer has great significance for all phases of interviewing including 'access, conducting interviews and making meaning' (Shah, 2004, p. 23). So it is widely used when the research is looking for 'detailed and personal accounts' (Denzin and Lincoln, 2002, p.162) especially when it is focusing on the values, beliefs and attitudes.

So, the information in this phase is obtained through in-depth interviews about topics related to the group's life and culture. These interviews have an ethnographic influence, because their goal not only revolves around ethnographic information, but is also directed at personal ideas highlighting interesting differences between local cultural opinions and what is really accomplished and perceived from that cyber culture. Layered over the foundational, but 'invisible nature of the Internet' (Abdelnour-Nocera, 2002a, p. 35), the culture of the on-line learning environment under study here is similarly the product of its creators: predominantly university students from Iran coming from different socio-cultural and linguistic background - Persian, Kurdish, Arabic and Turkish.



## **7.2. The main aims of this phase of the study**

This phase aimed to find out:

- a) What the participants' ideas are in communicating with their friends from different cultures and societies in a digital learning environment.
- b) How they can describe their experience and interactions in the V.LE. (Regarding the fact that they were from different cultures and languages)

### **7.2.1. Reviewing the questions**

As the qualitative research questions are open-ended, 'evolving, and non-directional' (Denzin and Lincoln, 2002, p.169) ; they can restate the purpose of the study in more specific terms; so it would be more challenging to 'start with a word such as "what" or "how" rather than "why" ' (Charmaz, 2006, p. 680). In other words, since the questions are a narrowing of the central question and sub-questions in the research study, they might be seen as the core of the interview system, bounded on the front end by questions to invite the interviewee 'to open up and talk and located at the end by comments and thanking the participants for their time for the interview' (Burgess, 2002, p. 83). So this phase of the study was guided by the following central question:

*How was a community formed in an adult computer-mediated distance learning class with different ethnic, national and linguistic backgrounds?*

#### **7.2.1.1 Sub-questions**

Through the interview questions, the students were required to answer the following sub-questions which focused on the sense of community building and the strategies they used or the possible problems they faced. For example they were asked: how they characterise this new community, what they think they have learned here or if they think they may have had a sort of contribution to it. As the third phase of the study, it was important to ask and make sure if the members recognise their environment as a "community" and ask whether they feel they belong to it or not. Then, it aimed to find out what, in their ideas, characterises community in that environment. Finally it was decided to know how we can promote community in this context and gain its benefits for individual members. Actually these questions focused

on understanding how individuals experience the process (What was the process? How did it unfold?). Normally such interviews have the ability to show the importance of ‘multiple means of communication: public and private, synchronous and asynchronous, multi-party and one-on-one, distanced and face-to-face for sustaining group interaction’ (Haythornwaite, 2000, p. 218).

### **7.3. Method**

A grounded theory approach to the system of questioning and analysis (Strauss, 1987; Strauss & Corbin, 1990) was used. Since in grounded theory, most of the data comes from interviews with the participants (Charmaz, 2006), the first round of interviewing was done by telephone and web messengers in order to establish rapport with participants. Following the interview, the researcher recorded impressions, reflections and interpretations in a computer diary. The second round of questions was directed by the data that emerged from the first round and was accomplished by e-mail and face to face interviews. In those cases where follow-up questions were needed for either the telephone or the e-mail interviews, the questions were sent and responded to by e-mail.

An analysis of each set of interviews was used to formulate hypotheses and areas of questioning for the following interviews. Interviews were semi-structured, and interviewer followed the lead of the interviewees in exploring issues of support and community, while still maintaining a focus on my core concerns (see Appendix 4.1 for a summary of the areas explored in each interview). The method of abstracting the categories or themes in this study was carried out by following the approach suggested by Glaser and Strauss’s (1967) Constant Comparative Method of Qualitative Analysis, and the coding procedures suggested by Strauss and Corbin (1990).

I have looked at the number of passages associated with each code as an indicator of participant interest in a code, but I have not reported counts in statistical detail here. This is because ‘counting conveys a quantitative orientation of magnitude and frequency contrary to qualitative research’ (Creswell, 2005, p. 79). In addition, a count conveys that all codes should be given equal emphasis and it ‘disregards that the passages coded may actually represent contradictory views’ (p.39).

### 7.3.1 Semi-structured interview

A semi-structured interview was designed for this phase. This was much more flexible than the structured one for this situation due to the fact that 'it normally allows depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewees' responses' (Hitchcock and Proedu, 1997, p. 289). Interviews conducted over six months, reveal the importance of community and its role in supporting them in their different kind of perspectives.

The first stage of the interviews was carried out between December 2007 and February 2008 and the second stage was conducted between February and April 2008. The initial intention was to study 20 informants, with an equal number of males and females (10). However, only 7 male students and 13 female students were available for interview at that stage. At first an interview protocol was designed and used; a form about four or five pages in length, with approximately 10 open questions and ample space between the questions to write responses to the interviewee's comments. The data consisted of over 100 hours of digital audio files, which documented more than 65 hours of interviews, and 25 hours of follow-up interactions with participants and also the email interviews in follow up sessions over a period of 6 months. All of the audio files were transcribed verbatim by the researcher. The data corpus consisted of over 500 pages of transcriptions, field notes, and documents shared by participants.

The interviews were conducted on a one-to-one basis at their university campus, helping them to be at ease 'to overcome apprehension and thus increase openness' (Seddon, 2003, p.65). At the beginning of the interview I made sure that each one of the interviewees was informed of the procedure of the interview and the important fact of their consent in this regard. I selected a standard interview guide to help reduce bias on the part of the interviewer. Dolbeare and Schuman (1982) recommended a 90 minute format for each interview, since the standard 60 minutes is associated with a standard unit of time. After conducting the pilot study, 90 minutes was found to exceed the time needed to conduct each of the interviews, ultimately, 30 – 60 minutes was deemed an appropriate length of time. I did remain flexible in order to allow for participants to express themselves freely without feeling time constraints imposed upon them by me, but the approximate interview length was mentioned to

the participants, so that they could plan accordingly. The interview continued as long as it was still productive and therefore did not hold fast to a pre-determined set time limitations on either end (Weiss, 1994). I was aware that I needed to develop and foster the newly developing relationship with the participants, so that the participants in turn could build trust in me.

All interviews were digitally voice recorded and fully transcribed into word documents in a timely fashion since ‘transcripts can be enormously useful in data analysis and later in replications or independent analysis of the data’ (Patton, 1990, p. 349). I firmly believe in a full and immediate transcription, so that the transcription would be as accurate as possible. Since this period after an interview was a critical time of ‘reflection and elaboration’ (p. 353), it was a time of quality control to guarantee that the data obtained will be useful, reliable, and valid.

### **7.3.2 How the interview was designed**

The interview had its own special design in which the three major steps of preparing the schedule, selecting the interviewees as the key informants, and finally conducting the interview were considered (Wellington, 2004). These three principles were regarded as the backbone of the study at this level since they could provide a better map for me in finding the best way towards finding the answers to the research questions.

#### **7.3.2.1. The schedule of the interview**

In the first glance the interview schedule included an introduction; a major set of questions, and closing comments (Fig. 9; see Appendix 4).

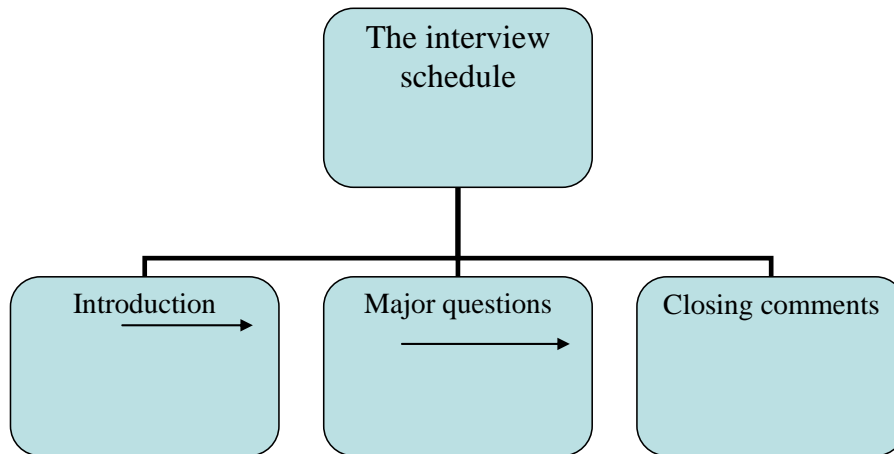


Figure 9 The interview schedule

Since this phase of the study was to search how the students experienced their new environment and also was designed to find some information about the participants' attitudes, the interview focused on the ideas, experiences and the possible problems they came across in this new multi-cultural situation. The interview had a fairly 'top – down' schedule starting from general questions leading to more specific ones to help the interviewees 'concentrate more on their answers' (Wellington, 2004, p. 74 ). Also they could feel the relaxed and 'impressionable mode' of the interview as they also expressed this in their talks. Then the interview started with talking about their personal and social life including education, university life, language experience and other aspects of their life. It was decided to learn something about their past to help me have a general view of the participants and also an archive of their past experiences for future analysis. It is worth mentioning that the interviews were structured in such a way as to elicit the information that was the focus of each interview, but at the same time, enough room was left for the participants to express themselves freely.

The main social reason for including this part in the interview was to know the major images they have about these aspects of their life which may show realities behind them as well (Haythornwaite, 2000). Then the questions led to more specific fields such as the experiences they had and also the possible ups and downs in that virtual

environment and their own ideas about the community building factors and realities behind this communication. Please see Appendix 4 for the schedule of the interview.

### **7.3.3. The sample**

Interviews were conducted over a period of 6 months with 20 students since it is normally suggested that in grounded theory one should include 20 to 30 individuals in order 'to develop a well-saturated theory', but this number may be much larger (Charmaz, 2006, p. 679). Regarding the fact that 'in qualitative interviews sampling is more focused' (Mann and Stewart, 2005, p. 32), the challenge at this stage was to find individuals who had experienced the on-line environment and at the same time were prepared to be involved in this phase. But it seemed reassuring that the purpose of this phase of the study was associated with the methodological approach taken (Creswell, 2005). As an overarching sampling strategy, I utilised purposeful sampling to obtain participants that were suitable as a case of the phenomenon of interest. This type of sampling is deemed appropriate for a single study done at one particular institution of its kind.

Participants were the same students in the university of Science and Technology in Tehran, Iran who had participated in the previous phases of the study in the last 2 years. Six groups consisting of three to four people each discussed and argued the questions raised by the interviewer. The group consisted of seven males and thirteen females. Students' majors were Software Engineering, Industrial engineering, Information and Communication Technology, Simulation and Process Control, and Management of Information. Interviewees were given the opportunity to comment upon any additional features or concerns related to the new virtual environment or its administration. They included the students whose mother languages were from the main four languages spoken in Iran; Persian, Turkish, Kurdish and Arabic. So they could represent a multicultural group who were studying in a virtual environment.

Table 10 Numbers of interviewees in each course.

	<b>Title</b>	<b>Number of participants in Phase three</b>
1	Information and Communications Technology	4
2	Software Engineering	4
3	Industrial Engineering	4
4	Simulation and Process Control	4
5	Management of Information	4

#### **7.3.4. Piloting the interview**

In doing the pilot study, I regarded Sampson's (2004) recommendations on the use of a pilot test to 'refine and develop research instruments, assess the degrees of observer bias, frame questions, collect background information, and adapt research procedures' (Charmaz, 2006, p. 678). After designing the interview, I decided to refine the interview questions and the procedures further through pilot testing. The pilot study was conducted in November 2007 in order to test the interview questions regarding their understandability and validity. As the primary investigator for the project, and primary tool of data collection, I selected two students after taking the permission of the department. Actually these pilot cases were selected on the basis of convenience and access on the one hand, and relatedness to the issue and the situation on the other.

When approached, Ali and Zohreh (pseudonyms) agreed to be interviewed twice. As a result of the pilot study, I realised that I needed to develop clear criteria for participant selection before data collection in December of 2007. In conducting interviews with them, it was felt that the interview was too long and did not address the issue at hand in a timely fashion. This became clear when both participants expressed that they were not finally sure about the main point of the interview and also some questions had been confusing for them. The final experience learned from conducting the pilot study, was that departmental approval took a considerable amount of time, something that would need to be factored in considering the whole time needed for the interview procedure. About the procedure of the pilot I should say that I conducted two 30 to 60 minute interviews per participant. I digitally audio recorded and fully transcribed all the interviews. Transcriptions generally required

averaging four hours of transcription per one hour of interview material, a lengthy and time-consuming process. Owing to the amount of time spent in the field and at home with transcriptions, the small sample size further allowed depth in description and the discovery of information about these participant's experiences. So the pilot test which was decided to refine data collection plans and develop relevant lines of questions, gained this major aim.

#### **7.4. Conducting the main phase: the interview**

After arriving at the interview site, I obtained consent from the interviewees to participate in the study and had the interviewees complete a consent form which went over the purpose of the study, amount of time needed to complete the interview, and plans using the results from the interview (see Appendix 1). It is worth mentioning here that I was careful to regard the interviewees' agendas as well. So I tried to make interview sessions 'lively and stimulating and personally fulfilling' (Mann and Stewart, 2005, p. 114) and also tried to be as open as possible about the purpose and processes of this phase of the study. This is why the interview schedule was made available before the interview and the participants were completely informed about the time frame of the interaction as well as substantive issues relating to the research. Of course I had not neglected the fact that they had actually developed deep relationships over time and shared a common purpose such as social interaction or discussion of mutual interests in the previous phase of the study over a long-term project. I paid considerable attention to what Cohen and Manion (1994), citing Tuckman's (1972) guidelines for interviewing procedures, insists on:

*“At the meeting, the interviewer should brief the respondent as to the nature or purpose of the interview and attempt to make the respondent feel at ease. At all times, an interviewer must remember that he is a data collection instrument and try not to let his own biases, opinions, or curiosity affect his behaviour” (p.81).*

The interviews lasted from half an hour to an hour, depending on the availability and willingness of the interviewees. The lack of time and the need to fit my interviews into the schedule of my participants was my main concern. Sometimes I had no choice but to interview two to three participants consecutively in a day. This was essential, in order to make sure that the participants continued talking and felt confident in me. All



the respondents were briefed about the nature and purpose of the interview. The interviews were mainly conducted in English although the interviewees were free to respond in both English and Persian. One advantage with this was that I did not have to translate the transcripts. I tried at all times to make them feel at ease and tried not to deviate from the planned format. The interviews normally started with me asking the interviewees to talk about themselves and their feelings towards the V.L.E atmosphere and how they have practiced there; I thought this approach would make them feel comfortable and would lead to a rapport between me and the participants.

During the interviews, questions were directed at uncovering information related to the four research questions (see Appendix 4). Despite this, there was great degree of flexibility to ensure focus on the main aspects of the investigation. There were two phases in carrying out the in-depth interviews. Although the questions remained the same for every interview, the exact wording of questions varied in response to what the interviewees said. There was no structured sequence to the questions because I changed them as I moved along and in most cases I would go with the flow of the conversation. Occasionally I had to refocus the questions when the respondents were straying too far from the actual intent or format of the questions (Tuckman, 1972). The essential characteristics of the interviews were regarded as being:

*“...rapport, commitment to shared understanding and opportunities for review and clarification; inter-personal, free-form modes of communication; and genuine interest and concern for the views of the interviewee”* (Masarik, 1981, p. 219).

After the initial interviews, 18 of the interviewees became focus-group participants, as well as 2 who were interviewed after the group had started. The group provided an interactive environment (Morgan, 1988) that focused on co-operation and solution. In the initial meeting, participants brainstormed the words ‘Virtuality’, ‘identity’, and ‘community’. Subsequent group sessions built on the first, with participants exploring emerging categories from the data analysis and their own questions, moving from less active involvement at the beginning to a ‘more fully participatory role’ toward the end (Abrams, 2003, p. 163).

As a first priority it was decided to investigate how they achieve interaction, participation, and focused dialogue—in a word, communication—in an environment in

which there are no explicit social norms, in which visual cues are absent and none of the participants are together in the moment of interaction. But first of all, it was important to have a warm-up moment and start the interview with a topic the informants felt more comfortable with. Something related to their life in the capital city was found to be a good starting point for conversations. Then the interview started with talking about their personal and social life including education, university life, language experience, and other aspects of their life. I had decided to know something about their past to help me have a general view of them and also an archive of their past life experiences for future analysis. The main reason for including this part in the interview was to know the major image they have about these aspects of their life which may show realities behind them as well.

### **7.5. Data analysis**

Grounded theory data analysis methods (Strauss and Corbin, 1990) were used to analyse the patterns of interaction between and among the participants. Data analysis for this phase of the research was an ongoing process that began during the data collection semester of 2007 and continued during whole process of data collection. This procedure became the initial step toward data analysis. A second step towards analysing the data began upon interview transcription. As each of the 20 interviews was conducted, I embarked on the initial task of category construction as I reflected upon the emergent findings that gradually became salient as the term progressed. I also followed the recommendations set forth by Guba and Lincoln (1981) that categories should be 'both comprehensive and illuminating' (Guba and Lincoln, 1981, p. 110).

For a better categorisation, it was important to carry out an open coding first in the grounded system. Grounded theory provided a useful collection of strategies such as constant comparison and analytic meaning. Based on the grounded theory, I used 'set procedures for analysis of the data'. These are coding procedures, devised by Strauss and Corbin (1990), which involve breaking down the data, conceptualising it, and putting it back together in new ways. This is the 'central process by which theories are built from data'. (p. 134). In this phase of the study open coding, axial coding, and selective coding were all used to analyse the data. Open coding actually developed categories of information, axial coding could connect the categories, and selective

coding created a story or visual model that consequently connected the coding and categories.

It is important here to refer to the unit of analysis as well, which can also vary, and deserves more attention by the researchers. In such research, the unit of analysis may be a word, phrase, sentence, paragraph, message, or single posting, or 'units defined by a theme or purpose' (Strauss, 1987, p. 49). So I was sure that choosing a unit of analysis affects the reliability of the coding, the 'likelihood of dealing with more instances of latent content', the difficulty or ease of the coding, and, finally, the meaning of the analysis (p. 116). So the final decision was taken that regarding the situation in which the research was done, the unit of analysis should be the sentence; one unit was coded each time a participant seemed to have a particular point to make or 'complete thought to convey' (Creswell, 2005, p. 99). In the process of data analysis, I looked for code segments that could be used to describe information and develop themes so that these codes could show something that represent 'surprising information' that I did not expect to find; and represent information that is 'conceptually interesting or unusual' to me (Charmaz, 2006, p. 689). So, in this section first I refer to the process of the coding system applied in this phase of the study. It is worth mentioning that the analytic process was based on immersion in the data and repeated sorting, coding, and comparisons that characterise the grounded theory approach (figure 10).

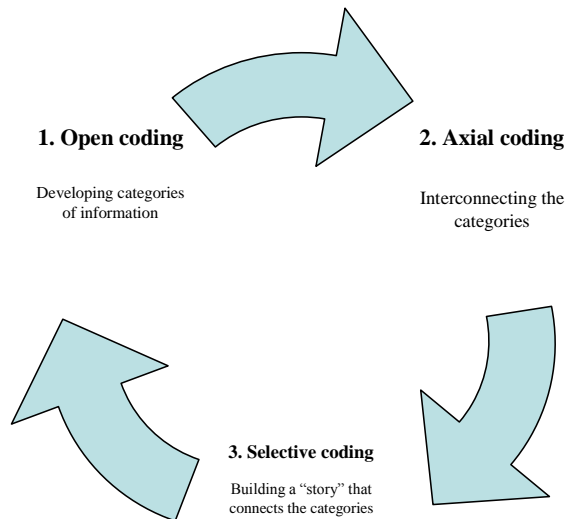


Figure 10 The procedure of data coding in grounded theory approach

### 7.5.1. Open coding

Analysis began with open coding, which is the examination of personal reactions to participants' narratives; coding the data for its major categories of information. Regarding the guidelines, in this section, I read the transcripts in their entirety several times, immersed myself in the details, trying to get 'a sense of the interview as a whole' before breaking it into parts (Agar, 1980, p.28). Initial themes began to emerge as the data was repeatedly read and compared against and across cases. The transcribed version enabled references to be made at any time during the analysis. The transcribed interviews also enabled initial notes to be written by the side as they were read. As I read the data, I colour-coded the major themes across cases and made notes along the margins of all the transcripts, reflections, and documents. With the aid of the word processor, snippets of interviews, field notes, and reflections were easily lifted and placed under the corresponding emerging themes. Some statements seemed to belong to more than one category. Hence when a statement seemed to fall into two or more categories, they were put in all of the possible categories and this was noted so as not to comment on them twice.

Once I had all the interviews transcribed, I then pulled out all the statements that belonged to the same category and produced a completely new file under the category that identified. This enabled me to do my analysis according to these categories. I would then see what sub-themes there were and decide on an order for their presentation, and start writing. Using the computer made the process manageable as I was able to cut, paste, transfer, insert, and do whatever I wanted within and between files. Moving beyond coding, classifying pertained to ‘taking the text or qualitative information apart, and looking for categories, themes, or dimensions of information’ (Creswell, 2005, p. 57). Lastly, I was able to place the emergent themes under three to four main categories when addressing the questions in this phase of the study. To achieve this goal, I read through several transcripts independently and coded each manuscript. I sought to develop a book of codes that would be stable and represent the coding analysis of four independent coding systems. After coding three to four transcripts, I then examined the codes, their names, and the text segments that were coded, then began to develop a preliminary qualitative codebook of the major codes. This codebook contained a definition of each code, and the text segments that I assigned to each code.

Four themes or categories emerged through open coding that characterised community-building in such distance learning environments. These categories were: experiencing an on-line culture with its own features: social behaviour on-line, students’ understanding of on-line social relationship; creating a new kind of social form and finally respecting their own culture, but strong belief in making the new virtual community for themselves. After initially exploring these issues, I returned to the participants and asked more detailed questions that helped to shape the axial coding phase, questions such as: what was central to the procedure of virtual communication? (The core phenomenon); what influenced or caused this phenomenon to occur? (Causal conditions); what strategies were employed during the process? (Strategies); and, what effect occurred? (Consequences)

### **7.5.2. Axial coding**

Open coding was followed by axial coding, which puts data back together in new ways by ‘making connections between a category and its subcategories’ (Strauss and Corbin, 1990, p. 97). The relationship among categories is specified here in axial

coding. It noted the context in which community formed, the conditions needed for the formation of an on-line community, intervening conditions, which can positively or negatively affect its formation, and strategies for overcoming negative conditions and utilising positive conditions. So the next step in the data analysis procedure was to identify propositions or relationships and draw links between concept groups. To do this, I reviewed each statement within a concept group to determine if it was also conceptually “connected” to another concept group. For example, the participant statement, “linguistic diversity or even cultural differences have never been significant factors in separating us from each other” (ST 6) was placed in a primary concept grouping labelled ‘language and cultural identity’, but I determined that it was linked conceptually to another thematic grouping ‘value of diversity and peaceful co-existence’ (Creswell, 2005, p. 91). Through this process, the frequency, directionality, and the nature of the primary conceptual relationship, or ‘propositions between categories’ (p. 36) emerged and are represented.

### **7.5.3 Selective coding**

The final step, then, was selective coding, in which I took the model and developed propositions (or hypotheses) that interrelate the categories in the model or assemble a story that describes the interrelationship of categories in the model. Actually selective coding was the integrative process of ‘selecting the core category, systematically relating it to other categories validating those relationships’ (Strauss and Corbin, 1990, p. 68). This was the final step in the analysis procedure and perhaps the first significant step in the process of grounded theory development which was looking for cross-links we might make regarding ‘relationships among various domains of the map as a whole’ (p. 90).

## **7.6. Results: interpretation of the findings**

The major themes and also the sub-themes arising from the interviews are stated in Table 11:

Table 11 The major themes and sub- themes emerged from the interview

<i>The major themes and the sub- themes arising from the interviews</i>	
<b>1.</b>	<b>Experiencing a specific on-line culture with its own features</b>
1.1	Participation and motivation
1-2	Social dialogue
<b>2-</b>	<b>The social behaviour on-line with its own particular characteristics</b>
2-1	Shared responsibility and purpose
2-2	Culture of caring /cooperative climate
2-3	Perception of otherness
<b>3-</b>	<b>Students' understanding of on-line social relationships</b>
3-1	Similarities found
3-2	Meeting needs
<b>4-</b>	<b>Establishing climate ; a room for multiple points of view</b>
4-1	Commitment and trust
4-2	Positive attitude

Here I focus on the main themes and then after a short definition of the major themes, more detailed description of the data and specifically the sub-themes will be given.

#### **7.6.1 Experiencing an on-line culture with its own features**

One major theme emerged from the participants' descriptions of community was that members of this community generally had something in common, whether it was interests, experiences, goals, values or vision. Many participants seemed to say that

commonality was ‘the core of community’ (Abrams, 2003, p. 158). Membership in the on-line community was conferred by others through feelings of worthiness and acceptance or belonging that occurred following participation in long threaded discussions. For better understanding of the main theme here I have categorised it with the following sub-themes: participation and motivation; and social dialogue.

#### **7.6.1.1 Participation and motivation**

Interviews showed how students, interacting from a distance and starting from a position of isolation, make connections with fellow students and recognise and live with members of a virtual community. In the interviews the students have referred to the existence of the community which is felt by all participants especially in their interviews. Of course the factor of interaction which is ‘implemented in a synchronous electronic environment in comparison to non-synchronic interaction’ (Abrams, 2003, p. 160) seems to have generated more opportunities for students to participate, a greater amount of language production, more time to develop and refine comments, and also more collaboration among them (Salaberry, 1999). The following analysis of the sub-themes might prove this idea. The concepts within this sub-theme are discussed here. The numbers in brackets show how often the participants referred to that concept in their interview.

- a) Communication frequency (14)
- b) Attitudes towards other cultures/ culture learning (10)
- c) Beliefs about virtual relations (18)

##### **a) Communication frequency**

The sense of community and the social support received from other students helps make it possible to share and learn in this environment and also keep on the frequency of the communication, as it is illustrated in the following extracts:

*“....the communications on our side was very good; we met each other on-line or even could express our feelings through chats and of course email each other, although we had our own misunderstandings some times.” (ST 1)*



One of the main points in establishing a sense of on-line identity has to do with ‘the degree to which people feel they are able to experience a connection to others through these virtual rooms’ (Salaberry, 1999, p. 104). It should therefore not come as a surprise that communication frequency was high within the virtual teams.

*“....For me the communication in this environment is like living in new place with same friend I had before although I had not contacted with them before in a face to face situation because I believe communication is not a big issue in this virtual environment but what is a significant point for me is to keep contact to the other virtual team members.....” (ST 2)*

They discussed the point that this virtual environment has been an effective context for building relationships. Actually they reported that long-term association with each other helped promote on-line community because they went through multiple situations together and could continue ‘to amplify on-line relationships’ so that a higher level of community resulted over an extended period of time (Abrams, 2003, p. 161). The students reported that they participated more in the environment, where there was no pressure on them unlike the normal classrooms.

*“....Sometimes I think I am able to express my feelings only in a virtual situation rather than face to face so that I like to have more and more contacts with my virtual team members...”. (ST 6)*

It seems that the students have experienced an identity they could not ‘portray in real life’ (Wood and Smith, 2001, p.59) and gained a new perspective in their new world of communication.

*“.... The new environment has provided more opportunity for us to contact with each other or even the instructors, preferably by involving each of us , it encourages us that we spend more time in communicative activities or.....”. (ST 9)*

#### **b) Attitudes towards other cultures/ culture learning**

This second theme was derived from participants’ descriptions of “other cultures” existing in this environment and their attitude towards them. Those definitions seemed to involve more action on the part of participants who said they were responsible in part not just for their own beliefs but for others too. That pointed to

'interaction as a potential core category' of building new community (Wood and Smith, 2001, p. 84) because it was through interaction that similarities were found and that thoughts and feelings were exchanged. Of course they have pointed to the issue that they struggled to figure out whether or not they have the qualities to be a member in this environment. It might be related to the fact that they have actively 'attributed a great deal of meaning' to the evident behaviour of the other during their interactions (p.77).

*"...The classes and the whole environment were unbelievable and through our contacts we could understand different values from different cultures. Of course it was rather difficult for some of our friends to get the level of enthusiasm for a long time especially on line but as far as I know we could easily sort out what was not agreeable for some of our friends in the community..."* (ST 7)

Participants' definitions of community often were a predictor of whether or not they felt part of a community and how their attitudes were in the new environment. Two students felt that face-to-face association was not necessary for their community to be able to learn each other's culture, and two felt that people needed to come together voluntarily to be part of a community. This anticipated what they later stated, that they really felt a sense of cultural learning in their on-line community.

*"... At first some of us couldn't comprehend well what our friends meant in using some of the basic words they used and I don't think that they could use any proper sentence when trying to communicate with each other. For example, some of us didn't know how to ask permission or interrupt each other and it had various connotations between most of us..."* (ST 1)

*"... Using clear and cooperative language in the contacts was a point that was considered by most of us during the contacts we had because it was considered important to us to help understand each other's culture as well in a virtual environment like this and in a multicultural society like Iran..."* (ST 3)

From this point of view, it seems that the student believes that those who meet on-line must communicate 'enough common ground' with one another and that participants involved are interested in 'sustaining relational ties' (Wood and Smith, 2004, p. 35). In this regard another student, supporting what stated before, expressed the idea that:

*“...The ideas given by our friends were very useful in improving our understanding of the other cultures. The suggestions/feedback changed the way I handled the contact I had with others. I was able to get necessary points in my contact with them. Based on these ideas and cultural contacts I found it easier to make alterations in my own ideas and improve them for having a better sense of community here.” (ST 5)*

Two students also identified their improved communication as a result of these cultural contacts and also cultural learning environment they had created for themselves.

*“...The sort of contacts and discussions we had here were very useful because I could learn more interesting points from other cultures and have some ideas on what other cultures believe in. The things that we really did not know before, although all of us had lived in one united region...” (ST 7)*

### **c) Beliefs about virtual relations**

Some of the participants believed that intercultural virtual exchanges are one form of helping to encourage the continuity of existing cultural relations while also working to ‘broaden and enrich them’ (Wood and Smith, 2004, p. 46). They are also of the opinion that these virtual relations enabled them not only to build a new cultural community for themselves, but also to overcome the limitations of ‘co-presence’ and to construct their attitudes in a more accommodating manner (Wood and Smith, 2001, p. 79) so that they are able to express themselves in this mediated environment.

*“...These virtual contacts went quite well despite my low belief in it at the start. Little by little when we went on I decided to be more active and emphatic and really saw this movement from other students as well. I realised that I was living in a new environment with its own complexities and difficulties...” (ST 8)*

Positive attitude, reflective thinking, and accepting motivating criticism were some of the words used by some other interviewees to describe the qualities that students believed in their virtual relations which as they said helped them to be more confident and competent in their relations on-line.

*“...I was able to understand the reality of virtual relations. It gave me the opportunity, time, and space to learn how to communicate from a distance – the opportunity of*

*understanding, interacting with these friends, shaping a new form of relations that you really don't see anybody by face but actually see the inside or as Iranians say 'see from within'...". (ST 6)*

*"...I believe most of the students and I have a positive attitude and are able to learn to accept constructive criticism in many situations in the virtual contacts. I believe that this view point really helped to us to be more confident and competent – provided feedback, given tactfully and genuinely". (ST 9)*

The nature of their environment they have created seems to have made them more confident about themselves and the relationship. This form of contribution in the virtual encounter seems to have reduced the uncertainty about whether or not everybody understands or at least cooperates with what the others say or suggest though having different views.

#### **7.6.1.2 Social Dialogue**

The other sub-theme which is emerged in the interviews is 'social dialogue' which is discussed in the students' talks and discussions in this virtual environment. They have seen the role of this sort of dialogue 'as an important motivator' in their own friendship and virtual community (Wood and Smith, 2001, p. 79). The following are the concepts within this sub-theme: dialogue within the group; and supportive interaction.

Most of the participants' words focused on creating a dialogic atmosphere, thoughtful co-operation and understanding between themselves. They thought that understanding the situation in which they were communicating played an important role in the development of their new community. Examples of the responses are illustrated in the following extracts:

*"...I believe we are like family friends and I always think that this atmosphere that is made here is also related to compromise that we have in our talks and I try to think of what others say rather than insisting on my own views because I think this sort of talk is really a dialogue which is social in its nature and I think plays a key role in achieving our goal here..." (ST 1)*

*“... this atmosphere of chats and dialogue between us I think can help students to think and make ideas in their mind and they can compare and contrast the ideas in their own way to see about if it is good for them or not...” (ST 3)*

The above extracts may clarify the role of this concept better which actually contains requirements of such a community the most important of which is supportive interaction in their dialogic atmosphere. What comes out in their talks may clarify the idea that this virtual community has actually allowed them to ‘transcend the ethnical or even geo-historical boundaries’ (Wood and Smith, 2004, p. 96) and unite with others who share or even oppose their ideas. This goes against Engestrom (1996) who mainly believes in geographically closed communications. This idea might show how the interactions in such virtual environments can be manifestations of the students’ attitudes. This is also stated by another interviewee an extract of which is brought here:

*“... Actually in this community we have tried to be helpful in helping each other with understanding the questions that are raised in the debates or arguments. If in the on-line chats anybody has problems in getting what his friends has said or may misunderstand it, for example I or my other friends give suggestions on how to solve his /her cultural misunderstanding or overcome the problem ...” (ST 5)*

Again we can see that a participant’s sense of belonging to such a community was based on ‘mediated communication’ in which they have shown their understanding of the concept of communication in such an environment and basically have relationships to one another that gradually progress through time.

*“...I have found a new world of friendship for myself because we could easily discuss even our social and political issues through this facility and new environment without the fears we had before. I had found it much easier to talk about our concerns in these aspects and my friends could freely analyse and give suggestions for solving some of them.....” (ST 9)*

Considering what this student and also the others said we can see that they have actually contributed on-line towards ‘the development of the net’ (Angen, 2000, p. 93) which implies how intercultural communication is realised in virtual environments. It seems that they have understood the value of collective work since they have actively

discussed and debated topics in a constructive manner and provided help to the others and talked over the role of this new environment in their communication several times to build the virtual community with ‘contribution of ideas and information’ (Wood and Smith, 2001, p.11).

### **7.6.1.3 Social behaviour on-line with its own particular characteristics**

In the interviews it became clear that the participants had found something very exciting about their on-line community; a process through which a shared culture is ‘created, modified, and transformed’ (Carey, 1989, p. 42). So the point seemed to be the fact that this community was directed not toward the extension of the messages in space or let’s say just doing their tasks over time, but the maintenance of their own on-line community over time. In the analyses of the interviews, under this sub-theme, the following concepts were found, the extracts of which are brought later in the following section; a) Shared responsibility and purpose, b) Social presence though having different ideas, and c) Lack of perception of otherness.

#### **a) Shared responsibility and purpose**

Regarding such virtual communities as ‘social aggregations that emerge from the Net’ (Rheingold, 1993, p. 29) some of the participants focused on the fact that they had experienced lines of personal relationships in which they felt and actually found a new meaning of responsibility and share which are quite evident in this virtual community. The following extracts can show some aspects of this concept.

*“...when I saw that we do not see each other and our contacts with everybody is through the lines and screens, I felt nervous and stressful. I did not know that one day it happens that you see everybody shows his or her responsibility to you even if it is not that much serious at first but at least you feel this with them. This is why I am more confident and can compose myself as well...” (ST 3)*

What is clearly seen in this interview is that the awareness of one’s action in relation to behavioural norms is stressed by the students and this is what is sometimes neglected by the people in real life. This strongly implies the sense of community in which individual actions or reactions are always ‘focused within the accepted

constraints of the community' (Watson, 2005, p.390). The extracts which follow may show this fact better.

*"...for me as a student, community-building in this virtual class really means creating a sense of belonging, of continuity, of being connected to others and to ideas and values they have. You know some of the students come from areas in which they were not allowed to talk of their rights and they did not have their own newspapers or schools although their language is different from the national language. But when they talk to each other here and see that most of us are ready to help them and cooperate with them even in their social and political problems, they are shocked for the first time and start talking about these issues for a long time and you know, they see feel this sort of responsibility among most of the students..." (ST 2)*

Some of the participants mainly focused on the role which having a shared purpose by the students has on the improvement of their community and compared their present time with the past.

*"...I think we are a group of people with a shared purpose, good communication, and a discipline, so the previous pressures that I had about knowing each others' ideas and how to show myself to others was resolved when I found that most of us have similar purpose of coming here and really nobody was aimless and reluctant to others although we also had some challenges with each other on many subjects..." (ST 10)*

What is stated here by the participants specially this student shows the potential of such virtual interactions to create the commitment that is associated with the term community since, as they believe, such a network has provided 'a sense of place' in an essentially different environment, and created new kinds of participation in community life (Hakken, 1999, p. 210). Another student said that being far from each other has not had much effect on their main purpose of making their virtual community and they have been able to keep their community well so far. As he says, he feels that feeling of 'place' has been created.

*"...I believe that the issue that I could not see my friend was not a negative point that can damage our situation and community. So this feeling helped me realised that we are a real people and that no matter how far we are from each other, we can still find ways to cooperate and work together very well..." (ST 5)*

This interview portion emphasises the importance of the responsibility the participant felt in having an active virtual community. It also highlights the re-conceptualisation this student had begun to make in light of the possibilities presented to them with this environment; she/he knew that more potential existed with the virtual environment in learning how to share the responsibilities in regard to the others' issues or problems and even the question they had. This seems important in here, as shown in the following extract as well, because cyber-social relations are said to be 'less formally organised into a structure of roles' (Hakken, 1999, p. 218) and they are more regarded as networks of connection – what has been emphasised by the students here as we shall see in the following section.

*“...in our communications we also showed a willingness to improve ourselves further and made an effort to shoulder each other's difficulties. Our relationship with team members was warm and generous with compliments and showed concern for their issues throughout the contacts...” (ST 3)*

#### **b) Culture of caring and respect through difference**

From the interviews it became obvious that the need to collaborate and care for each other's ideas with a different ideological background across distances had important implications or meaning for the participants. Most importantly, it could be observed that many of them emphasise this while starting their second semester and becoming more experienced in their virtual communications. They believe that this issue “helped them know each other better and forget about the differences they had” and also helped them know the motives, intentions and capabilities of other students. The following extracts can show these points better.

*“...well I really think that when we respected and accepted each other and was careful about what our team members said or suggest , although sometimes it was really challenging, it kept the teams developed and exchange preliminary thoughts and ideas...” (ST 7)*

Another participant also referred to this issue that they could construct ‘relationships of solidarity’ (Hakken, 1999, p. 219) in their new space regardless of the differences:



*“...the way we communicated with each other created a lot of ideas because we were careful not to disturb each other and have a kind of open arm for meeting each other’s ideas on-line and this was a very strategic approach that allowed us to strong our caring culture...” (ST 10)*

*“...I can surely say that this view that our on-line community is a place of respect that in it you know you can see no bias or insisting on your own ideas only is a main fact in our contacts. In addition it has brought a lot of valuable input and contributions in common decision makings that we have had so far although sometimes we have had very different ideas about our decisions or duties...” (ST 1)*

We might say that this development of expression which can mostly be understood or appreciated by members of this group, can be taken as an indication that something specific to the community is progressing here.

*“...Although sometimes I thought there is misunderstanding in the discussions among us, I really felt a sort of care and social responsibility from my friends on line so that I myself learned how to pay the needed attention about the others’ ideas before anything else even not regarding the political or social differences...” (ST 5)*

It should be recalled here what they have said in their interview is not only from a homogeneous virtual team but from a multicultural one in which there were people from four different cultures; Persian, Kurdish, Turkish and Arabic who had been able to come together and manage their problems in the discussions they had in an environment with no face to face opportunity but through the lines. So as they stated here, these differences were not a problematic issue in their decision toward building their community and they did not just communicate towards ‘shared norms’ with their on-line friends. The following extracts can clearly illustrate this point.

*“...in our contacts cultural differences became less powerful as we managed to create mutual awareness and shared understanding among us. You know this had an important impact on our communication so that a small group of virtual friends became a powerful network for social or even political discussions in addition to the talks we had about our lessons...” (ST 2)*

*“...working in a virtual group turned out to be less hard than I thought it would be. I realised that communicating was going to be much easier when our group agreed to*

*have this way of communication among us which you know gradually became a culture for us to regard it...*" (ST 6)

### **c) Perception of sameness / otherness**

In some of the participants' talks I found an important issue which was neglected before or paid less attention. They emphasised that the issue of geographical distance and mere on-line relations was not a strong factor to negatively affect their communications or create a feeling of otherness towards their relations with their colleagues in the V.L.E. The interviews revealed that perceptions of "otherness" were not that strong between them and it seemed that the team members had little difficulty establishing awareness of the self and the other within their virtual sub-teams.

*"... You know at the beginning of my communications and before doing anything, it was important to take time to introduce myself to others and find out our strength and weaknesses. We spent time to find and establish some common grounds because we all felt that we had similar aims of being there. So later on, it was a lot easier for us to communicate with and understand each other..."* (ST 1)

We can now see how participants are looking for the signs of 'high social interaction quality' through their communicative use of the medium and it seems that they have crossed the boundaries between sameness and otherness (Jones, 1995b, p. 23). It might describe such cultures as 'internally coherent wholes'.

*"...I believe that the beginning communication barriers we had due to geographical separation did not have serious effect on us to feel mutually separated or think that we are different from each other in any aspect. You know this could help us to deal with the primary communication barriers and actually facilitated a sort of creating a shared situation which was actually far from the feeling of otherness towards the others..."* (ST 8)

The participants placed a premium importance on the role of creating a strong sense of group self- awareness and esteem (Jones, 1995b) actually as a way to maintain cultural identity for themselves in their virtual community. It seems that the shared values and ideals they found in their virtual contacts might allow for the sameness of a common language and understanding (Hakken, 1999). This importance is shown in their talks with their interviewer.

*“... now that I have more experience of contacts in virtual classes or communications, I think that I have actually experienced the real meaning of a community which is support from people who share common talks and thoughts and I can even say that this new situation has made more opportunities for us to participate, a sort of greater amount of language production and we have had more time to develop the comments we had for each other and also more collaboration with a sort of high motivation you know and reduced anxiety...”(ST 10)*

What is highlighted here are the ways in which this particular environment includes forms of social interaction. They have recognised and validated the differences of others as a key element in shaping and development of their communication.

*“...when you have had some contacts with your fiends on-line after you know a while you feel that the things such as respect and trust are found in discussions and also the descriptions of on-line community members and this make you feel that there is not such a feeling of otherness here and everybody is like you and receive you good...”*  
(ST 7)

#### **7.6.2. Students' perception of on-line social relationship**

In the interviews the participants discussed how the on-line discussions and the previous themes referred to above could impact on making a creative environment which as they said “could have a direct support for the formation of on-line reflective learning community”. These sub-themes came out from the main themes; a) Similarities found and b) Needs met.

##### **7.6.2.1 Similarities found**

Most of the participants referred to the multi-cultural environment they had created in their on-line community and pointed to its positive points in helping them recognise themselves as a “community” which is actually the first step to ‘creating the common consciousness’ (Hakken, 1999, p. 60) rather than making a separating wall between them; the step which can show the accommodation in discourse in their virtual environment. They believed that the diversity they had experienced there, has actually promoted richness in their cultural perspective (p. 167) and made the atmosphere more communicative for them and consequently they have felt more social growth and development with the similarities they have found in the heart of the diversities

existed there. This, they believe, “will enable attempts at improvement in the conditions of their daily lives”. The following extracts illustrate this point.

*“... I know how we could manage these different cultures with different expectations or view points which were really hard at the beginning of our contacts. (ST 7)*

We can see here that the on-line interactions have been transformed into a stable ‘family-style’ communication that allows the combination of various actions and ideas into one system (Hakken, 1999). This may confirm that their on-line communication has both encouraged general requests for cooperation and helped them find these similarities in confrontation with their problems. So it seems that they, as a community, have put aside many of the challenging points of off- line life which is in itself a greater expertise and more inclusive forms of decision making.

*“... We have talked a lot to each other and each one from his or her view point has talked to the others especially when we had social or political chats. I myself think that I have also gained more insights towards others with these different backgrounds and I think this is the case with most of us who have come to these similarities and experienced them....” (ST 1)*

As this student says, this sharing of thoughts, feelings or information has allowed the construction of a new shape of communication, ‘self-descriptions’ and styles which are constructed out of the words that pass between them (Jordan, 2001) and can indicate how the process of accommodation is shaped in this virtual environment. Friendly interaction, as this, is culturally unique because it so often occurs with considerable variety and difference.

*“...I learnt a lot in dealing with the mistake my friends make in their suggestions because now we can offer each other the suggestions for solution of the problems or dilemmas very easily. Now if you talk to my classmates you can easily find that they are coming up with lots of ideas and creative ways that I myself have also tried them and improved myself...” (ST 10)*

This is the ‘abstract picture’ of virtual community from the perspective of the individual and it gives rise not only to the wonderful forms of social and cultural life

already examined but also to a distinctive form of society. Some of the students have referred to their aims while struggling with the initial steps.

*“.... I gained practical ideas from them about the culture and also the sort of society that everybody believed in it. These are new ideas from them. So every time I review these let's say strategies I also use them for my own personal life. For me it helps a lot. I feel more confident...” (ST 8)*

The participants, returning to the same ‘informational space’, have talked about this new community being emerged. The students have referred to this important issue that they may no longer feel alone in this environment but they have developed relations with a number of other users and have become part of the virtual community here.

*“I think a good match should exist between the people who work in this virtual environment. I don't want to say in their thoughts or necessarily ideas but in the way they present themselves to each other. This is really what happened to us here...” (ST 6)*

Some of them reported that they had ‘great confidence, commitment and empathy towards others’ (ST 1). Furthermore, they had ‘good rapport with the others, strong presence, and polite and positive attitude’ (ST 9) which they believe is related to the similar approach they had earned in looking at their cultural misunderstandings or problems; actually they believe that these factors were the main reasons why they felt such great similarities there. This understanding of the environment and the role they have had in making and shaping it is shown in the participants’ ideas specifically when they refer to differences as well as similarities in this space.

*“I think the similarities that we found out and came to them were not some things that were happened in a night but you know they were – uhhhh - the result of heavy struggles we had in the new environment of our communication to understand the cultural or political differences. We displayed interest and hard work in preparing ourselves for the discussions and were always aiming the targets towards a better relationship though having some times completely opposite ideas...” (ST 2)*

So, the students believe that ‘most of the team showed great confidence, good professional attitude and sensitivity to each other’s perceptions and responses and had established a good rapport with others’ which is another indicator of how their intercultural communication is realised in this virtual environment.

#### **7.6.2.2. Meeting the needs**

The participants also talked about their needs and expectations in the new virtual environment and could analyse them in their interview and said “‘in our objectives we were very careful to reach to those needs’”. (ST 7) These students thought that they have actually met those needs in their contacts. What follows are some of the extracts in which they have directly referred to their needs the three more important of which are: a) Sincerity, b) Confidence and c) mutual understanding between them.

Other students referred to the issue that this virtual space ‘could provide a specific space of information flow’ in which they could meet their needs: the ones which they normally expected to find in off-line life and are dependent on the interplay of their space and social values that ‘shape the answers to their needs in cyberspace’ (Jordan, 2001, p. 33).

*“...Like any other communication we went through the objectives and needs after having a time of being with each other. I think, you know, the most important need that we felt in our discussion , in addition to doing our other tasks, was knowing about the cultural or sometimes social issues that our friends had brought with themselves from different parts and cultures...” (ST 5)*

*“...we were not used to discuss about our needs immediately. We discussed them later because for example I liked to see my friends’ reflection on the topics we talked about. Then the other day when I was chatting with the same person I commented on that day. I always tell them what I think about their ideas and they do it as well. They are quite open-minded about it. I think this has been a great need that we achieved here. I don’t think you can find any social aim greater than this in a small community like this...” (ST 1)*

We can see how their virtual environment has created a sort of communication that is essential to their on-line or even off-line life and what their role has been in making and shaping that informational society. This type of society which was defined as ‘a

perfect place of finding similarities’, now has been defined as the one in which responding to their needs is discussed. As you see in the following extracts, they have referred to these needs as they have felt they have become part of the ‘imagined community of cyberspace’; the major step which shows how their virtual interaction could manifest their cultural background. They say that it is not important how much they have been successful in getting these needs, but for them success means ‘becoming part of this virtual community’.

*“...I myself am satisfied to see this similarity and I am sure they are also satisfied because everybody was able to reflect on what he or she considered as a goal for example in one part of the programme. I still believe that nothing has happened to reject this idea that the most important need of our community was to understand what we say to each other specially in being patient to give each other time to think a lot about the talks and I think we are there...” (ST 10)*

In what the students have reported here we can see the important points they believe they have met there. Also in these extracts we can see this emphasis clearly since they are on the whole of the idea that they have had some main needs which are met. One important thing that can be seen in these interviews is that their new society has become a representative body of what has happened to them. The language they have used here is a simple example of this; the pronouns like ‘we,’ ‘us,’ and ‘our’ are some of the linguistic changes happened to them which I think is important because these are the common beliefs of individuals who never met each other, but believe in their virtual community and even love their community. It seems that one of their needs has been to achieve the sense of ‘collective imagination of cyberspace’ (Jordan, 2001, p. 74) which urged them to recognise themselves as part of a particular imagined society; indicating the relationship between their virtual communication and their attitudes. This, I think is more important because they seem to be in a ‘constant state of almost becoming real’ (p. 208). This, as they have repeatedly said, has accrued in their virtual community through the ‘collective imagination’ they have constructed that allows them to recognise people they have never and will never meet as members of the same virtual community. Let’s have a look at the following extracts to see the ideas of the other students in this regard.

*“...Talking about meeting the needs is I think very complicated or let’s say hard and depends on many things. But on the whole I can say that for us the focus was more on the objectives, if I am not capable of stating explicit objectives, that most important of them and number one was understanding the tricky points discussed between us. I think the most important thing that happened was that it made us think which was the idea in the first place and the second one was letting others talk about their ideas freely and being able to communicate with each other with enough patience and of course cooperation. I look at them from this point that such important aspect or need is not normally met in face- to- face and specifically in the socio-cultural and political situations in Iran and the main reason that I am very surprised of its presence in our virtual community is actually this fact...” (ST 2)*

*“... We decided to have a major aim between us and that was feeling of responsibility, especially when we gave comments. Of course we did not experience any sort of force here but a sort of commitment to help the others feel happy and also committed and at the same time receiving the ideas. I still believe that sincerity in comments is the most important feature and aim that was happily achieved...” (ST 3)*

This process of engagement with the common responsibilities, as also referred to in previous section, has created shared languages, made explicit assumptions and allowed the formation of a ‘virtual we’ (Jordan, 2001, p. 210) which is very attractive to the others who want to know what needs have been met here. Of course it requires careful description of the sort of social interaction in this environment. It also requires that one interprets the cultural meanings that are being created in these interactions, with those means of expression which will be discussed in detail in the discussion section. Here I turn briefly to other parts of the interview, a further example of interaction, which will allow us to deepen our understanding of the meaning of needs and meeting them here. It involves an instance of intercultural communication that is public and even popular.

*“I didn’t feel very confident at the beginning because I did not have any experience in this or had some week ones. This is the first time that I feel I am able to do my duties in communicating with people well. This sort of confidence has helped me to really show my commitment to them in everything. I even stay for a long time in front of the screen to answer my friends’ questions or cooperate in a discussion for resolving the possible*



*misunderstandings and for having a happy ending in our relations.... I really think that: now I have the ability and self-confidence to be a good virtual partner. ” (ST 9)*

The expressions like this often elaborate their personal experiences, thoughts, and feelings which show how intercultural communication is realised and understood in virtual environments. A deeper look would explore what such expressions implicate by way of beliefs about being a virtual member and contacting with others in this environment. They may help us develop our understanding of the cultural views ‘when one cultural system of expression contacts another’ (Carbaugh, 2005, p. 39).

*“...now I know quite well about the likes and dislikes of my friends. That is the most important thing for me and I think for most of us. Before this I did not know these points and even I did not know how to communicate on the significant and critical points with others and I did not know what to do but now I am very clear in this since sincerity has been a major point for us....” (ST 1)*

As you see here in the interviews, in these virtual contacts and discussions the majority of the participants frequently attended and gave their ideas, comments and suggestions free from any sort of external pressures that students normally feel and have in such societies. They have been able to talk about their own ideas as well. Note for example, this excerpt from a discussion early in the semester, in response to a question about meeting their needs.

*“...Most of the time it was my question that how I overcome the possible problems or ideological or even sociological misunderstandings in our contacts but the comments my friends had to me were really nice and helped not only my confidence but also helped my understanding of what the people say in such discussions in general, go up and increase. ...” (ST8)*

### **7.6.3. An ethical perspective: honesty and giving room for multiple points of view**

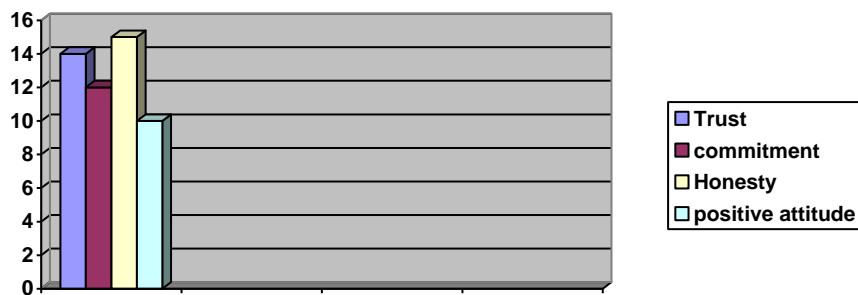
Reviewing the interviews I found out the following concepts to be the most important among the others. The number of occurrence is stated in brackets and the graph below shows this frequency better:

Trust (14)

Commitment (12)

Honesty (15)

Positive attitude (10)



**Graph 3** The frequency of the ethical concepts applied by the students

Some participants emphasised the role of trust in making their virtual community. Nearly all interviewees believed that honesty in presenting the ideas in the discussions among virtual classmates has been an important reason for their participation. When asked if this goal had been met, all but one replied that they had found this element in their relations very powerful to help them go on in their arguments specially the social ones.

*“...the environment we have here had really increased our’ knowledge about each other specially in finding the issue of truth and honesty between ourselves. I believe that this issue may verify the class achievement of one of its major goals, which was to increase the climate of trust and honesty...” (ST 4)*

We can see that having honest views in their expressions, negotiating meaning and building their practice of community building has become a possibility for these participants. This virtual environment seems to have linked students together who do not know each other, but who are engaged in similar practice. These might have allowed the honest expressions and exchange of ideas.

*“...I was really surprised to see that nobody thought only of himself or herself when we generally had a problem, for example in some social aspects of our life, and everybody was active to participate in this circle. You know they could easily think of their own for example lessons and do not think about what a friend says about the problems that students have come across when some of their classmates were in political jails due to writing one article in a newspaper. But I saw that a movement of energy and honesty was created to help those students which were really started from this small virtual community ...” (ST 7)*

Some of the responses showed that actually the belief that they should have commitment to what they say or do to their group has made them successful in their ‘sustainable relations’ and they have showed that ‘the strength of community is in the strength of relationships’ (Dillon et al., 2007, p. 172). They have focused on this point a lot and discussed it in detail in their interview.

*“... You know when the students come to a new society like a university; they bring their own cultures with themselves. I think in many cases you know this culture is very different from the new environment and from our previous experiment, I remember that there were many challenges or debates among team members. Of course here we also experienced sort of those problems but I should say that for the first time in my life I experienced a long term friendship because of the honesty I saw here. I really knew from the first day that most of the students had a positive idea for having this community at whatever price...” (ST 10)*

*“...we had regarded a brilliant communication factor from the first day in our group which was thinking of the others’ issues at any times they had a problem or an issue to discuss; a sort of commitment we had in living with these friends that helped us keep this community healthy and progress...” (ST 3)*

It should not be ignored that these ideas may seem generalities or characterisations of only a group of students, but as the students have also referred to it here, what they have learned from this honesty through variety of ideas, can show some of the conversational and cultural bases in this ‘mediated conduct’, indicating again the relationships between the students’ attitudes and their intercultural communication in this virtual environment.

*“...I think understanding the culture of the people who are working with you in a society like this is very important and it takes a lot of energy for me or may be for most of us to adapt themselves with the new situation. But after a while when I saw everyone is offering a hand and I found honesty in his talk I had less stress and decided to be more active and serious in my contacts on-line...” (ST 1)*

All the above quotes noted the importance of the same key factors which were ‘trust, commitment and honesty’ coming out from their positive attitudes toward their community; showing how such virtual interactions are manifestations of the students’ cultural and social development. The features and qualities of these factors were strongly stressed by nearly all of the participants, and the importance of loyalty and commitment was a priority for all. They have reported that they felt these concepts had led to a creative opportunity which was received positively.

### **7.7 Summary and the review of the findings**

The main characteristics discussed in this chapter are the outcomes of data collection and analysis from the interviews I had with the students to know what their own ideas are in relation to what they themselves had done during the 6 months period of being with each other on-line. What was done in this chapter was the response to the questions which were raised at the beginning of the research. The interviews specifically showed whatever happened in the students’ minds related to their contacts in the V.L.E and clarified what they had done in the previous phase of the study and showed their thoughts to the researcher as well. The main points of this phase of the study were classified in to four key themes:

- 1) Specific on-line culture (with focusing on participation and social dialogue).
- 2) Social dialogue on-line with its own particular characteristics (with focusing on ‘shared responsibility’, culture of caring while having opposite ideas, cooperative climate and lack of perception of “otherness”. Also peaceful co-existence and mutual respect were presented as ‘values to be nurtured’ (Jordan, 2001, p. 89).
- 3) Students’ views and understanding of on-line social relationship (focusing on ‘similarities found and needs which were met’).

4) Establishing a climate in which members can voice honest opinions and give room for multiple points of views (focusing on these concepts: trust, commitment, honesty, and positive attitude).

Here are the main findings of this phase of the study based on the research questions:

- a) It was very interesting to see the positive attitude in which the students' views were reported. This is clear in the reports of the interviews some extracts of which were analysed in this phase. The participants showed their own surprise of what they had come to after a time of on-line discussion with their classmates.
- b) The strategies the students had used to overcome the possible misunderstandings were also noted in here. The strategies such as 'culture learning and caring' about what they discussed or suggested in their serious talks have been the two main strategies, among the others, used by them.
- c) They also stated that they did not have the "perception of otherness" and moved toward the similarities although having a critical view on different political and social issues such as freedom of expression and the issue of human rights in their society; a feeling which helped them make a peaceful on-line community while having different opinions on the issues raised in their chats.
- d) They focused on their needs which they said they had met through their talks on-line. The main needs which were emphasised by them to have been met were:

d.1 sincerity

d.2 gaining confidence

d.3. common understanding between them

The most important finding in the interviews was the fact that nearly all of the participants said that they had tried to have a main ground rule for their community which was 'sharing responsibilities and purposes'. This issue was clarified in their interview when they gave some critical examples in which the students had come across the serious hazardous outcomes such as political jail for publishing a paper and as a result had faced long-term jail. It is difficult to show the participants' general impression because words some times can not represent the conceptual meaning

behind them, but the codes discussed in phase two and the themes emerged in this phase could show how intercultural communication is realised in virtual environments and how this sort of communication implicate the tensions between accommodation and lack of it in such virtual environments.

The way the findings can be put together with the whole research in answering the research questions which will naturally lead to the general impressions about what the participants have said, will be discussed in the next chapter - the Discussion chapter.

# Chapter Eight

## **Chapter Eight Discussion**

### **8.1. Introduction**

The purpose of this study was to conduct empirical research about the process of community building as experienced by young adult students in computer-mediated distance education classes. More specifically, this study sought to ascertain the steps that led to feeling part of an on-line community of learners. This chapter provides a brief review of the study and a summary of the findings and their relation to previous studies and actually extends prior research on the performance of CMC-mediated teams. Where appropriate, comment will also be given to the wider view of findings presented in previous chapters. To assist the reader, this chapter restates the research questions and reviews the major methods used in this study. The discussion therefore is a reflection on the findings of the data from three phases of the study-questionnaire, interpretation of the subjects' on-line talks and finally the semi-structured interviews. It then summarises the results and discusses their implications.

I have tried to bring together the results in such a way as to answer the research questions which were:

1. What are the processes that determine the tension between accommodation and dissonance in discourse in a virtual learning environment (V.L.E)?
2. In what ways are the interactions in the V.L.E manifestations of socio-cultural development of the learners?
3. How is intercultural communication realised in the V.L.E?
4. What are the relationships between intercultural communication in the V.L.E and the attitudes of learners?

### **8.2 Overview of the study and its methodology**

In this study I explored whether or not virtual communication by the students from different cultural backgrounds can be 'an effective context for building relationships' and how pragmatically this sort of relationship is made. In other words, drawing upon constructivist perspectives, the research attempted to grasp the role of collaborative interaction as the process of co-construction of their knowledge and identities by looking at patterns and outcomes of interaction and also their own ideas in the interviews and their answers to the survey questionnaire. These approaches were



useful for analysing interaction and its outcome, the role of each participant in interaction, and how and what learners are trying to learn through interaction with their peers from other cultural origins.

At the beginning, the main purposes were to reveal the perceptions and practices of those involved towards the virtual contacts and on the whole communication; to look at what kinds of relationship took place between students; and to see whether there was any sort of conflict in this new environment for these strangers. The respondents or participants consisted of the student population from Iran University of Science and Technology in Iran which has a long experience in handling and organising such courses for students and researchers in the country.

As the study required an in-depth understanding of the intercultural communication process from individuals acting in a particular social situation – in this case a virtual environment, the methodological approach chosen to achieve that purpose was within the interpretative research paradigm. Such an approach does not intend to prove or disapprove a theory; neither does it seek to generalise its findings to other individuals and to other settings (Cohen et al., 2005). It is actually because of the exploratory nature of the research focus and the necessity for personal responses in natural settings that this paradigm was an appropriate choice. Technically, it was assumed that the social setting plays an important role in communication and the power it has towards intercultural understanding (Vygotsky, 1978; Smith, 2003a; Wenger, 1998). Upon this foundation, the research framework selected supports constructivist theories and on the whole qualitative research methods.

The multiple approaches to collecting the data were selected on the basis of what was best for investigating the problems raised in the research questions and what can best provide insightful and reliable information. The data from the different sources were therefore triangulated for validation and verification. So, for example, it was possible to understand what the respondents said in the questionnaire about their experience or ideas in on-line contacts by analysing the chats they had with their virtual friends and the transcripts of the interviews. The rich data set obtained provided insights into the complex issues involved in the on-line communication process. The strength of this study lies in the triangulation of data from various different sources. These findings

were discussed in detail in chapters 5, 6 and 7. The discussion of the overall findings in this chapter is structured according to (a) perceptions of on-line communication showing how intercultural communication is realised in the V.L.E and what processes exist in this environment that can determine the possible tensions between accommodation and dissonance (b) nature and content of such communication to show any relationships between this communication and the learners' attitudes (c) relationship between the students and their cultural background to see in what ways the interactions in the V.L.E are manifestations of a socio-cultural development of the learners, and (d) emerging issues. These will be related to previous literature in the field.

### **8.3. Participants' communication with others on-line**

At first the students referred to their idea that the discursive interactions they have personally experienced have had important implications for their professional life. The findings from the questionnaire survey showed that nearly all of the students believed in the harmonious atmosphere that the on-line environment can make for them in their new environment and they ranked this only as positively. Regarding 'communication with others on-line', most of the students agreed that the way they communicate with each other can become much better and stronger through the V.L.E. Especially when they revealed their idea that the V.L.E is really effective in making the harmonious atmosphere for the students with different cultural backgrounds, it could be regarded as a signal that we may not be so much worried about this issue as much as earlier years, because the major issue in communication in V.L.E. was regarded as disconnection among such people with different cultural backgrounds. Here, by showing this amount of positive idea in this, I think, the participants are indicating that disconnections are no longer a problem and this harmonious atmosphere may lead to creating a new culture in the V.L.E. The importance of this role was reaffirmed and reinforced from the analysis I had on the students' on-line discussions. This was shown more clearly when I analysed the discourse functions they had used in their chats, especially on three most frequent ones; 'Asking strategy' which moved from 236 times in the first month and led to 396 times in the fourth month, and adversarial moves-representing the challenges- which started from 283 and led to 160 and also proposing strategy which started from 120 and led to 293 in the fourth month. Supporting this development were the exploratory

categories used by the students in their chats the most frequent of which were agreement, motivation, disagreement and misunderstanding. The results of the analysis of these categories could show how such intercultural communications are realised in virtual environments; category of agreement started from 67 and led to 350 in the fourth month and 'motivation', which really showed their intention in taking part in these chats, started from 180 and in the last month it reached to 591. The more surprising category in the students' chats which could show how virtual interactions are manifestations of students' cultural development were 'disagreement and misunderstanding'; starting from 420 and leading to 85 in the fourth month. The details of this development was discussed and shown in chapter 6 but it is worth mentioning here that this part could indicate the relationship between the students' attitudes and their success in their on-line intercultural communication.

In their interviews, they referred to their understanding of community to include not just the presence of harmony and intimacy but the actions which are collectively taken to achieve and to protect it. This is to some extent different from the 'scepticism' that early arguments for the presence of community on-line had raised (Hartman, 2002, p. 53). They have referred to the continual internal debates of such groups and different levels of intimacy. But in this study the results of the on-line chats and also the final interview with the students showed something different. The students had different kinds of discussion in their chats for a long time and showed their awareness of the behavioural norms. Moreover, the frequency of discourse functions and exploratory categories used by the students strongly implies a sense of community in which the students have a sense of belonging.

Supporting this issue is another section of the survey in phase one in which students said they had communication with their friends and nearly all of them believed that such an atmosphere can encourage independence in learning. Even they believed that this learning situation can introduce new ways of learning and communication and naturally help the students have better understanding of each others' views. These qualities were indicated as important both by the groups responding to the questionnaire and by the groups in the interviews. In other words, nearly all of the students stated that they have more creative communication and the V.L.E is able to encourage the students to have better understanding of each others' views. The

number of the students who believed in this was about 72 percent. Also the results from the questionnaires showed that this creative role of the V.L.E was ranked as important by most of the students. This role was also identified as more important in the interviews with them. Although the groups differed in their ranking of the V.L.E role, the results support the general view that the role of this virtual environment in making these different groups closer to each other for understanding the different opinions is important.

It might be stated such interaction is a defining characteristic of a healthy communication in an educational environment (Moore, 1989). This is literally the process of interacting with each other in a way that influences a person's understanding or view points. This form of interaction was regarded as a desirable one by many of the students because it can serve as a means of motivation and support of program content. We might assume that the V.L.E can provide a certain level of peer support and guidance, the point which was shown in the live chats the students had with each other in the second phase of the study.

### **8.3.1 Social dialogue and cultural exchange**

The findings indicate that when the majority of participants believe that the V.L.E can introduce new and better ways of communication for them, the previous ideas based on the existence of disconnection rather than a new communicative atmosphere, have been challenged (Kern, 1998). This is reinforced by another section of the survey in which the students clearly said that the V.L.E can make people closer to each other. Later on in their on-line chats they showed that these miscommunications were just the beginning of the way and they could resolve them by being more with each other to analyse different views regarding various cultural issues (e.g. please look at the 'adversarial moves' in phase 2 which started from 283 in the first month but in the last month it led to 160). In the interviews they also frequently referred to the issue of time and their ability to understand each other's view points about problematic points such as socio-political issues which had made barriers between them at the beginning of their communication.

Of course this view about interaction is different from what was found in the literature. In this regard some of the previous research had tried to redefine interaction

as a central element to the social expectations inherent in such educational environments. I assume that the students here have tried to show a new definition of interaction and contacts in their on-line community. It should not be ignored that there are many levels of approach and application here in which their mutual interaction can be accomplished. The students have referred to this important issue in both the chats they have had with each other and also the interviews. In the survey the students had said that they put a high value on colleagues with different cultural or language backgrounds. These responses were reinforced in their interviews and also live chats which indicated that students' interaction was a determining factor in supporting them to shape their own community; showing the relationship between their communication in this virtual environment and their attitudes.

Cooperative production within collaborative interactions was another commonly identified pattern across the data. When students were engaged in this type of interaction, they constantly worked on a common issue cooperatively and collaboratively to achieve their designated goal in many different ways. The examples from the interaction of these groups show that the students contributed their knowledge to compose the sentences in their live chats. The excerpts in this section (Phase 2) showed that each student does not have to have the answer to everything but they can co-construct their knowledge by combining with other students' contributions. Cooperative production also proved that it helps students to improve their tactics of communication (e.g. please see the 'exploratory categories' in which the number of disagreements and misunderstanding reduced from 420 in the first month to 85 in the last month of their communication). This is in line with what Thorne (2003) found in his investigations stating that these people negotiate dynamically through "cultures of use". This issue is restated by Scollon and Scollon (2001) where he said 'in such an environment more and more people become cultural hybrids or 'third identities that entail operating from at least two cultures' (p.138). The findings of the study have shown that the students were able to co-construct knowledge through collaborative interaction as displayed in Phase 2 and also the interviews reported in chapter seven. The on-line live chats also showed that a series of collaborative interactions occurred that led to constructing a new form of community; the increase of 'proposing category' in discourse functions from 120 in the first month to 293 in the last month of their on-line contacts could prove this

aspect of the study. Also the concepts emerged in their interview- trust, commitment, honesty, and positive attitude- could be other indicators of showing how intercultural communication is understood and realised in this virtual environment.

### **8.3.2 Sharing thoughts and cooperation**

After more collaborative talk was carried out and the participants were encouraged to help each other, more balanced turn-taking and equality of contributions were achieved among the students in the second phase of the study. The atmosphere of collaborative learning was likely to produce negotiated interaction that enabled them to modify their ideas for future communication. Another benefit of collaborative chats was that the V.L.E had become a space for socialisation in which ‘mutual assistance is necessary in order to complete a shared task’ (Kitade, 2000, p.159). The students referred to this in the questionnaire in which they stated that they did not agree with the idea of ‘being worried about having miscommunication’ when they are talking with others in the V.L.E. They showed this again in their chats in which they used ‘asking’ as one of the main discourse functions in their communications; the usage of this ‘speech act’ increased from 236 at the beginning of their communication and led to 396 in the last month of their communication which is quite meaningful both quantitatively and qualitatively. It may be another indication of the creation of a new, friendly and communicative atmosphere, leading to accommodation in the digital world. To test this assertion, in the interview the participants were asked ‘what characterises community in that environment’. The most important point made was the belief that their understanding of community includes not just the existence of intimacy but the things that they have done to achieve and preserve it (e.g. please look at movement of the ‘adversarial moves’ in on-line chats). This is similar to what Watson’s (2005) findings show from a group of people using ‘Phish.Net’.

It can be assumed that this awareness of the behavioural norms and moving towards respect and sharing of thoughts by the students in on-line communication (chats) implies a sense of community and thought sharing in which individual actions are always demonstrated within the known constraints of a forum and show how they have been serious in their ‘goal keeping behaviour’ (Watson, 2005, p. 391). This understanding of norms and helping others to join implies a move towards the utility of a ‘community metaphor’ (p.387) showing the relationship between the students’

virtual communication and their own attitudes. It should be mentioned that this movement seems more important when we regard the fact that the students had come from at least four different cultural and linguistic backgrounds where normally it would be hard to find harmony. I assume that this situation might prove the idea that we should begin thinking of community as a ‘product of shared relationships’ among people (Watson, 2005, p. 384).

It should be added that in a Phase 1 question in the survey, only 34 percent of the students said that their miscommunication was related to ethnic or cultural differences and most of them said they had communicated well with friends and classmates from different ethnic backgrounds. Surprisingly, the groups gave a low priority to these differences. Evidence from the on-line talks and interviews also indicated that this aspect was not perceived as important. Results from the interviews, and the on-line discussions showed that mutual perceptions about supportive and professional roles existed in their contacts, where each individual was clear about the concept of cooperation (e.g. please see the usage of ‘motivation category’ in on-line chats which started from 180 and surprisingly led to 591 ). There were perceived as close and healthy personal relationships, where the students were warm, friendly, approachable, helpful, caring, sincere and encouraging so that they could easily communicate with each other. These healthy personal relationships could promote good and rewarding interpersonal skills. Respondents repeatedly referred to this point in their interviews (e.g. please see ‘participation and motivation’ in the emerged themes and sub-themes of the interviews).

This part of the study also supports previous findings that the key to the success of any relationship is the readiness of the students to ask for help from the others whom they feel comfortable talking to (Crystal, 2008) and that constructive criticism is given in such a communicative atmosphere (e.g. please see the ‘proposing category’ as one of the major speech acts used by the students in their on-line chats). These findings are indicators of what Heidegger (1969) calls the “everydayness” of life which is needed to create the larger structures of society which, in turn, form the individual sense of being- in -the community.

### **8.3.3 Compromise and social grouping**

The majority of the students with different cultural backgrounds showed their agreement on the harmonious atmosphere in the V.L.E (phase 1). But it should also be mentioned that the findings of the chats and the interviews showed that students with different attitudes varied in their behaviours. Some students perceived some other students to be lacking in professional commitment, possessing negative attitudes which were revealed in ill-prepared answers in their on-line talks and a reluctance to discuss doubts and problems. These problems were similar to those in Crystal's (2008) study where students' negative attitudes, such as lack of commitment and interest in their beginning contacts, affected their relationships for the first few weeks. The findings also showed that students whose attitudes were consistent with on-line community goals would enhance their environment. Some students perceived some others to be lacking intact and possessing inflexible attitudes. For example, the experiences of four students with their classmates resulted in the relationship becoming tense and caused a loss of motivation, negative attitudes towards their community and no interest in contacts in the first few days (e.g. please see the 'disagreements and misunderstanding' category in the on-line chats which started from 420 in the first month of the students' contacts). Communication lines were almost closed and their relationship was distant. Such feelings were demoralising and could impair motivation to communicate and could badly affect the community building process. But later on students said they found students on-line toward whom they 'gravitated'. Often these were students with whom similarities were found. Sometimes the similarities were in location or academic background. Sometimes they were in commitment, motivation or circumstances. Regardless, students who found similarities began interacting on a regular basis.

Checking the on-line chats and also interviews in later stages showed that more than half of the students approached other students on the course for help because of their common experiences. Little by little they viewed their friends as the primary source of help and consequently could create a support network among themselves; the increase of 'asking category' in speech acts from 236 to 396 can also clarify this aspect of their communication. What students value most is the support or working relationship which is constructive, unthreatening and readily available and interactions which are characterised by honest and open communication. In the



interviews it emerged that students who were new to this V.L.E. had to spend a large portion of their first few weeks getting comfortable with the technology, and familiarising themselves with the new context. They were unprepared for the amount of time required for this, so they were confused about how to communicate and did not know how to fit this new system into their schedule. To avoid some problems, they went through a complex process to develop their cultural competence by the strategies that they chose through compromise and support that was provided there. After this introductory period, students gained confidence with the virtual environment, as well as the content. Also, as a pattern of participation, they learnt to function in 'a faceless interactive environment' (Kern et al, 2004, p. 113).

#### **8.4. Notion of interactivity**

As students continued with their 'live chats' with their peers, they could get the input of others, and they made conscious or unconscious judgments about each other based on the style, content and indeed on the whole the responses they provided for each other's questions and issues. Students judged others' intellectual and communicative competence according to the knowledge and understanding shown in the input. If students offered cooperative answers and suggestions, others thought it showed that they placed a high priority on the virtual community. Interaction styles and 'on-line personalities' were also factors used to "judge" each other (e.g. please see 'communication frequency' in phase 3). Most participants agreed that their 'on-line personalities' tended to emerge soon after they started the later stages of their talks in Phase 2. Then later on, when interviewed, they also focused on this aspect and it was evident that it was at this stage that decisions were made as to how much and with whom to participate. Then they began to find classmates with similar backgrounds, interests, ideas or with shared circumstances. Students used those similarities to begin virtual conversations when their circumstances were similar enough that they could easily find common ground about which to converse on-line.

This does not mean however that students were all similar or that they were only looking for someone like themselves. Indeed, the findings from the different sets of data revealed that they had their own ideas on each aspect, but they tried to find ways of interacting with each other to be able to find a way to resolve differences and move towards making a community comprised of different cultures who share time with

each other in a virtual land. This suggests that all those in the virtual community, as well as the supervisors and assistants are clear about their roles and responsibilities in the process of community building to ensure that virtual learning and communication becomes an educative experience to students; supporting the findings of O'Dowd (2006). Due to the importance of this matter, it is discussed in more detail in the following sections.

#### **8.4.1 The role of experience in students' move to community building**

Further evidence from the interviews confirmed the importance of interpersonal skills and experiences in the virtual communications. Students utilising the V.L.E said they generally took a longer period of time to 'create bonds of friendship, and community' than they might have in face-to-face associations, but the necessary elements were present to enable them to do this for those who wanted to utilise them. In other words, students with more contacts and who spent more time participating in on-line discussions reported feeling happy and achieved higher goals in their communication. These findings suggest that the more fulfilled the experience of students in communicating, interacting and working with others, the more likely they are to attain a meaningful communication in the process of community building. Therefore, in analysing the success or failure of such communities, the personal experiences of the students have to be taken into consideration (O'Dowd, 2006). Also the fact that more than half of the students approached other students on the course for help because their common experience enabled them to create an informal 'social support network' among their virtual friends and teachers was interesting and supported earlier findings (Crystal, 2008, p. 87). The results also suggest the need to have more time for earning the needed experience in this environment although there is no specific formula on how much time is needed for this community building.

The interviews confirmed that most of the students perceived that spending more time and getting more experienced in this environment encouraged them to reflect and analyse their on-line discussions and actions. They believed that the main clashes and tensions were closely related to their perceptions that they did not have enough time for discussions and they had found it difficult to discuss their views very well. These findings support Thurlow's (2001b) statement that 'communicators must have experience to identify, articulate, and coach the skills associated with effective on-

line interaction and communication strategies' (p.14). They also perceived themselves as being inadequately prepared to carry out their on-line interactions and responsibilities initially. So an on-line community existed in the eyes of some participants but did not exist for others, even though they were in the same situation and that class was described by many as having a strong community element.

To improve their experience, in the other parts of the on-line chats some of the more community-minded students widened their circles of friends and acquaintances, which supported the formation of community (e.g. please see the 'asking category' in the discourse functions in on-line chats to see how this process has improved through time). This confirms that many communications or repeated communications both encourage them to ask for questions and work cooperatively and meet those requests broadly which finally supports the efficiency of the environment. These differences were seen in the period between the first phase of the study when the students took part in the survey in 2006 and the third phase which was for the semi-structured interview in 2007. The changes these participants had made are constantly felt (figure 11). This is the difference and change which is discussed by some researchers such as Crystal (2008) and Jordan (2001) who suggest the main factor is this separating line between individuality and publicity. These students in this study experienced the virtual environment as individuals, who lived there and for them the most creative and complicated thing which happens is their individuality, which is strengthened by the virtual communications.

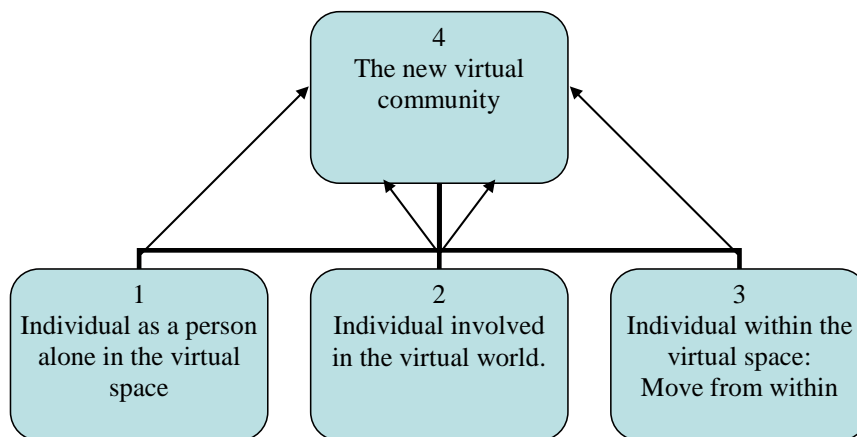


Figure11 The individual's experiential move from within in cyber space

This is one of the most important findings of the study which could show how intercultural communication competence is realised in virtual environments. This seems to be slightly different from what other researchers such as Dillon et al. (2007) and Wang et al. (2007) talked about relating to the cyber-communication leading to disconnections rather than a move toward personal completion and a philosophical or sociological move of the person within the virtual community. In the study the students repeatedly referred to this development over time; and also to their 'mentality' in this circle (e.g. please see the section 'social dialogue' in the interviews). Most students indicated that they enjoyed meeting the people in their virtual community but not computers or the technology which enabled this. It seemed they built their communities' actions based on their need to create a different space for them to show this power in eliminating the misunderstandings and move towards a new space (e.g. please see how the 'disagreements and misunderstandings' have decreased from 420 in the first month to 85 in the fourth month of the students' on-line chats). Other aspects of this individuality in a community will be discussed in the following sections.

#### **8.4.2 Knowing the context as a means for cultural unity and identity**

The qualitative analysis of the on-line chats showed that a strong form of cultural exchange emerged and was encouraged by participants. Specifically, communication between, and learning about, other participants' national, ethnic and linguistic identities were portrayed as means to what Rivenburgh and Manusov (2004, p.59) described as 'cultural self-enrichment'. In general, however, even cultural unity or as they said mutual understanding among the students from different cultures, was portrayed in this domain as something that could bring opportunities for enrichment in discourse in such virtual environments, promoting richness in cultural perspective. Such sentiment was counter to views expressed by the previous researchers. Nonetheless, these participants saw intercultural exchange as a form of helping to persuade the stability of existing cultural identities while also working to expand and enrich them. Again these findings were opposite to what was found in other previous research (e.g. Kern et al., 2004, p. 39) where contact in the virtual world was seen as 'harmful to personal identities.' This study supports Crystal's (2008) finding which states:

*"Students recognise their context which centres on the immediate, practical issues of cyber contacts, and which builds on experiences they have already gained"* (p. 141).

And the students here have given due consideration to immediate bilateral reaction and understanding when issues are often complicated. This situation was also found in previous studies (Thorne, 2003; Thurlow, 2001b) where the professional and personal relationships between students were boosted because of this mutual understanding of the context. As stated earlier, the participants were given sufficient time to discuss issues at any given point with their friends on-line so the support from the virtual environment was also appropriate. The findings show the importance of cultural diversity and peaceful co-existence in such environments which may embody the idea that accepting diversity promotes richness in cultural perspective and will pave the path for social growth and development (e.g. see extract 3 and 4 in qualitative section of the on-line data analysis). In the study it was evident that most of the students recognised the importance of the situation and had tried to keep their new virtual environment peaceful despite their different ideas on various issues. This might have affected their attitudes, knowledge and contact practices during the communication period as they moved towards the more developed stages of their communication.

Various elements indicated or showed the cultural identity of the students in different stages of their contacts. These ranged from tangible products (e.g., homework, teachers, and university food; e.g. see extract 1 in qualitative section of the on-line data analysis) to behaviours (e.g., traditions, habits, friend finding) and beliefs (e.g., political issues, social values, religion). I think the direction or movement of these elements is very important because first they started talking about the issues which were not problematic; and gradually after knowing more about each other and the context and finding the trust they needed, they started to move towards elements necessary for making a socially active community. This is another important finding of the study which can indicate that students moved towards accommodation in their virtual environment; this was supported in their interviews as well (e.g. please see the section 'experiencing an on-line culture' in the interview results).

It is worth noting that in the Middle Eastern countries, due to constant socio-political problems in society, gaining trust is a very important issue which might not be hard for those from other cultures to experience in their daily life, but in the Middle East this is something which needs a lot of time and energy and application of various

strategies to be able to build trust among people. It is suggested that findings of the study may be more challenging for the scholars of those countries who have not experienced freedom of ideas easily in daily face- to- face communication. Overall, however, the development which the students underwent in the dialogues of the second phase offers evidence of the conceptualisation of cultural identity found in previous research (e.g., Collier, 1996 and Philipsen, 1998). The following figure may show this cultural and social development better.

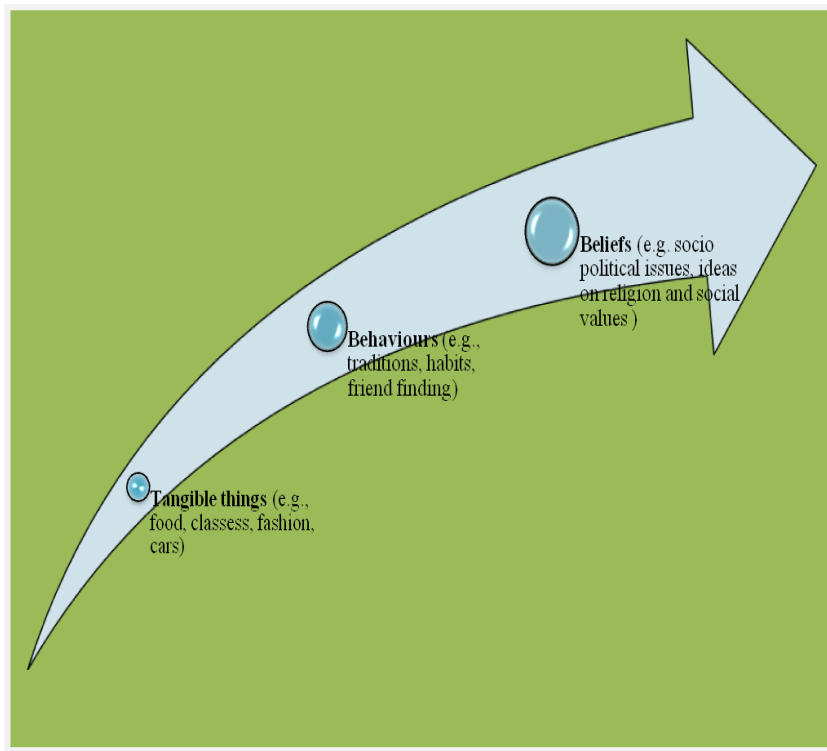


Figure12 The direction of the students' development in their on-line communication.

This is the context where students communicate with each other and have certain expectations and themes for themselves and try to move towards those aims. The results of this part of the study suggest this aspect of the on-line communications in which the students have tried to see the virtual environment rather exclusively in a positive light, as a system to allow people, whatever cultural background they are

from, to move towards cultural learning and exchange, and support new types of cultural identities to form. It is important to note that in this study most students did previously appear to have had a good experience in their contacts with other languages and cultures; this might have affected their attitudes, knowledge and classroom practices before starting the second stage of the research. Thus, within these results, the virtual environment was shown as a useful means through which they could encourage what Rivenburgh and Manusov (2004, p. 39) describe as 'diversity and positive intercultural exchange', as a helpful mode of learning about identity and culture, and as one of the means through which identity's dynamic quality can be improved and displayed (e.g. level three in the above figure).

#### **8.4.3. Language and virtual identity**

A vital element in addressing culture and communication in virtual environments is language (Carbaugh, 2005). When I talk about language here, I don't mean only the language used, but the 'patterned ways' in which a language is being used (p. 47). This requires careful description of social interactions in this environment, as shown in the previous sections. The cultural meanings created in these interactions are also analysed to help the reader get a better view of this fundamental element; showing how intercultural communication is understood in virtual environments. The main reason that this aspect was a focus in this research was the possibility that it might develop our understanding of the students' cultural conduct. With these objectives in mind, the second phase of the study was designed, so the students tried to get a wider view of the situation and the fact that the use of language is very important in cyberspace. From the live chats of the students and also their own ideas in the interviews it came out that language was the base for establishing their own and perceiving others' on-line cultural beliefs.

Students also said that they were able to find their voices through the new virtual environment which was a phenomenon for them as they compared this with their face- to- face daily contacts. Some of them said they had been able to create an even more idealised self-image, as they thought "it is a creative environment in which they were not forced to talk and reveal their ideas in discussions" (ST.1). This perspective demonstrates clearly that students were intensely attracted to networked conversations because on-line interaction provided a forum to find a voice that might

otherwise remain silent. The study provided some evidence that, through the V.L.E they had been able to create an environment that enabled them to move away from a real-life relationship (e.g. level two in the above figure) and look for emotional support from their on-line relationships. Some students had used words which could represent their ideas or beliefs on socialisation in this virtual environment, for example the specific pronouns which clearly showed how they thought about this situation. The most attractive and appropriate pronouns when talking about their presence in that community are: ‘we,’ ‘us’ and ‘our’ (‘Ma’, ‘ma ra’, ‘male ma’ in Persian) which I interpret as a deep sense of belonging to that community and mark the sense of community which has gone behind the normal definition of a virtual community. The number of times these words were used in their on-line chats is stated in the table below; which can be another indicator of the relationships between the students’ virtual communications and their attitudes.

Table 12 The pronouns and the number of times they were used in the students’ chats

<b>pronoun</b>	<b>we</b>	<b>us</b>	<b>Our</b>
Number of usage in the first month	217	200	157
2nd month	371	345	386
3 <sup>rd</sup> month	565	453	534
4 <sup>th</sup> month	680	560	696

These are some evident aspects of the students’ common beliefs; those who had never met each other, but were shown to believe in their cyber community and even love them. This has been the focus of much research in the last decade. For example, Rivenburgh and Manusov (2004) and Dillon et al. (2007) have talked about the sort of the content of the discussions in such virtual environments. In this study it was evident that the hopes and fears they had in their chats made them close to each other and this resulted in a shared language among them which has actually allowed the expression of a ‘virtual we’ (Rivenburgh and Manusov, 2004 p. 212); this, I think, is another great finding in the process of virtual accommodation in this study. These findings, especially the use of such discourse in their contacts, I assume, was actually



what they themselves decided to make and it did not happen unless they wanted it to happen so they often helped create community by modeling expected behaviour. The participants wanted or needed the virtual community for whatever reason, so they were eager to find or make it. Some students saw the new situation and the form of the language they used as an opportunity to network. Some just naturally wanted to participate and, in fact, provided some of the support that was needed to put a community together and keep it together. The usage of the plural pronouns in the interviews (please see the above table of pronouns and also the 'motivation category' in the quantitative analysis of on-line chats) could be the visible signs of feelings of worthiness and acceptance or belonging that occurred following participation in long threaded discussions; they can clearly represent the accommodation process in discourse in this virtual environment.

Qualities such as respect and trust were evident even though such feelings had to be transmitted through text only on a computer screen and nearly all participants referred to their goal of on-line communication as creating a forum for discussion as an important reason for their participation, a goal which almost all participants felt. This exactly matches the values and beliefs discussed by them in the on-line chats. The coherence in the language of the chats ( e.g. please see extracts 4 and 5 in the qualitative analysis of on-line chats) seems to be a sign of the perceived close and healthy personal relationships, where students were warm, friendly, approachable, helpful, and encouraging so that they could easily communicate with each other. These findings suggest that the more coherent, respectful and clear language in communication and interaction, the more likely the students are successful in their community building. Therefore, in moving towards a successful virtual community the language and the style chosen by the students have to be taken into consideration. The findings in this part of the study were similar to some of the previous research in virtual communications which demonstrated the importance of language in such virtual contacts (Crystal, 2008; Godwin, 1994). I think the findings also demonstrate that the use of such special styles can enhance teams' performance in idea-generation talks relative to the V.L.E interaction.

#### **8.4.4. Perception of otherness /cultural awareness**

The findings of the study, in particular the second phase, showed that in their virtual communications most students had found people towards whom they were attracted or felt comfortable with (e.g. please see the ‘agreement category’ in quantitative analysis of on-line chats). Often this was because of similarities in motivation, dedication, academic or personal background. Regardless, these were people they felt comfortable interacting with and who they thought would help them when needed. They supported this issue in the interviews in which they said, “We tried not to be separated even if we were different because if we are strictly separated, there is no relationship between us enabled...” This feeling of unity which is opposed to isolation was an important factor which was discussed a lot by the students in their interviews (e.g. please see the ‘communication frequency’ section in the interviews). It might imply that the movement towards community building has prevented them from having a dogmatic attitude towards the ‘other’ as something quite different and not relatable. The major point of the discussion here is the epistemological view the students had in their contacts with others. One of the main points discovered in the study was the idea that being different and separated does not mean being in isolation. In other words, the data proves that this frame of looking at the others in a community shows a dialogical understanding of otherness through such separation in which an incorporated relation develops; showing the relationship between intercultural virtual communication and the students’ attitudes.

The way in which these particular attitudes are present in this environment, which includes forms of social interaction that are culturally distinctive, is important to note as they create a sense of the other as a part of a unit but not as a stranger in the community. This attitude, I assume has helped the students move towards unity despite the cultural differences; indicating the ways the virtual interactions can manifest the social and cultural development of the students. They supported this notion in their final interviews in which they directly defended this attitude towards their community building process (e.g. see the section ‘perception of the sameness/otherness’ in the interviews). It is important to note that they stated that they were aware of the degree to which this emotion is indeed working. Regarding these features, Simao and Valshimer (2007) say:

*“These contacts create an intercultural communicative event that is being conducted according to their community rules, forms, and preferences for their community building process” (p.210).*

Similarly, this study supports the idea that keeping these attitudes and cultural bases involved in the students’ ideas can help change our abstract considerations of individuals and their on-line communication to real cultural and communicative practices. The study also showed that identities did not disappear for the sake of the new community, but they are constructed with different resources of ‘offline identity’ (Jordan, 2001, p. 48) which means they are reinvented on the basis of new forms of on-line identity; this shows how intercultural communications are understood in virtual environments. This, I think, opens the gate for the scholars who are afraid of identity loss due to the fluidity within such cyber societies to look at this environment from a different perspective. Simao and Valshimer (2007) also focused on this aspect, but in non-virtual environment and agreed that it is true that the issue of ‘otherness’ challenges us with the idea that ‘keeping in relation cannot mean fusion or isolation’ (p. 396). They say:

*“a dialogical understanding of otherness requires taking into account that being separate or even different does not mean being in isolation- but rather- through such differences and separation an integrated relation develops” (p. 397).*

The situation in this study demonstrated that the otherness had another definition in this cultural constructivist frame through which the students set up conditions for their relationship to develop. The following quote from Markova (2003) is another reference to what other research tells us regarding this abstract aspect of the study:

*“... from the semiotic-cultural constructivism, such situations are advantageous developmental life situations where it is allowed to the I to be touched by the strangeness of the Other; where it is allowed to the I to transform himself in the struggle for overcoming the Other’s strangeness, while both are trying to assert themselves as a discrete agents, although dependent on the relationship” (p.33).*

It is important to remember that the members of this virtual group were not only representatives of different geographical location, gender, class, racial or ethnic background, but they were also examples of cultural hybridity and of how individuals learn to negotiate between traditional sets of values and norms while also being exposed to different modes of reasoning, expression, social expectations and world

views. It might be assumed here that the study shows the challenging point of hybridity in a better way since it became clear that cultures are not 'static entities' and undergo steady changes (Simao and Valshimer, 2007, p.114). The interviews also clarified this point in the last part of the study when students had passed the main stages of their community building successfully and were required to give their ideas and opinions about it (e.g. please see the section 'participants' communication with others on-line' in the interviews) .

Participants also referred to 'cultural awareness' when they were negotiating or discussing with others on-line (e.g. the section 'attitudes towards other cultures' in interviews). This is a very important direction in their activities which determines 'how culture influences or directs action'. The students discussed and challenged what they felt might separate them but tried to find out practically what Deifelt (2007, p. 12) referred to as the 'socio-cultural hybrids' that combine values and practices. This is why I describe them as examples of cultural hybridity, since they have accepted the others' differences in ideas and attitudes and have moved towards an emergent hybrid identity and community; this can show us the processes through which they have been accommodated in the virtual environment. From the previous literature I therefore contend that cultural awareness means being aware of the differences; but I should say, from what was found in the study, we might assume that it does not only mean similarities or differences among the participants or people, but this is a self awareness which contributes to a more complex understanding of cultures. Regarding this aspect Jordan (1991) says:

*"...this self-awareness is not a homogenous, unified, and consistent totality. Rather, cultures also include alternatives and dissonant voices -views that might only be brought forth in contrast with difference and otherness" ( p. 115).*

Through the study, it was shown that the participants were redefining and recreating their community's culture as well as their understanding of the concept of culture (e.g. 'Asking category' in discourse functions or the section 'social dialogue' in the interviews). This attitude, I think has helped them in finding a common language among themselves which has been called the language of 'sameness' (Deifelt, 2007; Crystal, 2008; Jordan, 2001). This sameness/ otherness discussion is believed to have given them a shared structure of references, a culture that contains and represents

multiple views and practices which has been the main key of success in their virtual community building and communications, indicating how the possible tensions in this virtual environment are determined and managed. The findings of the study suggest that boundaries between sameness and otherness were constantly crossed and the students experienced a unique culture made by their own struggles and hard work in that virtual environment. This attitude has encouraged the students to engage in dialogue so that they could listen, learn, and live together as ‘interdependent human being’ (Deifelt, 2007, p. 14).

The students, specifically in the second phase of the study, either started or were part of a long threaded discussion. This demonstrated their full engagement in the virtual environment. It made the students feel part of a bigger whole, part of a virtual community that together were examining or struggling with information, an issue, or an idea. Once students gained acceptance through the threaded discussion, they interacted more confidently with others, often even widening their circle of acquaintances or friends and receiving more validation which bolstered their self-confidence so that they could then help bring others into the community (e.g. please see the ‘adversarial moves’ in discourse functions and also the section ‘participants’ communication with others on-line’ in the interviews). Communicating freely without the normal boundaries present in face-to-face situations brought their virtual classmates into more ‘tangible reality’ and helped form or strengthen a relationship with other classmates. Some of the main ideas and experiences the students had in their contacts with the others on-line were shown in the results of the questionnaire which were later on approved in the interviews. They mainly believed that this attitude towards the others is really essential for their socio-cultural development. These stages did not necessarily all occur suddenly for everyone, but they provide a framework for understanding the process of community-building in virtual learning environment.

### **8.5. Beliefs regarding the V.L.E and its role**

The main focus in this section is on the role of the V.L.E as a means for making the students closer to each other, and I will discuss whether the students differed in their perceptions of importance and perceptions of their practices in the V.L.E and what roles or aspects were viewed as important (e.g. the section ‘Beliefs regarding the

V.L.E and it's role' in the survey results of phase one). Students showed that they held strong beliefs regarding the positive aspects of the V.L.E in the primary phase of the study. Students held high expectations of the virtual environment and thought that they should understand this role very well. It is important that students were clear about these roles and responsibilities in the environment to ensure that their communication becomes an educative and thoughtful experience to them. Interacting beyond the requirements promoted the feeling of community among them. Whether this interaction was in the form of additional chats and discussions or individual e-mails, the 'cumulative effect' was that the person creating the additional interaction was more fully engaged in communication and so found more community there. Further evidence from the interviews confirmed the importance of the directive role of the V.L.E as an educational environment.

#### **8.5.1 The dialogic nature of the V.L.E**

Students viewed their on-line discussion setting as an academic one where they could form new relationships. Although a few students' answers reflected a negative perspective on the academic and social role of the setting, the results of the interviews showed that on the whole the students believed that on-line discussion setting represented a new form of interaction that highlighted different communication styles in which human emotions could easily be realised. They made further positive observations about their on-line experiences. Students stated that the new virtual environment can foster good relationships. For example some of them spoke of how they used the V.L.E to share their ideas with their classmates. On-line talks with their friends and the opportunity to reveal their ideas on different topics were considered a distinct social activity that they utilised for developing relationships (e.g. see how they have moved on in their usage of 'proposing' as a discourse category in on-line chats and how the frequency of this usage changed positively in four months).

Additionally, reading on-line personal instructions emerged for some other students as the second major communication tool that fostered social interaction. What I could take from the interviews about this potential is interesting in finding the main reasons of the success of some and failure of some others in communication in this environment. On the whole, most of the students believed that the setting helped to build their initial contact, although some of them said that they were confused by too

many discussions going on at the same time and said that the absence of genuine dialog diminished the quality of their interaction with other students. Actually what I found out from the on-line talks and then from the interviews, support the ideas of the majority of the participants who believe that the V.L.E provided an opportunity for them to develop new relationship with others and they showed a preference and appreciation for having a real voice in creating their own community as the main way to 'enhance interactivity' (O'Dowd, 2006, p. 89). I think this implies a strong desire by the students to interact with their classmates. Crystal (2008) also talks about the role of the environment as the base for encouraging the students in making their on-line communities.

Thus the students emphasised that it was vital for them to have serious friends. This shows that students were engaged in controversial topics by discussions, as these enabled them to feel free to disagree with their framing their comments and ideas with respect and by being polite with those who hold differing opinions. They have also referred to the point that the V.L.E could foster interactivity by developing a climate that enables them 'to take risks and challenge their critical thinking skills' (Muirhead, 1999, p.17) (e.g. see the 'proposing' discourse function and its growth in on-line chats). Actually a major overall conclusion of the study involved most of the students who related the importance of maintaining on-line communication throughout the course to enhance interactivity. In the study the students clearly indicated that consistent on-line communication was the key to improving interactivity. The study also affirmed that the V.L.E can be regarded as an environment in which students can experience feedback and constructive criticism to give them a clearer picture of this environment and to verify that they truly understood the creative aspects of this new communicative setting. It was also interesting to find that the participants viewed their V.L.E as a tool for pursuing educational goals and connecting with others. Related to this aspect is Muirhead's (1999) study that found that students appreciated the benefits of virtual contacts and the V.L.E to: '(a) provide human contact, (b) offer a forum to share ideas, (c) provide a permanent record of comments and (e) foster regular communication with their classmates' (Muirhead, 1999, p. 19). In fact the V.L.E and the virtual communications on the whole were easy ways to discuss different ideas with others, and it reduced their feelings of being isolated. The findings are also indicative of the

existence of a warm working relationship between the students which assisted them to further progress in their professionalism.

What students valued most is the support or working relationship which is positive, unthreatening and accessible created in the new virtual environment (e.g. see the section 'An ethical perspective' in the interviews). Long-term association with each other helped promote on-line community because students who went through multiple discussions together could continue to strengthen on-line relationships so that a higher level of community emerged over an extended period of time. I assume that through the constant use of the new environment the students could realise how community is built on-line and understand the benefits of community, so they practically felt they were given the background, tools and expectation for community and helped it happen more readily. In the interviews most of the students referred to this aspect and said that when their community was formed, they could easily keep in contact with one another through the very medium they used to create the community. Based on their ideas even the new community must not end when the class or the program is over. They said they have discovered the ways in which to continue two-way communication that facilitates community; this might indicate the relationships between their virtual intercultural communication and their attitudes. This was actually one of the major questions in the study and also the main point of the discussion among the researchers who have done socio-cultural studies on virtual environments as they have always wanted to know with what strategies or how the convergence happens in such divers societies or if ever the technology has any roles in this success or failure (Deifelt, 2007; Smith, 2003b; Crystal, 2008; Jordan, 2001).

The findings from the questionnaire survey also supported this view when they were asked about the psycho-social role of the V.L.E in which most of the students (85 percent) agreed about the role of this environment in making them closer to each other and giving them a new direction in their community building movements. This is similar to what Muller (2003) had said in the research on the benefits that may result from the negotiation of identities and co-creation of language in virtual environments. She has referred to the benefits in her research as the following:

*“Enhanced understanding of one another’s’ perspectives and needs, critical examination of assumptions underlying the ways that each party expressed its*



*perspectives, enhanced incorporation of new and emergent ideas through the ability of participants to express their ideas directly via the virtual environment, improved communication within the team and from the team to interested outsiders (clients, stakeholders) and last but not least, enhanced working relations through a sense of shared responsibility and purpose” (p.132).*

The discussion of these benefits and applications are worth focusing on in more detail in the following sections.

### **8.5.2 Shared responsibility and purpose**

This study supports previous findings in a non-virtual environment that the key to the success of any relationship is in the environment and the role it plays in making the people (Jordan, 2001), and that constructive help and guidance is given in a communicative atmosphere (Muller, 2003; Smith, 2003b; Crystal, 2008). The results of the on-line discussions and the completed interviews showed how much this virtual environment was effective in giving positive feelings to the students in different stages of their communication. The study supports the idea that the virtual environment impacts on students' daily lives and certainly plays an important part in developing students' positive and negative attitudes toward it and also towards each other (Volk, Berezhko and Ksenofontov, 2005, p. 32). As a direct means, the study showed that technology used here helped the students develop attitudes through others' experience in shouldering the responsibilities related to them. One of the main points that students referred to in their interviews was the fact that the virtual environment has formed positive attitudes in them and helped them to have greater power to listen to each others' problems or ideas and accept the major purpose of the talk in the community. At the same time, the data coming out of the interviews showed that the students strongly believed that cultural exchange which practically helped them learn about the meaning of responsibility was encouraged by the creative potential of the V.L.E.

The study did not ignore the problems which happened during the course and also the ones students referred to them in their interviews (e.g. please see the high frequency of the 'Adversarial moves' in the discourse functions and the 'Disagreement/misunderstanding' category in the first month of the on-line chats and also the section 'Culture of caring and respect through difference' in the interviews).

Sometimes I found students to be lacking in personal and professional commitment, possessing negative attitudes which were realised in the high number of 'Adversarial moves' and also 'Disagreement' category in the on-line chats in the first few weeks. But with passage of time the results of the data in the second phase showed the students had moved towards a warm working relationship. Establishing a good, harmonious and caring relationship is perceived as the result of their gradual accommodation in the V.L.E on one hand and the creative potential of the V.L.E on the other. These findings further confirm the idea that the quality of the V.L.E - the technology, instructor and the official environment- is of vital importance in mediating the quality of the relationship between students or even the students and instructors. The findings also support the idea that such interactive environments might be able to help the students 'articulate and coach certain skills' (Muller's, 2003, p. 132) associated with effective communication strategies and management.

The on-line dialogues also showed that the majority of the students were successful in realising each other's needs and how they could develop it. They tended to tell their friends what to do and what not to do in their daily duties; the increase of the 'proposing' category in their on-line chats can indicate this aspect. In this respect, the study does not support previous studies (Ware, 2003; Kent, Sullivan and Berdel, 2004) that the virtual interactions between students normally failed to show how successful they were, due to the problems and weaknesses of the virtual learning environments which are not easily accessible. But as stated before, the findings can support the idea that the supports given by the students in the V.L.E may influence the students' skills, knowledge and attitudes and establish their performance.

### **8.6 Personal experience with others from various linguistic and ethnic backgrounds**

The results of the study in the second phase showed that social interaction with their classmates and collaborative interaction with them were very important for the students to improve learning and increase participation in on-line discussions. Nearly eighty percent of the students had said in the survey that they had experienced a sort of miscommunication in on-line contacts before that, but most of them had said that they were not worried about experiencing miscommunication in this environment. The results of later stages of the study proved this claim and showed that members

socialised in on-line groups in a fashion similar to that of face-to-face situations ( e.g. please see the table of ‘discourse functions’ in quantitative analysis of the chats). This situation helped their chats to become cohesive and created higher member satisfaction and the possibility of better communication, showing the accommodation in the discourse of the students in this virtual environment. It is interesting that there were more social talks and discussions; however, they included disagreeing and the offering of differing opinions (e.g. see the high number of ‘Disagreement/Misunderstanding/ ups and downs’ category in the first few weeks of the students’ on-line chats), and so this mostly constructive conflict would seem to lend itself to quality group discussions.

So the finding about getting more coherent and cooperative talks on-line was found more frequently in groups with stronger relations and experience which is interesting here since it can indicate how intercultural communication competence is realised in such environments. Also the findings of the study revealed that students showed more interest in contacting those with different socio- cultural back grounds. This also seems interesting and shows the importance of the social relationship involved in group dynamics. This finding concurs with other recent research on the importance of experience, culture and community to effective on-line communication (e.g. Smith, 2003a; Crystal, 2008; Dixon et al., 2006). The fact that this social relationship is present and related to better group communications in on-line discussions is a key element in the success of the virtual learning environments which can illustrate how the interactions in the V.L.E can be manifestations of socio-cultural development of the students.

Another finding which was impressive was the extent of expert-like opinions provided by the participants in phase two (e.g. please see extract 6 in the qualitative analysis of the on-line chats), which indicated the attitude of the students in this virtual environment. Another area of relative importance was the point that participants brought their thoughts and others with whom they interacted during their on-line activity. These findings support previous studies (Dixon et al., 2006; Benzie, 2004; Bloch, 2002) that the experience of the students in their on-line communication and knowing or understanding this role by the participants may influence the initial students’ skills, knowledge and attitudes and determine their performance. The study

found that there was rapid improvement in the students' communication skills through their constant and punctual on-line contacts. Specifically, the findings show that the emotional and social concerns of the students got much better after these experiences (e.g. see the changes in the 'discourse functions' used in on-line chats).

This study implies that since communication and cultural contacts are fundamentally practical, having more experience or opportunity in on-line communications can be regarded as useful insofar as they are able to help students to recognise successfully the requirements of the particular environment in which they learn to work together and communicate. The results of the interviews indicated how the students subsequently reacted to experiences affected their thinking, interests and priorities which were different for each individual. This reflects the notion that students bring their existing experience along with them to their communicative situation and their beliefs, attitudes, principles and expectations are used to make sense of the experiences they face within a social context and through social interactions; this might indicate the strong relationship between the students' successful communications and their attitudes.

#### **8.6.1 Establishing climate of trust and commitment**

One of the most important findings of the study was empathy, that is to say 'knowing what another person is feeling and responding compassionately to another person' (Levinson, 1990, p. 9) when the participants were communicating with each other on-line (e.g. please see figure 12: the direction of the students' development and progress in their on-line communication). So the research shows that there is an affective dimension in such environments since engaging with these feelings leads to the creation of a community in which the climate of trust and commitment grow quickly. The findings of the study suggest that mutual sharing in the virtual environment could increase trust and emotional connection and even allowed the participants to enter into personal spaces which might be difficult to address in face to face situations. There is evidence from the different phases of the study that trust among the participants, from any cultural or linguistic background, increased over extended interactions and led to their accommodation in this virtual environment; for example exploratory categories in the quantitative analysis of the on-line chats could clearly show this aspect of the study.

The finding of this research adds to the previous ones which believed that ‘empathy can strongly grow between similar people or people who share similar experiences’ (Ickes, 1993, p. 602) but the findings here showed that the students practised such feelings in an unfamiliar atmosphere and they did not seem to have similar feelings at least in the first stages of communication. When the students started their on-line chats with their friends, they actually had not seen each other and were worried about miscommunication among them (e.g. please see the section ‘personal experiences with others in the V.L.E’ in phase one in which eighty percent of the students said that they had previously experienced a kind of on-line miscommunication), but through the on-line communications they made a new environment in which they proved that strangers can also change the V.L.E to a community of trust through passing some strategic stages. Regarding this aspect, Haythornwaite (2006) says:

*“...the strong interpersonal ties shared by community members actually increase the willingness to share information and resources, setting the stage for collaborative learning and on the other hand strong communal ties increased the flow of information among all members, the availability of support, commitment to group goals, cooperation among members, and satisfaction with group efforts ( p. 1108).*

The interviews could define the meaning of trust in this new community (e.g. see the section ‘An ethical perspective’ in the interviews). It can be said that trust in this community strengthened contribution and support in times of need and they experienced a greater sense of well being and happiness, and were even more willing to support in times of need; this was another process which showed how students accommodated in the V.L.E. This phenomenon was discussed by some of the previous researchers at a theoretical level in which they asserted that such things ‘depend heavily and can be influenced by the properties of different communication media’ (Preece, 2000, p. 96). Furthermore, a considerable amount of literature focused on the question of how trust is developed through on-line virtual environments. The findings of this study showed that special procedures and strategies were sought to support trust on-line. They included the strategies such as evidence of respect towards different cultural and even religious beliefs existing in that community, truthful promises of support, and assuring each other of future supportive behaviour, etc. the summary of which is stated in the following figure.

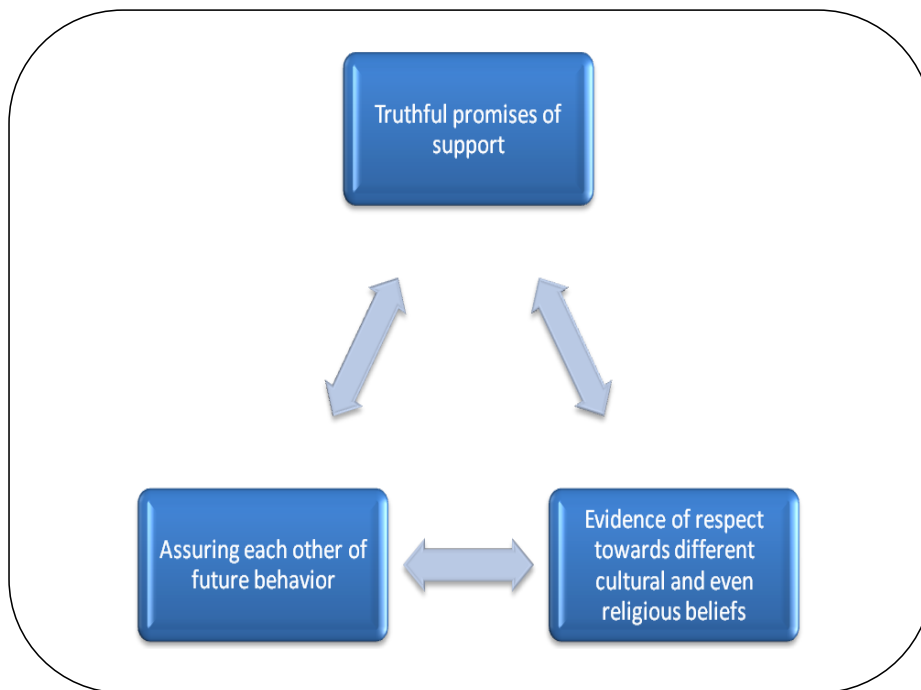


Figure 13: Special procedures and mechanisms applied by students to create atmosphere of supportive trust on-line.

The major point of the discussion in this part is the problems that the students referred to while making this community of trust. The findings showed that it was not easy for these groups to make such a community as some of them were reluctant in disclosing their personal ideas and information on-line for the people who had not seen each other before. They said “they knew their information could be accessed even later after finishing their communication and may make serious problems for them”. Regarding the fact that revealing or disclosing a person’s personal and private ideas is something with very dangerous outcomes in areas like the Middle East even in face to face situation, finding such results in virtual environment is sociologically important. This again clarifies the fact that what influences individuals and small groups, also impacts on the community, but ‘communities also have a character and dynamics of their own’ (Preece and Krichmar, 2001, p. 127). It appears that there are no simple

rules about what sorts of strategy we are likely to detect in such a community building process and there is no simple policy about where a student's starting point or end point is likely to be. Thus, learning to communicate and gaining trust in such virtual environments includes a series of stages during which strategies are carefully harmonised according to students' developmental needs. Level three in figure 12 - students' developments from discussing more tangible aspects to more abstract ones - shows the stages they passed in gaining trust in the V.L.E. This was actually a considerable finding of the study which answered to the overarching focus of the study; how convergence happens in on-line university discussions in Middle Eastern culture and what processes determine the possible tensions in their accommodation in discourse in this virtual environment.

#### **8.6.2. Confidence and mutual understanding**

In terms of their confidence level, the findings of the interview section of the study showed that the majority of the students had high levels of confidence in their contacts with the others from different ethnic and linguistic background, despite being worried in the first stages of their on-line communications. Most students felt competent to have communication and even arguments with others. This fact that many students feel fairly competent to communicate in such an environment with others even when they have had no previous experience, is in accord with the amount of time they spend getting to know each other. The students' data in the second phase also provided a valuable and important source for understanding students and their communicative competence. In this phase it was discovered that the students had their own set of experiences, beliefs and knowledge and their own views on nearly all the social and personal issues. Sometimes, their past personal experiences influenced them for a large part of the course, yet for others this influence, whilst remaining important, did not seem to prevent them from being receptive to new ideas from an early stage.

This is compatible with the literature of the research which referred to previous research saying that 'as virtual relationships evolve over time, attributional confidence regarding on-line relational partners approaches greater equivalence with face-to-face situations' (Walther and Parks, 2002, p. 338). In analysing the main reasons for achieving the needed confidence in such contexts it is interesting to note

that the data shows that they could socially build rules and behaviours, and construct community patterns. Supporting this aspect of the research, one survey found that about one-third of people believe it might be easier to disclose "frank and unpleasant" things through these environments (Pew, 2002), which was generally viewed as an important benefit for openness in family and friend relationships. According to Erickson:

*“some of the rules of behaviour and shared beliefs provide an identity for the group and a way of knowing how to behave and how to anticipate the behaviour of others as well as identifying those who do not belong to the community or who are new to the community” (1997, p. 28).*

This study also supported the suggestion that longer-term interactions systematically might allow the V.L.E to strengthen and expand social and relational interaction, especially ‘when identification with the group as whole rather than individual differences among members is salient’ (Paccagnella, 2005, p. 43). These findings also describe the idea of cultural construction from inside the net as do other studies which state that virtual relationships might develop closeness, relationship, mutual trust and confidence more quickly than do other forms of relationships (McKenna et al., 2002, p. 20); a clear example indicating this social and cultural development of the students in this study is the considerable increase of ‘Agreement category’ in exploratory categories used in on-line chats. According to Rheingold (2002) virtual communities are social chains that ‘emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace’ (p. 59). This is what I found from the analysis of the context in the on-line chats and also in revealing the students’ ideas in the interviews in which they referred to this issue; “if trusting relations and confidence are absent, we will not be effective, no matter how sound our subject matter and knowledge” (ST 7).

At the end of the second phase, many students said not only had they learnt from their own on-line practices with others, they had also learnt from the experiences they had made in their contacts. They said that in discussions with their friends, their thinking was questioned at a level and in such a way that they were helped towards an understanding which they valued. They only began to mention their mutual trust and confidence when being asked how they knew what alternative strategies to use in



their own practice, or when their initial contacts had not worked (e.g. please see the section ‘Culture of caring and respect through difference’ in the interviews). The reason for this emphasis was to know more about the strategies they had applied in their on-line contacts for achieving confidence and trust; clarifying the relationship between their communication and their attitudes. Furlong and Maynard (1995) describe this stage of virtual communication as ‘personal survival’ where idealism is disappeared in the face of the realities of the context (p. 33). The analysis of the data showed that the students’ virtual relationship involved a two-way interaction where they could talk, discuss issues and exchange ideas with each other with high level of confidence in themselves. This study supports previous studies (Crystal, 2008; Paccagnella, 2005; Rheingold, 2002) which suggest that people in such virtual contexts might struggle at the start of their contacts to change and represent the concepts and ideas to make sense to those they are communicating ( e.g. see the high number of ‘Adversarial moves’ in the first month of students’ on-line chats) since students must understand not only the subject they are talking over but also ways of expressing the content that will improve their communicative competence.

### **8.6.3 Positive attitudes/critical framing**

Previous studies for example (Paccagnella, 2005) define virtual communities as cultural groups that may construct their own culture through ‘the use of a positive lens out of expressive and interpretative resources’ (p. 43). The findings of the survey showed that most students were worried about having miscommunication with others on-line but they believed in the role of the V.L.E in making the people closer to each other. In the interview they referred to this point that they had considered this idea through their contacts to be able to push the primary social and cultural barriers behind in making the new community for themselves. Supporting the importance of this point of the research are the studies done by Jones (1997), Belz (2007) and McKenna et al. (2002) in which they raise the question on how groups of users establish networks of relationships through the use and development of a specific positive view towards the others, which ‘preserves the identity of the community’s members’ (McKenna et al., 2002, p. 29). This idea of how much the students’ views might play a role in their success or failure in their communication is vital, for it helps to support ‘the cohesion and the sense of the group’s life’ (p. 30) as was seen in this study (e.g. please see the table of ‘Agreement/engagement and values’ category in the

quantitative analysis of the on-line chats). The positive attitudes of the students could also develop shared community resources, frameworks and perspectives that could maintain 'mutual engagement' (Seddon, 2003, p. 186) in the further on-line talks or arguments.

Paccagnella, (2005) has referred to this aspect and supported it since he believes that this form of communication with this sort of positive views 'leads to a cyber culture that is inherent to the group and is also constructed collectively in "webs of meaning" that the group has spun'(p.41). Moreover, studies of on-line environments have already found that we can indeed create community and make strong ties through electronic media provided the fact that we start contacts in this community with a positive attitude towards the others, ourselves and also the power of the virtual context (Belz, 2003). In other words, the productive or positive aspects of the community and its members and the outcomes of contacts with others from different communities and cultural backgrounds could pragmatically help the students connect with others in the community who could introduce elements of their practice or any aspects of their opinions to the group. This can support the previous studies on communication in which participants in virtual communities are described as having increased opportunities in determining how to represent their ideas through having a positive attitude towards the others in the community and context (Seddon, 2003). This is what we can call one of the main signs of intercultural communicative competence which leads the students to a form of accommodation in discourse in the V.L.E. Belz (2007) says 'the most obvious way in which to ascertain whether or not learners are developing intercultural competence is to examine the content of their on-line correspondence' (p.112); the process which happened in the second phase of this study through which the discourse functions and exploratory categories, used by students in on-line chats, were examined.

I should refer to the very important point which has sometimes confused some people in their research on intercultural competence. As also discussed and supported by a considerable amount of literature, the findings of the study do not support the idea that having a positive attitude means only accepting whatever the others say, rather it is the decrease in the use of 'negative judgment over the course of partnership' (p. 106). In other words the sacrifice of some of the ideas for reaching a common and

accepted opinion by all is the main goal of the community building which was also discussed by the students in their interviews. This is what Belz (2007) has called it 'gradual softening of the way' (p. 78) and O'Dowd (2006) has also referred to it as community building factor in which 'one positions him/her self with respect to the absolute truth of utterances' (p. 91). This is what Kern (2000) has also called 'critical framing'. He says:

*"...through critical framing, learners can gain necessary personal and theoretical distance from what they have learned, constructively critique it , creatively extend and apply it , and eventually innovate on their own , within their old communities in new ones"* (p. 157).

The views expressed during the interviews of the third phase of the study and the students' on-line discussions match this idea. The findings of the interviews also support the idea that there are deeply embedded thoughts and values for everybody that are influenced by the environment, culture and also the individual factors that have shaped the major differences in behaviour (Wang et al., 2007). In other words most students in this study accepted these differences and so tried to find or select the best communication strategies which fit their new community matching those differences. From what the interviews showed and also the on-line talks, I conclude that they support this notion in the study and also the previous studies referred to above. Actually the students in the study, although from various cultural background, tried to understand the others' expectations, views and ideas, so they have tried to look at the environment as a whole, the values of the others' culture and also the individual factors which could shape their community to show how they have been able to accommodate in the new environment.

### **8.7. Designing a model for community building in a virtual learning environment**

The findings of the study gave rise to a diagram which illustrates the development of students in culture learning and practising, interrelationship between the virtual learning environment, the individuals' attitudes, communication and virtual relationship. It summarises the discussion of the study and illustrates the five stages the students passed towards the development of their virtual community; showing how convergence happens in on-line discussions in the Middle Eastern universities

and how they move towards accommodation in discourse in such environments. I called it the Virtual Social Development model (VSD).

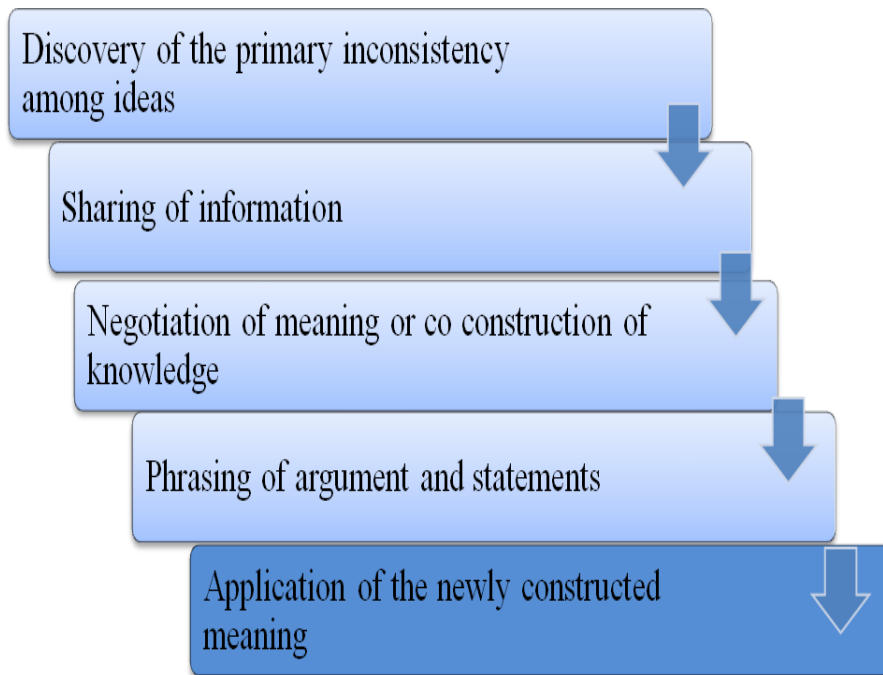


Figure 14: virtual social development model (VSD); five stages of students' social development in the V.L.E.

The findings of the study provide support for the idea that students can learn and demonstrate the processes that illustrate the tension between accommodation and dissonance in discourse in a virtual environment; the idea which believes culture can be brought from the past to a new situation like the V.L.E as the result of which a new form of culture or social understanding is created with its own parameters and standards showing intercultural competence of the students. This idea supports Baym (2000) who said:

*“As fans discuss different things and argue about rights and wrongs, they actually share their views and values, learn from the rich network of relationships, and develop shared norms” (p. 82).*

This is what made this virtual community different from other forms of community studied before; it evolved continuously, as a ‘process not an entity’ (Fernback and Thompson, 1995, p. 122). I assume that based on the findings of the study, the virtual environment played its role well in starting this development through ‘guiding the community’s social evolution’ (Preece and Krichmar, 2001, p. 84). Two other findings of the study are worth mentioning again: dialogue and social support. These are what the students insisted on them in their on-line chats and also talked over them in their interview. This part of the finding supports the idea that the main key for success of such communities is in providing ‘exposure to diverse groups and ideas’ (Preece, 2000, p. 65). This has been identified as live interaction that allowed the students reach a common goal creating a sense of responsibility and the participants could identify a relevant virtual context for themselves, a ‘virtual niche’ (Seddon, 2003, p. 165).

### **8.8. Summary of the discussion**

This chapter has discussed the data presented in previous chapters while trying to relate them to the questions of the research. It also described the main points of the findings and related them to the previous literature to pave the way for future research as well as answer the major questions raised through the whole period of research over four years. I have considered in depth a broad range of issues in this chapter. Not only are these issues compelling in the light of the findings, there are also clear indications that the study has identified threads of connectivity that explain the complex inter-relations between the issues that have been identified. Thus the process and strategies applied by the students in making virtual community have been described as a world within a life; but this could be applied to the broader picture - to describe a life within world (Gibson, 2002). What has been achieved here is to bring together ‘a breath of research, and make sense of it in a coherent manner’ (Teal, 2002, p.258) through on-line qualitative research.

# Chapter nine

## **Chapter Nine Conclusion**

### **9.1 Introduction**

This chapter is going to summarise the study and the principal findings uncovered in the three phases of the research. It also reviews the findings which were distinctive in approach and outcomes.

There are few studies done so far which have been able to support their aims and ideas in three different phases, specifically in the Middle-Eastern area. Another characteristic of the study which distinguishes it from the others is its focus on the research in one context, but incorporating different ethnicities and languages. The majority of the literature in the field has focused on linguistic and cultural transfers in the virtual environments and few of them have focused on the issue of community building in the contexts which include different cultures specifically in areas like the Middle East. This study illustrates the potential of a new way of investigating the culture of the on-line classroom, since the research provided insights into communication and pragmatics; and recommendations are made to develop strengths and weaknesses both in terms of the settings, quality and the required technical supports in such complicated studies. The research highlighted many issues for further study one of which was to regard different interpretations of the concept of community building specifically in on-line contexts.

In other parts of the chapter, the findings of the study and their contribution to the research area and the lessons learnt in doing this mixed-method study are discussed. Thus the aims and objectives of the study together with the research questions are revisited first which I think will pave the way for future research and progression in this field. In other parts of this chapter I will refer to the limitations of the study and also some recommendations for further research.

### **9.2 Summary of the study**

The research aimed to discuss and provide a framework for understanding intercultural discourse competence; to see whether convergence happens in on-line

university discussions in the Middle Eastern context. In this regard, the perspective of social constructivism and intercultural communication theory was regarded as the theoretical framework of the study. Intercultural discourse is considered here as the communicative activities for the purpose of creating meaning across different ethnic and linguistic backgrounds. So it aims to evaluate to what extent such objectives can be achieved in the limited life-span of on-line talks or forum discussions between groups of students and how these communities are formed in such societies with completely different linguistic and socio-cultural backgrounds.

The overall aim of such research in general, and in this research in particular, is to test critically the assumption that virtual communication will proceed in a standardised system 'for culturally diverse learners in networked environments' (Cherny, 1999, p. 146) to identify any problematic aspects of such communications, and to provide a preliminary framework for the analysis of electronic communications. And in doing so, I was hopeful of making the case to other scholars for linking education, rhetoric, intercultural collaboration and understanding. Such analysis is part of what Dewey would call 'an experiential way of knowing' - researching something not to prove a claim about it, but to 'understand it more fully as your working hypothesis, to probe your working theory and next actions' (Flower and Heath, 2000, p. 51).

Chapters five, six and seven were designed to answer the research questions through different phases but before that, a comprehensive study of the literature and various components that underlie the research were stated in chapter three. The literature which was mostly on communication and cultural behaviour in this environment referred to the important point that little is known about the actual experience in the field using these technologies to facilitate communications between individuals and groups from different cultural backgrounds. Chapter four which focused on the theoretical and methodological aspects of the study could illuminate the study drawing on social constructivist approach based from which the theoretical backbone of the study was designed. This chapter also discussed the important points in the research design, data collection and analysis and also the sampling strategies of the study. As the purpose of the study was to gain an in-depth understanding of the cultural communication process from individuals acting in a particular social situation – here a virtual environment, the methodological approach chosen to achieve that



purpose was within an interpretative research paradigm. So the concentration of the research was on an interpretive paradigm which could actually reflect a social constructivist approach as the theoretical base of the study. In other words, the research attempted to grasp the role of collaborative interaction as the process of co-construction of their knowledge and identities by looking at patterns and outcomes of interaction and also the students' ideas in the interviews and their answers to the survey questionnaire.

Chapter 5 primarily examined the students' ideas and previous experiences in order to consider what factors affected their communications with others and how their experiences of on-line communication shaped their impression of such communications; and what was the meaning of the cultural context or contexts for them. So their beliefs and ideas in terms of choice, opportunity, culture and expectations were examined through a survey in the first phase of the study. Then to find out how the students play their role in creating such a community for themselves on-line and how they either shape it or fail in this process, a university e-forum was designed for them in the second phase of the study (chapter 6) in Iran in which they were free to contact with each other without pre-planned tasks or intervention by the class tutors. Socio-cultural approaches of mediation were useful for analysing interaction and its outcome, the role of each participant in interaction, and how and what learners are trying to learn through interaction with their peers from other cultural origins. To make sure of truth and credibility of the findings, a semi-structured interview (chapter 7) was designed for the students in which they could talk freely and openly about what had happened to them in those six months and what stages they had passed and if they felt successful or failed. They also showed what strategies the students had used in their community building process.

Multiple approaches to collecting the data were selected on the basis of what can best investigate the problems raised in the research questions and what can best provide insightful and reliable information. The data from the different sources were therefore triangulated for validation and verification. So, for example, it was possible to understand what the respondents said in the questionnaire about their experience or ideas in on-line contacts by analysing the chats they had with their virtual friends and the transcripts of the interviews. The rich data set obtained provided insights into the

complex issues involved in the on-line communication process. In the analysis of the data in different phases, some important themes emerged which could reflect the answers to the research questions. These themes were discussed in detail in chapter 8.

### **9.3 Summary of the findings and discussion**

I think one of the most exciting findings of the study was the fact the findings gave rise to a diagram which illustrates the accommodation and convergence process in a diverse virtual community; the development of individuals in culture learning and practising, interrelationship between the virtual learning environment, the individuals' culture and attitudes, communication and virtual relationship. The diagram shows the stages the students passed towards the development of their virtual community and moving towards accommodation in this diverse virtual environment; I called it virtual social development model (VSD) (please see figure 14). The following sections are the detailed explanation of this virtual social development through different phases of the study.

Regarding the context, I assume that this virtual environment can provide a certain level of peer support and guidance, the point which was shown in the primary results from the questionnaires which demonstrated that the creative role of the V.L.E was ranked as more important by most of the students. This role was also identified as more important in the interviews with them. Although the groups differed in their ranking of the V.L.E role, the results support the general view that the role of this virtual environment in making these different groups closer to each other for understanding the different opinions is important. This form of interaction was regarded as a desirable one by many of the students because they believed it can serve as a means of motivation and support of program content. I assume that the students also showed a new definition of interaction and contacts in their on-line community. It should not be ignored that there are many levels of approach and application here in which their mutual interaction can be accomplished. The students have referred to this important issue in the interviews as well.

The excerpts, the discourse functions and the exploratory categories in Phase 2 showed that each student does not have to have the answer to everything but they can co-construct their knowledge by combining each student's contribution, indicating the

ways the interactions in the V.L.E can demonstrate socio cultural development of the students. Cooperative production also proved that it helps students to improve their tactics of communication (e.g. please see the tables of 'discourse functions' and also 'exploratory categories' in on-line chats). The findings of the study have shown that the students were able to co-construct knowledge through collaborative interaction as displayed in Phase 2 and also the interviews of chapter seven. The on-line live chats also displayed that there are a series of collaborative interactions embedded in the interaction occurred that lead to constructing a new form of community there. The most important point which was found here was the belief that students' understanding of community includes not just the presence of friendships and intimacy but the things that they have done to achieve and preserve it; the exploratory categories used in on-line chats and the themes emerged in the interviews demonstrated the strategies the students had taken to achieve the new concept of community in a diverse context.

In other words the findings from the different sets of data revealed that they had their own ideas on each aspect, but they tried to find a sort of interaction with each other to be able to find a way to resolve those differences and move towards making a community made of different cultures, leading to accommodation in discourse in the virtual learning environment. The importance of this issue was reaffirmed and reinforced from the on-line chats and the interviews with them. Specifically, communication between and learning about other cultures were illustrated as 'means to cultural self-enrichment' (Jordan, 2001, p.39). Findings from the interviews showed that most students had recognised the importance of the situation and had tried to keep their new virtual environment peaceful though having different ideas on various issues. This might have affected their attitudes, knowledge and contact practices during the communication period as they moved towards the more complicated stages of their communication. The results of this part of the study could prove this aspect of the on-line communications in which the students tried to see the virtual environment nearly exclusively in a positive light as a system to allow anyone from any cultural background to move towards cultural learning and exchange, and encourage new types of cultural identities to form. This is while the findings from the survey showed that more than half of the students had not previously had a good experience in their contacts with other languages and cultures which might have

affected their attitudes, knowledge and classroom practices before starting the second stage of the research. Thus, within these results, the virtual environment was portrayed as a useful means through which diversity and positive intercultural exchange, as a helpful mode of learning about identity and culture are encouraged.

Another crucial thing in treating culture and communication in this virtual environment was the idea of cultural construction. So the cultural understanding created in these interactions are analysed to help the reader get a better view of this fundamental element (e.g. please see the extracts in qualitative part of phase 2). The main reason that this aspect was focused in the research was the possibility that it might develop our understanding of the students' cultural conduct and how their possible differences were used towards intercultural convergence in the V.L.E. From the live chats of the students and also their own ideas in the interviews it emerged that they were able to find their voices through the new virtual environment which was a phenomenon for them and me as the researcher; indicating their successful strategies in moving towards accommodation in this diverse virtual community. This perspective is a clear reason why some students were intensely attracted to networked conversations as on-line interaction had provided a sort of forum 'to find a voice' that might help them understand the differences in the cultures (Abdelnour -Nocera et al. 2007, p. 159).

The discourse of the chats revealed that the students had used the words which could represent their ideas or beliefs on socialisation in this virtual environment. Here the data showed some aspects of the common beliefs of the students who actually never met each other, but believed in the power of their community and even loved it. These findings especially the use of such discourse in their contacts, I assume, was actually what they themselves decided to make and it did not happen unless they wanted it to happen so they often helped create community by modeling expected behaviour which could clarify how their intercultural competence is realised in this virtual environment. The results of the interview showed that nearly all interviewees referred to their goal of on-line communication as creating a forum for free speech among them; as an important reason for their participation. This exactly matches the values and beliefs discussed by them in the on-line chats. I think the findings also

demonstrate that the use of such special styles can enhance teams' performance in idea generation talks relative to the V.L.E interaction.

Another major finding which was discussed previously was the feeling of unity in diversity. This feeling, which is opposed to isolation, was an important factor which was discussed by the students in their interviews. It might imply that the movement towards community building has prevented them from having a dogmatic attitude towards the 'other' as something quite different and not relatable. The major point of the discussion here is the epistemological view the students had in their contacts with others. In other words this frame of looking at the others in a community shows a dialogical understanding of otherness. What needs to be highlighted here is the way in which these particular attitudes are present in this environment which includes forms of social interaction that are culturally distinctive and look at the other as a part of a unit but not as a stranger. This can clarify how their move towards convergence and unity has been and on the other hand how it affected their attitudes towards the V.L.E. They approved this notion in their final interview in which they directly defended this attitude towards their community building process.

The study also showed that identities did not disappear for the sake of the new community, but, as the students themselves also referred to it in the interviews, are constructed with different resources of 'offline identity' which means they are reinvented on the basis of new forms of on-line identity (Jordan, 2001, p. 49). This I think opens the gate for the scholars who are afraid of identity loss due to identity fluidity in such cyber societies and helps them look at this environment in another angle. The study could show the challenging point of hybridity in a better way since it became clear that cultures of communication are not static and undergo constant changes. The interviews also clarified this point in the last part of the study when students had passed the main stages of their community building successfully and were required to give their ideas and opinions about it. This attitude, I think, has helped them in finding a common language among themselves which was called 'language of sameness' in previous literature. This sameness/ otherness discussion is believed to have given them a shared structure of references, a culture that contains various beliefs, and practices leading to convergence in such diverse communities; this has been the main key of success in their virtual community building and

communications. So I think the findings of the study can show that boundaries between sameness and otherness were constantly crossed (Jordan, 2001) and the students experienced a unique culture made by their own struggles and hard work in that virtual environment.

Regarding the potential of the V.L.E and how the students' moves towards such cultural views affect their attitudes towards V.L.E, results from the questionnaire showed that the directing potential of the V.L.E was ranked as more significant by the students which they believed was overlooked by some of the students. It is important that students were clear about these roles and responsibilities in the environment to ensure that their communication becomes an educative and thoughtful experience to them. Further evidence from the interviews confirmed the importance of the directive role of the V.L.E as an educational environment. The results of the interviews showed that the students believed that on-line discussion setting represented a new form of interaction that highlighted different communication styles in which they could easily observe human emotions. They shared positive remarks about their on-line experiences. Based on their ideas even the new community does not have to end when the class or the program ends. They said they have considered ways in which to continue two-way communication that facilitates community; this could clearly show how intercultural competence is understood in virtual environments. This is the main point of the discussion among the researchers who have done socio-cultural studies on virtual environments as they have always wanted to find out how and with what strategies convergence happens in such diverse societies or if ever the technology has any roles in this success or failure.

Another finding which was impressive was the extent of expert-like opinions provided by the participants in Phase 2 in which they observed each other building upon the knowledge of others. Specifically, the findings show that the emotional, social and procedural concerns of the students decreased after these experiences (e.g. please see the tables of 'discourse functions' in quantitative analysis of the on-line chats). Also, as discussed in the literature review, a considerable amount of literature focused on the question of how trust is developed through virtual environments. There is evidence from the different phases of the study that trust and warmth among the participants, from any cultural or linguistic background, in virtual relationships

increased over extended interactions. The findings of this study showed that special procedures and mechanisms were used to support trust on-line. They included the strategies such as evidence of respect towards different cultural and even religious beliefs existing in that community, truthful promises of support, and assuring each other of future behaviour (e.g. please see the section 'Participation and motivation' in the interviews). The findings of the interviews also support the idea that there are deeply entrenched thoughts and values for everybody that are influenced by the environment, culture and also the individual factors that have shaped the major differences in behaviour (Wang et al., 2007). So they have tried to look at the whole environment, the values of the others' culture and also the individual factors which could shape their community.

#### **9.4. Implications and contribution of the study**

This research into an interactive environment has definite implications for educators and the researchers in the field of discourse, media, and distance education programs. Although the term 'virtual community' is in common use, few studies have been done to discover how adult distance learning students define community, 'whether they feel part of a community, and, if so, how that phenomenon occurs' (Jordan, 2001, p.56). This study adds new research, rooted in accepted classroom theory and practice, to the literature on higher education distance learning. This research provides background for curriculum designers and facilitators of distance learning classes, regardless of the field. Student-centred communication requires both tutors and students be prepared to take personal responsibility for their role in the on-line educational process. This research can encourage distance education administrators to explore ways to educate faculty members in communicating with their students or in understanding how close they might be in such distance environments in making their own communities. Administrators may need to investigate creative ways to improve such on-line environments more but certainly the findings of the study guide them how to start this new movement. In other words, these findings have important implications for firms contemplating the use of the V.L.E to provide electronic support for the teamwork of their professionals. The findings suggest that the use of CMC chat systems results in better 'hybrid thinking', leading to the generation of a significantly greater number of ideas in communication among the students. This ability to support teams with geographically dispersed members, combined with the

superior efficiency of computer-mediated teams, as demonstrated in this study and also discussed by Chapinet and Jones (2005), indicates that firms and specifically the universities should strongly consider increasing the use of such technology.

Apart from the aforementioned implications for organisations and business professionals, I think the findings are also relevant for educators and discourse researchers considering the use of cooperative learning environments to enhance education and learning (Cottell and Millis 1992; 1993). The findings reveal the virtual learning environment's support by interacting teams improved participants' effectiveness in generating ideas, thus improving the potential for the participants' learning and understanding of the situation which provided understanding and suggestions on virtual educational environment so that it recommends different cultures in a systematic way to enable students from diverse backgrounds to work together effectively (Dillon et al., 2007). It could also reveal that the factors which shape or form individual communication styles seem to be more complicated than referred to in literature and in some cases the results of the study could challenge them. This study demonstrates that it is possible to do research for the existence of a virtual community instead of simply assuming its existence in a technical domain as done in the past. The research contributes to the field of virtual community research by illustrative and operationalising concepts developed by other researchers from theoretical analysis and field study. It paves the way for more systematic investigation of virtual communities and for building stronger empirical/quantitative research in the field of virtual community research.

In addition, this research has potentially extensive implications. One possible implication of distance learning community-building may be students' desire and ability to continue contact with one another through electronic networking which is very important for communication in countries in which there are no political or social parties to help the people decide in social or even educational issues. These findings also have important implications for organisations such as cultural or public relations that are already using CMC technology to provide electronic support for the teamwork of their professionals.



## **9.5. Limitations of the study**

These are some limitations to this research which still remain:

- a) The small sample size in the second and third phase of the study seems to be a problem. On the other hand, discussions among 20 students in one learning environment may be regarded as a reasonable number for an initial exploration of the topic.
- b) A limitation of such study might be the difficulty of the participants being under pressure to exaggerate the positive points of the situation and be biased in their interviews. Although to address this limitation, I tried hard to regard their privacy in the quiet place of interview in which they could talk freely and openly without the normal pressures of the interviews.
- c) I was not sure if the on-line environment might limit the ways in which participants can utilise 'face-saving and face-giving strategies' which is important for allowing participants from some cultural backgrounds to feel secure to participate fully in personal discussions. So, a qualitative approach was chosen for exploring the socio-cultural factors present in the context of the study. This idea was considered further in the analysis section along with previously detailed concepts such as shared thought frames and problem setting prior to solutions being found.
- d) It should be acknowledged that the study contains data findings that carry in their depth of analysis due to students who offered various levels of information on different categories of on-line communication. Additionally the research did not provide extensive demographic data, such as age or gender for the reader. Instead, I stressed obtaining the information that had a close and vital connection to on-line interactivity (communication, participation, and feedback).

## **9.6. Recommendations and suggestions for further research**

- a) This section tries to re emphasise the practical aspect of the study and how future researchers can promote this area of the research, specifically on cultural diversity and intercultural communications in different societies.
- b) Following a review of the professional literature and considering the research questions, I selected this research approach supported by constructivist learning

theory and research methods used in sociological and anthropological research so that the ideas presented in this research can be useful for implementing similar studies with different orientations since these ideas can open new horizons in the study of human cultures in the new virtual environments (Dillon, 2008).

c) This research highlights the need for further investigation into computer-mediated interactivity and virtual communication. It is worth noting that presently, the number of research studies on intercultural discourse in virtual environments is quite limited and those are becoming dated. The data could be a good resource for future investigators who want to examine information from the surveys, on-line contacts and also the interviews. This is actually a rich field for research and much can be learnt, regarding the students' experiences and lives in diverse cultural contexts of virtual learning environments, specifically in the Middle- Eastern context. It is suggested that the organisation of on-line intercultural dialogues provides opportunities for future researchers to engage in more 'culture general and cost-efficient' international and intercultural theory development.

d) Also, future intercultural discourse investigations could explore the following areas: a) conduct case studies on what factors promote interaction with group activities in other parts of the world with different varieties of cultures; b) perform a content analysis of textual material produced during on-line discussions to investigate critical thinking and interactivity. Equally there are other areas of new ground to explore from this context. For example they can compare and contrast interactional attitudes and socio-cultural contacts between different levels of university students for instance undergraduate and graduate students, although this aspect itself needs another research since further research needs to be conducted to determine whether e-learning and communication is being accepted by students in other parts of the world. It is also recommended that studies be undertaken concerning the pedagogical methods that are employed in using e-learning tools. The last, but not least, is the fact that while there are numerous ways to improve this study, it does offer a solid beginning for exploring on-line learning environments on the one hand and the complicated culture of the V.L.E on the other.

# Appendices

## **Appendix 1: Informed consent**

A survey of students' ideas on virtual learning environments and their experiences in this area.

Dear student,

The purpose of this questionnaire is to obtain information that will help us in understanding of the factors affecting community building in virtual learning environments. It is important that your views are also included in a thorough investigation of intercultural discourse in virtual environments. The questionnaire is designed to be confidential and anonymous and there is no intent to identify individual students or students' views. Please provide the information required based on your experiences and personal information.

Thank you for your co-operation

Hamid R. Dolatabadi

University of Exeter, United Kingdom

**Informed consent by the students**

I voluntarily decided to cooperate with this project and I can be assured of anonymity and confidentiality, and that I will incur no risk in taking part.

I consent to my entries in the following data sources will be issued in the research:

Yes/No (Delete as appropriate)

The Questionnaire: use of a virtual Learning Environment for communication and learning in an intercultural learning environment.

The content of the discussion from the discussion forum of the university

The content of the face to face semi-structured interview

Would you mind answering each case and returning them to me- to my email at [h.r.dowlatabadi@ex.ac.uk](mailto:h.r.dowlatabadi@ex.ac.uk)

With best wishes

Hamid R. Dolatabadi

School of Education and Lifelong Learning

University of Exeter, united Kingdom

**Consent form for participants to be interviewed as part of the research project titled:**

Intercultural Discourse in Virtual Learning Environment

I agree to take part in the above research project. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records. I understand that agreeing to take part means that I am willing to:

- be interviewed by the researcher either one on one, or as part of a focus group
- allow the interview to be videotaped/audiotaped
- make myself available for a further interview should that be required
- I understand that my name and identifying details will be changed and access to the original tapes and transcripts restricted to the researcher and supervisor to protect my identity from being made public
- I understand that I will be given a transcript of data concerning me for my approval before it is included in the write up of the research
- I also understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalized or disadvantaged in any way.

**Please tick the appropriate box:**

- The information I provide can be used in further research projects which have ethics approval as long as my name and contact information is removed before it is given to them
- The information I provide cannot be used by other researchers without asking me first
- The information I provide cannot be used except for this project

**Name:**

**Signature:**



**B. Please tick one of the choices which fits you best.**

	<i>Never</i>	<i>Termly</i>	<i>Monthly</i>	<i>Weekly</i>	<i>Daily</i>
15. I use email for contact with my teachers.					
16. I use email for discussion about the lessons					
17. I use the Internet to keep informed about the latest developments in my field.					
18. I use the V.L.E to learn something new.					
19. I use the V.L.E to exchange information with others					
20. I use the V.L.E for problem solving.					

**C. Please tick one of the answers**

Please tick on of the answers	<i>Totally Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Totally agree</i>
21. The most important role of V.L.E is to prepare students for professional world					
22. My chats always start from my educational needs					
23. The lessons in V.L.E should be in line with the abilities and skills expected by society.					
24. The V.L.E can make people know more about each others' interests.					
25. I don't like many changes in teaching methods and systems for students.					
26. The V.L.E can encourage independence in learning.					
27. Instructors can track pupils' learning performance in V.L.E better than traditional system.					
28. The V.L.E can increase students' understanding of technology.					
29. The V.L.E is able to prepare the students for higher levels of education.					
30. The V.L.E can introduce new ways of learning and teaching.					



**D. Please tick one of the answers**

	<i>Totally Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Totally Agree</i>
31. The miscommunications I have had so far have been mostly related to language differences.					
32. The miscommunications I have had so far have been mostly related to ethnic and cultural differences.					
33. The main aim of V.L.E is to encourage the students to have better understanding of each other's views.					
34. I believe that face to face communications are more effective than talks on-line?					
35. I don't think new technologies can decrease miscommunication among people.					
36. I have negative experiences in communicating in the V.L.E.					
37. I worry about having miscommunication when I am talking with the others in V.L.E.					
38. The V.L.E is able to introduce new and better ways of communication for the students and the whole society.					
39. The V.L.E should promote harmony among students with different cultural backgrounds.					

### Appendix 3: The frequencies of the answers to the questionnaire

#### Frequencies

##### Statistics

	The V.L.E is able to introduce new and better ways of communication for the students and the whole society	. The V.L.E should promote harmony among students with different cultural backgrounds.	. I believe that face to face communications are more effective than talks online?	. I use the V.L.E for problem solving	. I use email for contact with my teachers.
N Valid	200	200	200	200	200
Missing	0	0	0	0	0

#### The V.L.E is able to introduce new and better ways of communication for the students and the whole society

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	6	3.0	3.0	3.0
disagree	17	8.5	8.5	11.5
neither disagree nor agree	25	12.5	12.5	24.0
agree	74	37.0	37.0	61.0
totally agree	78	39.0	39.0	100.0
Total	200	100.0	100.0	

#### . The V.L.E should promote harmony among students with different cultural backgrounds.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	2	1.0	1.0	1.0
disagree	6	3.0	3.0	4.0
neither disagree nor agree	35	17.5	17.5	21.5
agree	65	32.5	32.5	54.0
totally agree	92	46.0	46.0	100.0
Total	200	100.0	100.0	

#### . I believe that face to face communications are more effective than talks online?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	11	5.5	5.5	5.5
disagree	59	29.5	29.5	35.0
neither disagree nor agree	60	30.0	30.0	65.0
agree	56	28.0	28.0	93.0
totally agree	14	7.0	7.0	100.0
Total	200	100.0	100.0	

. I use email for contact with my teachers.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
.00	3	1.5	1.5	1.5
never	68	34.0	34.0	35.5
daily	8	4.0	4.0	39.5
weekly	6	3.0	3.0	42.5
monthly	21	10.5	10.5	53.0
termly	94	47.0	47.0	100.0
Total	200	100.0	100.0	

### Frequencies

#### Statistics

		The V.L.E is able to introduce new and better ways of communication for the students and the whole society	. The V.L.E should promote harmony among students with different cultural backgrounds.	. I believe that face to face communication s are more effective than talks online?	. I use the V.L.E for problem solving	. I use email for contact with my teachers.
N	Valid	200	200	200	200	200
	Missing	0	0	0	0	0
Mean		4.0050	4.1950	3.0150	3.1500	3.2800
Std. Deviation		1.06331	.90057	1.03932	1.13310	1.85981

### Frequencies

#### Statistics

		how often do i usually talk (chat) with my instructions or friends on line?	For approximately how many hours in a week do I use internet outside my professional duties. e.g. for leisure and chats with your friends? .....hour s.	I use email for discussion about the lessons.	.My chats always start from my educational needs
N	Valid	200	200	200	200
	Missing	0	0	0	0
Mean		2.7300	2.4400	3.3250	2.9000
Std. Deviation		.87230	1.04492	1.49686	1.02727

		How many computers do I have good access to in my learning situation? .....Computers	I use the V.L.E for problem solving
N	Valid	200	200
	Missing	0	0
Mean		1.9750	3.1500
Std. Deviation		1.01465	1.13310

### Frequency Table

how often do i usually talk (chat) with my instructions or friends on line?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	16	8.0	8.0	8.0
seldom	62	31.0	31.0	39.0
sometimes	82	41.0	41.0	80.0
usually	40	20.0	20.0	100.0
Total	200	100.0	100.0	

For approximately how many hours in a week do I use internet outside my professional duties. e.g. for leisure and chats with your friends? .....hours.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0-5	40	20.0	20.0	20.0
5-10	76	38.0	38.0	58.0
10-20	40	20.0	20.0	78.0
over20	44	22.0	22.0	100.0
Total	200	100.0	100.0	

I use email for discussion about the lessons.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	45	22.5	22.5	22.5
daily	16	8.0	8.0	30.5
weekly	18	9.0	9.0	39.5
monthly	71	35.5	35.5	75.0
termly	50	25.0	25.0	100.0
Total	200	100.0	100.0	

**.My chats always start from my educational needs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	11	5.5	5.5	5.5
disagree	74	37.0	37.0	42.5
neither disagree nor agree	48	24.0	24.0	66.5
agree	58	29.0	29.0	95.5
totally agree	9	4.5	4.5	100.0
Total	200	100.0	100.0	

**How many computers do I have good access to in my learning situation? .....Computers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0-5	87	43.5	43.5	43.5
5-10	47	23.5	23.5	67.0
15-20	52	26.0	26.0	93.0
over20	12	6.0	6.0	99.0
5.00	2	1.0	1.0	100.0
Total	200	100.0	100.0	

**. I use the V.L.E for problem solving**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	15	7.5	7.5	7.5
daily	45	22.5	22.5	30.0
weekly	60	30.0	30.0	60.0
monthly	55	27.5	27.5	87.5
termly	25	12.5	12.5	100.0
Total	200	100.0	100.0	

**Frequencies**

**Statistics**

		The V.L.E can encourage independence in learning.	. Instructors can track pupils' learning performance in V.L.E better than traditional system.	The V.L.E can introduce new ways of learning and teaching	The main aim of V.L.E is to encourage the students to have better understanding of each other's views.
N	Valid	200	200	200	200
	Missing	0	0	0	0
Mean		3.8500	3.4650	4.1900	3.9350
Std. Deviation		.92291	.90158	.87045	.97237

		The V.L.E is able to introduce new and better ways of communication for the students and the whole society	The V.L.E should promote harmony among students with different cultural backgrounds.	The V.L.E can make people know more about each others' interests.	The most important role of V.L.E is to prepare students for professional world
N	Valid	200	200	200	200
	Missing	0	0	0	0
Mean		4.0050	4.1950	3.8100	3.3350
Std. Deviation		1.06331	.90057	1.06752	.98877

### Frequency Table

The V.L.E can encourage independence in learning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	3	1.5	1.5	1.5
	disagree	16	8.0	8.0	9.5
	neither disagree nor agree	36	18.0	18.0	27.5
	agree	98	49.0	49.0	76.5
	totally agree	47	23.5	23.5	100.0
	Total	200	100.0	100.0	

Instructors can track pupils' learning performance in V.L.E better than traditional system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	6	3.0	3.0	3.0
	disagree	22	11.0	11.0	14.0
	neither disagree nor agree	61	30.5	30.5	44.5
	agree	95	47.5	47.5	92.0
	totally agree	16	8.0	8.0	100.0
	Total	200	100.0	100.0	

The V.L.E can introduce new ways of learning and teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	4	2.0	2.0	2.0
	disagree	5	2.5	2.5	4.5
	neither disagree nor agree	21	10.5	10.5	15.0
	agree	89	44.5	44.5	59.5
	totally agree	81	40.5	40.5	100.0
	Total	200	100.0	100.0	

The main aim of V.L.E is to encourage the students to have better understanding of each other's views.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid disagree	23	11.5	11.5	11.5
neither disagree nor agree	32	16.0	16.0	27.5
agree	80	40.0	40.0	67.5
totally agree	65	32.5	32.5	100.0
Total	200	100.0	100.0	

The V.L.E is able to introduce new and better ways of communication for the students and the whole society

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	6	3.0	3.0	3.0
disagree	17	8.5	8.5	11.5
neither disagree nor agree	25	12.5	12.5	24.0
agree	74	37.0	37.0	61.0
totally agree	78	39.0	39.0	100.0
Total	200	100.0	100.0	

The V.L.E should promote harmony among students with different cultural backgrounds.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	2	1.0	1.0	1.0
disagree	6	3.0	3.0	4.0
neither disagree nor agree	35	17.5	17.5	21.5
agree	65	32.5	32.5	54.0
totally agree	92	46.0	46.0	100.0
Total	200	100.0	100.0	

The V.L.E can make people know more about each others' interests.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	4	2.0	2.0	2.0
disagree	31	15.5	15.5	17.5
neither disagree nor agree	19	9.5	9.5	27.0
agree	91	45.5	45.5	72.5
totally agree	55	27.5	27.5	100.0
Total	200	100.0	100.0	

The most important role of V.L.E is to prepare students for professional world

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	13	6.5	6.5	6.5
disagree	28	14.0	14.0	20.5
neither disagree nor agree	46	23.0	23.0	43.5
agree	105	52.5	52.5	96.0
totally agree	8	4.0	4.0	100.0
Total	200	100.0	100.0	

		Have I ever had a miscommunication with other people on line? a. Yes b. No	. The miscommunications I have had so far have been mostly related to language differences.	The miscommunications I have had so far have been mostly related to ethnic and cultural differences.	How well do I communicate with friends/classmates with different ethnic (religious and political) backgrounds? a. well b. not well
N	Valid	200	200	200	200
	Missing	0	0	0	0
Mean		.8550	3.4100	2.9800	.9550
Std. Deviation		.55272	.89212	.92947	.86412

#### Statistics

		How well do I communicate with friends/classmates with different linguistic (language) backgrounds?	I have negative experiences in communicating in the V.L.E.	I worry about having miscommunication when I am talking with the others in V.L.E.
N	Valid	200	200	200
	Missing	0	0	0
Mean		.8450	3.2250	3.2850
Std. Deviation		.77068	1.01959	1.02422

#### Frequency Table

Have I ever had a miscommunication with other people on line?      a. Yes      b. No

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid no	38	19.0	19.0	19.0
yes	159	79.5	79.5	98.5
4.00	3	1.5	1.5	100.0
Total	200	100.0	100.0	

. The miscommunications I have had so far have been mostly related to language differences.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid totally disagree	9	4.5	4.5	4.5
disagree	16	8.0	8.0	12.5
neither disagree nor agree	71	35.5	35.5	48.0
agree	92	46.0	46.0	94.0
totally agree	12	6.0	6.0	100.0
Total	200	100.0	100.0	



The miscommunications I have had so far have been mostly related to ethnic and cultural differences.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	7	3.5	3.5	3.5
	disagree	63	31.5	31.5	35.0
	neither disagree nor agree	61	30.5	30.5	65.5
	agree	65	32.5	32.5	98.0
	totally agree	4	2.0	2.0	100.0
	Total	200	100.0	100.0	

How well do I communicate with friends/classmates with different ethnic (religious and political) backgrounds? a. well b. not well

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not well	52	26.0	26.0	26.0
	well	121	60.5	60.5	86.5
	2.00	20	10.0	10.0	96.5
	4.00	5	2.5	2.5	99.0
	5.00	2	1.0	1.0	100.0
	Total	200	100.0	100.0	

How well do I communicate with friends/classmates with different linguistic (language) backgrounds?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not well	77	38.5	38.5	38.5
	well	77	38.5	38.5	77.0
	2.00	46	23.0	23.0	100.0
	Total	200	100.0	100.0	

I have negative experiences in communicating in the V.L.E.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	10	5.0	5.0	5.0
	disagree	47	23.5	23.5	28.5
	neither disagree nor agree	40	20.0	20.0	48.5
	agree	94	47.0	47.0	95.5
	totally agree	9	4.5	4.5	100.0
	Total	200	100.0	100.0	

. I worry about having miscommunication when I am talking with the others in V.L.E.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	14	7.0	7.0	7.0
	disagree	32	16.0	16.0	23.0
	neither disagree nor agree	47	23.5	23.5	46.5
	agree	97	48.5	48.5	95.0
	totally agree	10	5.0	5.0	100.0
	Total	200	100.0	100.0	

## **Appendix 4: Interview Schedule**

Intercultural Discourse in Virtual Learning Environments

### **Interview Schedule**

Code of interviewee.....

Class.....

Date of interview.....

## **Semi-structured interview schedule**

### **A. Understanding of the rights as informant**

Thank you for the long term cooperation and support you have had in the last few months. Please answer the following questions with as much detail as you can provide regarding your past experience in on-line contacts or using virtual environments in your works or personal contacts. Be assured that I will maintain all precautions in the analysis of this information. In order to uphold privacy, a pseudonym will be applied to all written and recorded materials. Furthermore, the audiotapes and other printed material will be kept securely locked to assure confidentiality.

### **B. Focused Life History and Experiences**

1. Would you tell me about yourself and your past experiences on-line communicating with others?

#### **Follow up:**

- In the past, have you had any synchronous or asynchronous communications on-line with any body?
  - Have you ever found close friends on-line? Was it only in university site or you also had contacts outside of this site?
  - What challenges presented themselves to you while using technology in your friendships?
  - Is there anything else you would like to add about your past experiences of communication while using technology?
2. What is your idea in communicating with students from different cultures and societies in digital learning environment?

### **Follow up**

- Do you ever recognise this environment as a "community" and do you feel you belong to it or not?
  - How do you describe this community? what characterizes community in that environment
  - How do you characterize this new community? In other words what "community" means for you as a member of this environment?
  - Do you think you are affected personally or socially by these new contacts? How? Have you noticed any changes in yourself in light of the move to the new virtual communication?
  - What do you think you have learned here or if you think you may have had a sort of contribution to it?
3. Did you come across serious problems which could disconnect you from your virtual friend or separate you?

### **Follow up**

- If yes, please give me 2 or 3 concrete examples of how your communications were more difficult?
- Where do you see this leading you in the future? Do you think you will have better communications or fail?
- How did you experience the process and identify the steps in the process (What was the process?)

- How do you think you can promote community in this context and gain its benefits more?

#### **Appendix 4.1: The interview question sample**

1. How did you feel about participating in on-line interaction? Did you feel in any ways different from others in your peer group?
2. Do you really feel you are part of the discussion forum group or still feel very different from the people who joined the forum?
3. Did you enjoy communicating with the students with such diverse backgrounds? I actually want to know to what extent you are aware of the differences between yourself and others in such an environment.
4. Now I would like to ask you about your own experiences. Would you please let me know about your previous experiences of intercultural communication in on-line environments?
5. Would you please tell me something of the issue of culture in CMC in this virtual environment?
6. Let's talk about the factors of belonging to an on-line cultural group. Can you tell me what makes someone feel he belongs to a cultural group on-line?
7. What about the factors which influence the way you communicate on-line with such diverse groups? Actually I want to know what your communication style is.
8. What do you think are the advantages of C.M.C specially such a discussion forum?
9. Did you find the environment and discussions helpful in terms of learning and communication?
10. As a student in V.L.E what do you think are the issues leading to difficulties in communication here and what strategies did you use to deal with them ?

## **Appendix 5: Pilot interview**

This is a testing interview with the on-line students in a virtual university system in Iran which was done just as a test of the interview system before the final approval of the schedule.

...Q. O Do you have any experience of on-line communication using a computer?

A. I used computer a lot when I worked in the telecom office before coming to uni. I started to chat with people on-line and I found it was interesting because I can chat with people for long time even if I don't know who they are.

Q. 1 Any experience of intercultural communication when you were communicating on-line?

A. Yes. I study in a multi cultural department some students were Turkish, some Arabic mother language and some Kurdish but with a native language of Farsi and English as a second language usually used for on-line contacts, so I got to know other cultural expectations and language behaviours. We did have Cultural barriers cultural barriers especially at the beginning. The first was the language barriers, at that Language issue I couldn't use a common language to communicate my idea and value; secondly, normally we use Farsi to communicate different value and idea with others and it caused some problems. For example, one invited the others for doing some thing or visiting out, but sometimes they did not get it and thought it was rude. For us, this behaviour shows being warm-hearted, great hospitality, but soon after I found out it was impolite to some of my on-line friends.

Q.2 Can you tell me something of the issue of culture in CMC in your virtual environment?

A. Culture is a big notion. I can narrow it down to tell you the CMC culture through on-line education. Being educated in on-line system is very important and privileged. From a lot of ancient Persian proverbs, we can see the importance of education in China. Self- development (study) is the first step for person's life. Through studying on-line, people will gain success and also add glory to their life. The relationship between people and society can also be defined in cmc. 'Being harmony' is very important for social relationship in an on-line culture. 'Friendliness is conducive to business success.' And 'Good-naturedness leads to propitiousness.' It advocates relationship in harmony between people; Social relationship people need to prepare to tolerate and compromise specifically when they are on-line and conflict happen. Of course, what I describe here is my personal view, but this concept is influencing us nowadays, it is still the root of our cultural relations on-line.

Q.3 Can you tell me what makes someone feels he belongs to a cultural group on-line? (Factors of belonging to an on-line cultural group?)

A. The person who is a member of the on-line group gradually knows how to compromise, and personalities to tolerate. If the person is too critical and sharp, either in idea or language, it is hard for him or her to make friends with us. And the contacts get longer time to think.

Q.4 what is your communication style? What are the factors which influence the way you communicate on-line with people from different cultural or language background?

A. I like to communicate on-line rather than face to face. I think that is influenced by the V.L.E Cultural environment. I think here, in this culture, people speak something or express their idea directly rather than indirectly. It gives the listeners more space to think and guess meaning, and avoid direct confrontation. So if you want to speak indirectly, you need to be careful to the words you choose. But I think here, the atmosphere lets you have a better situation for your contacts especially at the beginning of your CMC contacts in the V.L.E. I feel comfortable to use CMC; I don't like to speak in front of public I don't know probably because I am a very introverted



person. I need to sit in front of computer for many hours per day. And I need to communicate with people using computer. I usually I feel comfortable facing the screen more than people. But I feel there are differences in Face-to-face situation I like the on-line course system specially the Discussion Forum which is part of the webct here in University, which I feel less limitation in my learning and CMC contacts.

Q.5 what do you think are the advantages of CMC specially the discussion Forum?

In Virtual classrooms, and especially in discussion forums, the atmosphere is I can say student-centered. I think it really open new doors for the students to find how they can make a new community for themselves. Students are given ample opportunities to air their views on certain topic virtual classes and CMC. I also like on-line discussion forum because it is useful for communication between students on the lessons and also practice English writing. I benefit a lot from the discussion forum through my own writing and reading other students' message. When I do writing in this virtual learning environment I feel it is a process of learning communication because I need to do reflection, choose topic and be careful in constructing my message in terms of language. Students also swap information on different topics each other.

Q.6 did u find the discussion helpful in terms of learning and communicating?

A. As I said in another question, It provides us a good 'platform' to communicate with other students. When I reflect some idea, I learn that is a process of learning. When I have a chat I have to construct my Communicating ideas, sentences and words carefully to make others understood. That is a way of communicating I think. Also in these virtual communications, the students say many things which can be really helpful to you for example they may say your ideas are very helpful and useful in their understanding of the solutions of the problems they have. I also found their problems through the forum which I found quite similar to face contacts. Even I realised it is a real place to Communicating and also learning to communicate academic idea, especially with new students. Now after one year studying and communicating in this virtual environment specially using CMC I am familiar with web design and

virtual environment of here. So, it is not so difficult for most of us to communicate with others.

Q.7 let's talk about this on-line interaction in more detail. How did you feel about participating in on-line interaction? Did you feel in any ways different from others in your peer group?

Well as I said earlier, I do feel difference in on-line communication. Here, Virtual students are very direct and confident in their CMC communication. These students seem to be open-minded. While the students in traditional face to face system seem to be more modest and even sometimes lack self-confidence - I could see these characters from their writing.

Q.8 Sorry to interrupt you, but do you feel you are part of the discussion forum group or still feel very different from the people who joined the forum?

A. Of course I now feel more flexible between different cultures, because I have been a bit familiar with the sort of culture in CMC and the virtual environment and I know the drawbacks for these cultures.

Q. 9. Did you enjoy communicating with those who have culturally and linguistically diverse backgrounds? And what sort of thing did you value in meeting students from personally diverse cultural background?

A. Yes, I do enjoy communicating with people with culturally and linguistically different background. I value the pluralism, diversity and differences that exist between us. This widens my horizon of knowledge of the world. Then I know my knowledge is not the thing in the world. I think these are very important. Very much. What traditional education and communication lack nowadays is what I mentioned above? This causes so many problems in young people in their socializing and social networking. You need independent learners who are able to be critical to what they learn or how they communicate with the others.

Q.10 As a graduate student in the VLE, did you still encounter any difficulties communicating with people? In your case, what are the issues leading to difficulties in communication in virtual environment?

A. The design in virtual discussion forum is still not so warm or attractive. The interactive area is not formed ideally for all courses and I think it needs more work by authorities. Also we need a tutor or organizer. He or she could issue a topic. Then students can express their idea on the topic. That person could answer the students and organize the follow up topics. Topic is important. Without topic, new students do not know what they could say.

Q.11. Do you think adding cultural and linguistic elements to the course/website design is important?

A. It will be very important to add cultural elements for students. Add more language aids column is very helpful for students, for example how to write good English, academic English. In term of cultural elements, VLE students need to know what the on-line environment and the friends on-line expect them to behave. This is important. No matter what culture you are in, now you are in a new virtual environment, so you need to know how to behave here if u like to progress in your contacts. There is a saying: when you are in Roman, do as Romans do. Students consider and recognise cultural difference and do something to facilitate cultural contacts.

## Appendix 6: Sample of coding the chats

### viii. On line experience ( 1)

Speaker	Categories Aka (speech) acts	Exploratory categories	Episode number	Episode focus	Themes
	Performative)		viii	On line experience (1)	Semantic
	Function	Content (semantic)			Compromise/social grouping/ co- operation/sharing thoughts
01.1 <b>Mahmoud:</b> Hi every body. 01.2 hope everything is ok. 01.3 If u like we can talk about our experience in this new shape of contacts.	Greeting  Salutations  Initiate	Exploration of experience	viii	On line experience (1)	social grouping  social grouping  cooperation/sharing thoughts/social grouping
02.1 <b>Noushin:</b> good idea. 2.2 Let's talk about it. 02.3 Have you started your virtual friendships or contacts yet?	Agree  Initiate  Ask	Consolidation/consensus  Continuation  relationship	viii	On line experience (1)	cooperation  cooperation/sharing thoughts  social grouping
03.1 <b>Mahmoud:</b> oh yes 3.2 and I have expanded it in the last few weeks 3.3 so that most of us feel as a family we are part of an organisation where we help	Agree  Response/reply  Expand	Continuation  Clarify  relationship	viii	On line experience (1)	Co-operation  social grouping co-operation  co-operation

each other in answering the questions for which you really need time to think.					
04 Saeed : How was the experience?	Ask	Experience	viii	On line experience (1)	
05.1 Mahmoud : I've always loved doing such things and seeing the difference they made for others.  5.2 especially knowing we were talking about unresolved issues in our communications and culture or even language made the work so worthwhile.	Response/reply  Expand  Clarify	Motivation/engagement  Affirmation/acknowledgment  Affirmation/acknowledgment  Ups and downs and problems	viii	On line experience (1)	Co-operation  Sharing thoughts   Social grouping
06 Noushin: are you going to keep on more in future?	ask	Continuation	viii	On line experience (1)	Co-operation/ sharing thoughts
07 Mahmoud: Oh yes, I would love to.  What about you saeed?	Respond  Invite	Agreement  Continuation	viii	On line experience (1)	Co-operation
08 Saeed: yes although I have experienced with some misunderstanding sometimes, I think it has been wonderful for me.	Response/reply	Misunderstanding, ups and downs,  motivation	viii	On line experience (1)	Sharing thoughts  compromise

09 <b>omid:</b> did you feel disappointed in your challenges or could sort it out with your online friends?	Ask	question	viii	On line experience (1)	Sharing thoughts compromise
10.1 <b>Saeed :</b> sometimes yes but I think the best thing which encourages me to go on is recognition from those around me.  10.2 the thanks I get from my virtual friends is wonderful. it is very good to have other people value what I do as much as they do	Reply/  Expand  Expand	Ups and downs  Motivation and intention  Motivation/intention	viii	On line experience (1)	Co-operation Sharing thoughts  Compromise  compromise
11.1 <b>Noushin:</b> I think this is the main point which has encouraged us to go on,  11.2 although the course is ESP and nothing more than a course. I am still positive about it although I have had some ups and downs myself.	Reply / response Agree  Expand	values, encouragements  problems ups and downs	viii	On line experience (1)	Social grouping  Compromise
12 <b>Omid:</b> ok folks let's say good bye for today. See u on Thursday.	Ask	Closing down	viii	On line experience (1)	

### Appendix 6.1 Tables of using discourse functions in students' on-line discussions

Table 1.... Discourse Functions in Synchronous Communication Using IRF model in the first month of electronic interactions.

Categories (Electronic Discourse Functions)	Total in the first week by 20 participants	Total in the second week	Total in the third week	Total in the fourth week
(1) Greetings	4	4	7	9
(2) Salutations	3	3	8	10
(3) Initiation	4	6	7	6
(4) Ask	180	195	210	236
Comprehension checks,				
Explanation requests)				
(5) Response/replies (elaboration	110	132	161	175
Explanation, clarification,	230	241	286	297
Apology, agreement)	29	41	90	146
(6) Adversarial Moves	346	338	310	283
(7) Expands	126	138	149	178
(8) Comments	56	71	98	119
(9) proposing	79	88	99	120
(10) Closing Moves	13	19	23	27
<b>Totals</b>				

Table 2 .... Discourse Functions in Synchronous Communication Using IRF model in the second month of electronic interactions.

Categories (Electronic Discourse Functions)	Total in the 5th week by 20 participants	Total in the 6th week	Total in the 7th week	Total in the 8th week
(1) Greetings	11	11	13	16
(2) Salutations	13	16	19	26
(3) Initiation	8	11	16	19
(4) Ask	250	266	279	293
Comprehension checks,				
Explanation requests)				
(5) Response/replies (elaboration	188	210	243	276
Explanation, clarification,	320	339	361	379
Apology, agreement)	168	194	223	241
(6)Adversarial moves	280	271	259	250
(7) Expands	191	218	234	246
(8) Comments	131	147	166	187
(9) proposing	136	152	179	194
(10) Closing Moves	27	32	33	36
<b>Totals</b>				



Table 3.... Discourse Functions in Synchronous Communication Using IRF model in the third month of electronic interactions.

Categories (Electronic Discourse Functions)	Total in the 9th week by 20 participants	Total in the 10th week	Total in the 11th week	Total in the 12th week
(1) Greetings	18	22	24	30
(2) Salutations	16	19	23	28
(3) Initiation	21	24	27	31
(4) Ask	312	319	330	346
Comprehension checks,				
Explanation requests)				
(5) Response/replies (elaboration	289	302	319	331
Explanation, clarification,	388	399	410	426
Apology, agreement)	252	269	287	294
(6)Adversarial moves	239	226	219	203
(7) Expands	259	270	284	292
(8) Comments	196	210	221	239
(9) proposing	198	216	229	240
(10) Closing Moves	36	39	43	47
<b>Totals</b>				

Table 4.... Discourse Functions in Synchronous Communication Using IRF model in the 4<sup>th</sup> month of electronic interactions.

Categories (Electronic Discourse Functions)	Total in the 9th week by 20 participants	Total in the 10th week	Total in the 11th week	Total in the 12th week
(1) Greetings	39	45	47	50
(2) Salutations	29	33	36	41
(3) Initiation	33	36	37	41
(4) Ask	349	361	380	396
Comprehension checks,				
Explanation requests)				
(5) Response/replies (elaboration	343	359	370	386
Explanation, clarification,	439	451	469	483
Apology, agreement)	294	318	332	349
(6)Adversarial moves	192	186	178	160
(7) Expands	314	329	340	356
(8) Comments	252	269	277	293
(9) proposing	249	261	278	293
(10) Closing Moves	47	51	56	59
<b>Totals</b>				

## Appendix 6.2 Sample of coding the interviews

...Q. O Do you have any experience of on-line communication using a computer?

**Comment [R1]:** Online communication using computer

A. I used computer a lot when I worked in the telecom office before coming to uni. I started to chat with people on-line and I found it was interesting because I can chat with people for long time even if I don't know who they are.

**Comment [R2]:** Positive feedback

Q.1 Any experience of intercultural communication when you were communicating on-line?

**Comment [R3]:** Intercultural communication

A. Yes. I study in a multi cultural department some students were Turkish , some Arabic mother language and some Kurdish but with a native language of Farsi and English as a second language usually used for on-line contacts , so I got to know other cultural expectations and language behaviours. We did have cultural barriers especially at the beginning. The first was the language barriers, at that Language issue I couldn't use a common language to communicate my idea and value; secondly, normally we use Farsi to communicate different value and idea with others and it caused some problems. For example, one invited the others for doing some thing or visiting out, but sometimes they did not get it and thought it was rude . For us, this behaviour shows being warm-hearted, great hospitality, but soon after I found out it was impolite to some of my on-line friends.

**Comment [R4]:** Languages issues

**Comment [R5]:** Values and ideas

Q.2 Can you tell me something of the issue of culture in CMC in your virtual environment?

**Comment [R6]:** Cultural issues

A. Culture is a big notion. I can narrow it down to tell you the CMC culture through on-line education. Being educated in on-line system is very important and privileged. From a lot of ancient Persian proverbs, we can see the importance of education in Iran. Self- development (study) is the first step for person's life. Through studying on-line, people will gain success and also add glory to their life. The relationship between people and society can also be defined in cmc. 'Being harmony' is very important for social relationship in an on-line culture. 'Friendliness is conducive to business success.' And 'Good-naturedness leads to prosperity.' It advocates

**Comment [R7]:** Importance of culture

**Comment [R8]:** Importance of online studies in life

relationship in harmony between people; Social relationship people need to prepare to tolerate and compromise specifically when they are on-line and conflict happen. Of course, what I describe here is my personal view, but this concept is influencing us nowadays, it is still the root of our cultural relations on-line.

**Comment [R9]:** Social relationship

Q.3 Can you tell me what makes someone feel he belongs to a cultural group on-line? (Factors of belonging to an on-line cultural group)?

**Comment [R10]:** Factors of belonging to cultural group

A. The person who is a member of the on-line group gradually knows how to compromise, and personalities to tolerate. If the person is too critical and sharp, either in idea or language, it is hard for him or her to make friends with others. And the contacts get longer time to think.

**Comment [R11]:** Social behaviour and personalities

Q.4 what is your communication style? What are the factors which influence the way you communicate on-line with people from different cultural or language background?

**Comment [R12]:** Factors influence communicating

A. I like to communicate on-line rather than face to face. I think that is influenced by the V.L.E Cultural environment. I think here, in this culture, people speak something or express their idea directly rather than indirectly. It gives the listeners more space to think and guess meaning, and avoid direct confrontation. So if you want to speak indirectly, you need to be careful to the words you choose. But I think here, the atmosphere lets you have a better situation for your contacts especially at the beginning of your CMC contacts in the V.L.E. I feel comfortable to use CMC, I don't like to speak in front of public I don't know probably because I am a very introverted person. I need to sit in front of computer for many hours per day. and I need to communicate with people using computer. I usually I feel comfortable facing the screen more than people. But I feel there are differences in Face-to-face situation I like the on-line course system specially the Discussion Forum which is part of the webct here in University, which I feel less limitation in my learning and CMC contacts.

**Comment [R13]:** Cultural influence

**Comment [R14]:** Linguistic issues

**Comment [R15]:** Personal issues in online compared to face to face

Q.5 what do you think are the advantages of CMC specially the discussion Forum?

**Comment [R16]:** Advantages of CMC

A. In Virtual classrooms, and especially in discussion forums, the atmosphere is I can say student-centered. I think it really open new doors for the students to find how they can make a new community for themselves. Students are given ample opportunities to air their views on **certain** topic virtual classes and CMC. I also like On-line discussion forum because it is useful for communication between students on the lessons and also practice English writing. I benefit a lot from the discussion forum through my own writing and reading other students' message. When I do writing in this virtual learning environment I feel it is a process of learning communication because I need to do reflection, choose topic and be careful in constructing my **message** in terms of language. Students also swap information on different topics each other.

**Comment [R17]:** Cultural and social behaviour

**Comment [R18]:** Online discussion forum positive

Q.6 did u find the discussion helpful in terms of learning and **communicating**?

**Comment [R19]:** Communication and learning benefits

A. As I said in another question, It provides us a good 'platform' to communicate with other students. When I reflect some idea, I learn that is a process of learning. When I have a chat I have to construct my Communicating ideas, sentences and words carefully to **make** others understood. That is a way of communicating I think. Also in these virtual communications, the students say many things which can be really helpful to you for example they may say your ideas are very helpful and useful in their understanding of the solutions of the problems they have. I also found their problems through the forum which I found quite similar to face contacts. Even I realised it is a real place to Communicating and also learning to communicate academic idea, especially with new students. Now after one year studying and communicating in this virtual environment specially using CMC I am familiar with web design and virtual environment of here. So, it is not so difficult for most of us to communicate with others.

**Comment [R20]:** Communicating ideas

Q.7 let's talk about this on-line interaction in more detail. How did you feel about participating in on-line interaction? Did you feel in any ways **different** from others in your peer group?

**Comment [R21]:** Feeling about online interaction

A. Well as I said earlier, I do feel difference in on-line communication. Here, Virtual students are very direct and confident in their CMC communication. These students seem to be open-minded. While the students in traditional face to face system seem to be more modest and even sometimes lack self-confidence - I could see these characters from their writing.

**Comment [R22]:** Positive feedback on online contact

Q.8 Sorry to interrupt you, but do you feel you are part of the discussion forum group or still feel very different from the people who joined the forum?

**Comment [R23]:** Belonging to social group online

A. Of course I now feel more flexible between different cultures, because I have been a bit familiar with the sort of culture in CMC and the virtual environment and I know the drawbacks for these cultures.

**Comment [R24]:** Feeling positive in cmc

Q. 9 did you enjoy communicating with those who have culturally and linguistically diverse backgrounds? And what sort of thing did you value in meeting students from personally diverse cultural background?

**Comment [R25]:** Cultural and linguistic issues

A. Yes, I do enjoy communicating with people with culturally and linguistically different background. I value the pluralism, diversity and differences that exist between us. This widens my horizon of knowledge of the world. Then I know my knowledge is not the thing in the world. I think these are Very important. very much. What traditional education and communication lack nowadays is what I mentioned above? This causes so many problems in young people in their socializing and social networking. You need independent learners who are able to be critical to what they learn or how they communicate with the others.

**Comment [R26]:** Positive about cultural difference

**Comment [R27]:** Critiquing traditional systems

Q.10 As a graduate student in the VLE, do you still encounter any difficulties communicating with people? In your case, what are the issues leading to difficulties in communication in virtual environment?

**Comment [R28]:** Difficulties in communication with others

A. The design in virtual discussion forum is still not so warm or attractive. The interactive air is not formed ideally for all courses and I think it needs more work by

**Comment [R29]:** technical problems

authorities. Also we need a tutor or organizer. He or she could issue a topic. Then students can express their idea on the topic. That person could answer the students and organize the follow up topics. Topic is important. Without topic, new students do not know what they could say.

Q.11. Do you think adding cultural and linguistic elements to the course/website design is important?

**Comment [R30]:** Cultural and linguistic aspects

A. It will be very important to add cultural elements for students. Add more language aids column is very helpful for students, for example how to write good English, academic English. In term of cultural elements, V.L.E students need to know what the on-line environment and the friends on-line expect them to behave. This is important. No matter what culture you are in, now you are in a new virtual environment, so you need to know how to behave here if u like to progress in your contacts. There is a saying: when you are in Roman, do as Romans do. Students consider and recognise cultural difference and do something to facilitate cultural contacts.

**Comment [R31]:** language aids

**Appendix 6.3: List of Codes used in the Analysis of the Semi-Structured Interviews**

Category	Code
Aptitudes	Apt
Attitude	Att.
Attitudes towards other cultures	Att/ cult
Beliefs	B
Beliefs about errors	B/Error
Culture learning	CL
English	Eng.
English-speaking countries	ESC
Group work	GW
Identity - construction	Id/Con
Individual differences	Ind/Dif
Language skills	L/Sk



### Appendix 6.3: (Continued)

Category	Code
Motivation	Mot.
Personal experience	P/Exp
Role of attitude	R/Att
Role of classroom culture	R/C/C
Role of context	R/Con
Role of culture	R/C
Role of experience	R/Exp
Role of time	R/Time
Using internet	Int

**Appendix 7: Some of the most important Internet Areas (Countries' Internet Suffixes)**

.ab.ca	Alberta, Canada	.ht	Haiti
.ad	Andorra	.hu	Hungary
.ae	United Arab Emirates	.id	Indonesia
.af	Afghanistan	.ie	Ireland
.af.mil	United States Air Force	I	Israel
.ag	Antigua and Barbuda	.il.us	Illinois, United States
.ai	Anguilla	.in	India
.ak.us	Alaska, United States	.in.us	Indiana, United States
.al	Albania	.iq	Iraq
.am	Armenia	.is	Iceland
.an	Netherlands Antilles	.it	Italy
.ao	Angola	ir	Iran
.aq	Antarctica	.is	Iceland
.ar	Argentina	.it	Italy
.ar.us	Arkansas, United States	.jm	Jamaica
.as	American Samoa	.jo	Jordan
.at	Austria	.jp	japan
.atl.ga.us	Atlanta, Georgia, United States	.ke	Kenya
.au	Australia	.kh	Cambodia
.aw	Aruba	.ki	Kiribati

.az	Azerbaijan	.kp	.kp
.ba	Bosnia and Herzegovina	.kr	South. Korea
.bc	British Columbia, Canada	.kw	Kuwait
.bd	Bangladesh	.ky	Cayman Islands
.be	Belgium	.kz	Kazakhstan
.bg	Bulgaria	la	Laos
.bh	Bahrain	.la.us	Louisiana, United States
.bj	Benin	lb	Lebanon
bm	Bermuda	.lc	Saint Lucia
.dj	Djibouti	.li	Liechtenstein
.dk	Denmark	.lk	Sri Lanka
.dz	Algeria	Jr	Liberia
.ec	Ecuador	is	Lesotho
edmonton.ca	Estonia	.lt	Lithuania
.ee	Estonia	.lu	Luxembourg
.eg	Egypt	.lv	Lybia
.eh	Western Sahara	.ma	Morocco
.er	Eritrea	.ma.us	Massachusetts, United States
.es	Spain	.mb.ca	Manitoba, Canada
.et	Ethiopia	.mc	Monaco
.fi	Finland	.md	Republic of Moldova
Jj	Fiji	.md.us	Maryland, United States
.fl.us	Florida, United States	ink	Madagascar
Sn	Micronesia	.ml	Marshall Islands

.so	Faeroe Islands	.mm	Macau
.fr	France	.inn	Montserrat
.lx	metropolitan France	.mn.us	Michigan, United States
.ga	Gabon	.at	Mauritania
.ga.us	Georgia, United States	.mu	Mississippi, United States
.gb	Great Britain	.mv	Malawi
.gd	Grenada	.mz	Mozambique
.ge	Georgia	.na	Namibia
.gf	French Guiana	.nb.ca	New Brunswick, Canada
.gh	Ghana		
.gi	Gibraltar		
.gl	Greenland		
.gn	Guinea		
.gov.ca	Canadian government		
.gp	Guadeloupe		
.gq	Equatorial Guinea		
.gr	Greece		
.gt	Guatemala		
.gu	Guam		
.gy	Guyana		
.hk	Hong Kong		
.hn	Honduras		
.hr	Croatia		

## Appendix 8: Certificate of ethical research approval

STUDENT HIGHER-LEVEL RESEARCH



School of Education and Lifelong Learning

### Certificate of ethical research approval

**STUDENT RESEARCH/FIELDWORK/CASEWORK AND DISSERTATION/THESIS**

You will need to complete this certificate when you undertake a piece of higher-level research (e.g. Masters, PhD, EdD level).

To activate this certificate you need to first sign it yourself, then have it signed by your supervisor and by the Chair of the School's Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: <http://www.bera.ac.uk/publications/guides.php> and view the School's statement in your handbooks.

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**READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR COMPUTER** (the form will expand to contain the text you enter).  
**DO NOT COMPLETE BY HAND**

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Your name: Hamid Reza Dolatabadi

Degree/Programme of Study: PhD in Educational Studies

Project Supervisor(s): Professor Patrik Dillon and Dr. Malkolm Macdonald

Your email address: [h.r.dolatabadi@Exeter University](mailto:h.r.dolatabadi@Exeter University)

Tel: 01392 217312

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Title of your project: Intercultural Discourse in Digital learning Environment

- **Brief description of your research project:** *This PhD. research is mainly going to study and find out the specific factors which affect the communication among the people from different cultures in virtual learning environments. It also tries to find how and with what strategies the possible negative issues related to cultural and socio linguistic background of the people could have a positive role in digital environments.*

Give details of the participants in this research (giving ages of any children and/or young people involved):

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■ 200 Iranian university students in the first phase : Students from four different Linguistic and cultural background; Turks, Arabs, Kurds and pure Persians in The Distance learning University of Shiraz-Iran.

And 20 of them for the 2nd and 3rd phase of the study

**Give details regarding the ethical issues of informed consent, anonymity and confidentiality (with special reference to any children or those with special needs)** a blank consent form can be downloaded from the SELL student access on-line documents:

Of course some issues such as 'collaboration in building mutual trust and understanding' is clearly respected. The issues such as informing the participants of the results, how the data will be stored and the related matters will be discussed with the participants .Also, the methodology will be discussed with the groups of participants which, I think, is a positive point in this research because based on BERA, the participants in a research study have the right to be informed about the aims, purposes and systems of the research. So the research has got this positive ethical consideration in itself. Furthermore, the participants will be informed of the 'likely publication of findings' involved in the research and of political consequences for them. The major ethical considerations will be as follow:

**-Gaining access**

To get permission to enter the research field, I shall pass gatekeepers. According to Bailey (1996) there are two kinds of gatekeepers: formal gatekeepers that refer to authorities in the institution, whereas informal gatekeepers do not have institutional power but influence the context. So, before I begin conducting a field study, I shall ask for permission from both types of gatekeepers. This is because informal gatekeepers may feel intruded on and insecure if I ask only the top authority for permission.

I shall ask the participants to take part in my research through the official permission from the authorities.

**- Informed consent**

According to Diener & Crandall (1978) informed consent is the procedure according to which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decision.

So the participants will be briefed of the research purposes and the conduct of each stage. I will try to clarify any procedure-related doubts, and tell them that they may withdraw from the research at any

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time. Before the data collection, I shall make sure that the participants have no doubts about the process.

#### **- Anonymity**

The principal of anonymity refers to the fact that the participants or their organizations are not identifiable by the information given. So for achieving the anonymity, the participants' real names and identification will be replaced with aliases or coded numbers (Frankfort-Nachmias & Nachmias, 1996).

#### **Confidentiality**

It is also important to maintain the privacy of the participants. To do this, although the "researchers know who has provided the information or are able to identify participants from the information given, they will in no way make the connection known publicly" (Cohen et al 2003).

**Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:** This study will include 3 phases:

#### **Phase 1: The Structured Survey (questionnaire):**

I am going to use the questionnaire in phase 1, as the questionnaire will allow us access to a wide number of participants, and the selection of a large representative sample from the population (Mouly, 1970). In addition, questionnaires are effective and practical research tools as they allow collecting the required information quickly and cheaply, as well as providing quantitative and qualitative data that can be analysed using appropriate statistical analyses or qualitative analysis (Oppenheim, 2000).

This phase aims to:

- Ascertain the tendency of the participants' beliefs and ideas regarding others from other cultures in a digital learning environment.
- Establish a "profile of beliefs" related to ICT and the digital world.
- Establish some background information about the respondents such as, age, gender, qualification, teaching experience, and their college.
- Establish a constraints profile to address the problems facing the participants in their daily work in using ICT.

As with any questionnaire designed for this purpose, consideration will be given to ease of and time for completion in order to minimize the likelihood of non-response and the return of incomplete

questionnaires. A structured format that in the main uses predetermined standardized response formats is selected to aid completion, increase reliability and facilitate data analysis.

#### **Phase 2: Practical communication online**

- In this phase the I am going to create a communal on line Forum using the latest software such as "First Class" for students to talk to each other online, discuss different issues and send a message to another person.

The main aim of this phase is to:

- a. see how the socio linguistic and cultural differences are shown in a real and practical environment.
- b. How these differences may end in convergence rather than obstacles in virtual learning environments.

#### **Phase 3: Structured interviews**

Interviewing is used extensively for data collection due to its ontological and epistemological relevance to the nature of intercultural inquires

This phase aims to find out:

- a. what the participants' ideas are in communicating with their friends from different cultures and societies.
- b. How they can cope with the possible social obstacles in their communication.
- c. How they can cope with the cultural and sociolinguistic obstacles to find better ways towards convergence in virtual learning environments.

### **Data Analysis**

This study requires an ongoing data analysis that will commence during the data collection process. This is due to the snowball effect of the data collection procedure, which means that the structured survey needs to be analysed first in order to carry out the interview and the practical communicative phases. Furthermore, a study such as this will incorporate collecting a huge amount of data and early analysis will help to reduce the problem of data overload by selecting significant features for future focus (Cohen et al 2003).

The nature of the data analysis in this study is continuous and overlapping, which involves multiple phases as follows:

#### **a) The analysis of the structured survey (questionnaire)**

The collected data will be fed into the SPSS programme. This will enable me to analyse data quantitatively using SPSS (Statistical Package for Social Sciences). The features of SPSS will assist me with descriptive statistics such as means, standard deviations, frequencies, percentages, and correlation analyses.

#### **b) The analysis of the structured interviews**

First the audio tapes will be transcribed and the transcripts will used to reconstruct the students' practical communication online. Statements from the transcripts will be categorized and coded



according to the basic coding systems in intercultural qualitative studies to find out different views of the students from various cultures and back grounds.

**c) The students' communication online**

The students' communication online which are mainly through text chats will be recorded in a digital bank and then, after saturation of the data, they will be analyzed to see how the students have been able to cope with the problems related to the differences in their culture and cultural or sociolinguistic views and see if any convergence is seen in this way or the movement is towards divergence!

**Give details of any other ethical issues which may arise from this project (e.g. secure storage of videos/recorded interviews/photos/completed questionnaires or special arrangements made for participants with special needs etc.):** I don't think there is any other special issue to be concerned about. The most important ethical issues are discussed in previous questions.

**Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):** I am going to regard all facts about the students' cultural and ethnic background to the best of my knowledge specially in the 2<sup>nd</sup> phase of the study. So I don't think any special ethical issues to raise and affect the natural process of the study.

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*This form should now be printed out, signed by you below and sent to your supervisor to sign. Your supervisor will forward this document to the School's Research Support Office for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.*

---

**I hereby certify that I will abide by the details given above and that I undertake in my dissertation / thesis (delete whichever is inappropriate) to respect the dignity and privacy of those participating in this research.**

**I confirm that if my research should change radically, I will complete a further form.**

Signed:.....H.R.Dolatabadi.....*H.R. Dolatabadi*.....date:.....23/05/06.....

*N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor*

---


**This project has been approved for the period:** ..... **until:** .....  
By (above mentioned supervisor's signature): ..... *P.J.S.W* ..... **date:** ..... *24.05.06* .....

---

*N.B. To Supervisor: Please ensure that ethical issues are addressed annually in your report and if any changes in the research occurs a further form is completed.*

---

SELL unique approval reference:.....P/05/06/21.....

Signed:..........date: 5.6.06.....  
Chair of the School's Ethics Committee

---

This form is available from  
<http://www.education.ex.ac.uk/students/index.php>  
then click on On-line documents.

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