



**Promoting Social Presence in a Social Networking  
Environment in a Kuwaiti Higher Education Context**

**Submitted by**

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**to the University of Exeter  
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## **Abstract**

Recently, the numbers of Higher Education institutions that are using Web 2.0 technologies and social networking sites are increasing dramatically. These sites offer unique and diverse learning opportunities. There is evidence that a sense of community can be created online and that this community is connected with perceived learning. Garrison, Anderson and Archer (2000) introduced and developed the Community of Inquiry framework as a dynamic process model and a comprehensive framework to guide the research and practice of online learning communities, and to describe and measure elements supporting the development of these communities. This framework consists of three elements - social, teaching and cognitive presence - as well as categories and indicators to define each presence and guide the coding of transcripts. The categories of social presence are affective responses, open communication and group cohesion. The categories of teaching presence are instructional design and organisation, facilitating discourse and direct instruction. Previous studies suggest that a positive social climate on an online learning community is important as it can improve learning experience and cognitive presence.

This study aims to explore and understand the nature of Community of Inquiry presences, in particular teaching presence and social presence. The aim of the study is to understand the influence of a different teaching presence on students' development of social presence. This study provides a more comprehensive picture of developing students' social presence over changing teaching presence in a social network environment in a Kuwaiti higher education context. In order to achieve the purpose of this study, the following research questions are explored:

1- How does a students' sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?

- a. Does a students' sense of social presence (affective responses, open communication and group cohesion) change as a result of a different teaching presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?
- b. Why do participants maintain or change their social presence level during the course?

2- How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context within the social network environment?

The study was conducted in the second semester of 2010/2011 at The Education Technology Department - The College of Basic Education - The Public Authority for Applied Education and Training (PAAET), within the State of Kuwait. The study was carried out on the Educational Communication module and involved 46 male participants. This study uses the equivalent of mixed methods design to answer research questions. The sequential explanatory strategy is embedded within an applied quasi-experimental approach. Quantitative data is collected and analysed, which is then followed by the collection and analysis of qualitative data. The researcher used a messages analysis and a content analysis approach to reveal the level of social presence in an online community and then develop stimulated recall interview questions. A combination of individual interviews and focus group interviews were used. Garrison et al.'s (2000) social presence coding schemes were developed to make them more suitable in the study context.

Quantitative and qualitative data show that there is no significant difference between the effects of facilitating discourse and direct instruction in terms of students' social presence level. Stimulated recall interviews reveal that most participants cannot distinguish between facilitating discourse and direct instruction. The participants believe that facilitating discourse and direct instruction are similar. The participants' responses lead the researcher to

search for other motives that could promote the development of students' social presence in the higher education context in the social network environment. The study concludes that there are two factors that could promote the development of students' social presence. First, instructional design and organisation, such as web design satisfaction, network effect, instructor responsiveness, the nature of the task and awarding degrees. Second, learner-specific matters, such as previous experience, peer influence, friendship, attitude, self-esteem and self-confidence and something I refer to as the Wave Effect.



## **Dedication**

To my parents,

My father, who has only a primary school certificate.

My mother, who cannot read or write.

I am always proud of them.

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This dissertation was accomplished with the help of many people. I would like to take this opportunity to show gratitude to:

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# Chapter 1: An Introductory Chapter

## ❖ Introduction

In 2006, Time magazine chose millions of anonymous contributors of user-generated content on Wikipedia, YouTube, MySpace, Facebook, Second Life, blogs and other providers as their 'Person of the Year', personified simply as 'You'. The US magazine claimed that the age of the "great man", as described by the Scottish philosopher Thomas Carlyle, when he said that "the history of the world is but the biography of great men", no longer existed. Carlyle believed that it is the few, the powerful and the famous who shape our collective destiny as a species. Time posited that the world is now the property of regular individuals. The magazine said: "It's a story about community and collaboration on a scale never seen before. It's about the cosmic compendium of knowledge, Wikipedia, the million-channel people's network, YouTube, and the online metropolis, MySpace. It's about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes". The magazine concludes: "Web 2.0 is a massive social experiment, and like any experiment worth trying, it could fail ... This is an opportunity to build a new kind of international understanding, not politician to politician, great man to great man, but citizen to citizen, person to person. It's a chance for people to look at a computer screen and really, genuinely wonder who's out there looking back at them. Go on. Tell us you're not just a little bit curious" (Grossman, 2006).

According to Facebook's second quarter of 2013 results, there are 699 million daily active users on average, an increase of 27% year-over-year. It has 1.15 billion monthly active users, an increase of 21% year-over-year and 819 million mobile monthly active users, an increase of 51% year-over-year. Instagram application also reached 100 million monthly active users (Facebook, 2013). One out of every seven minutes spent online is on Facebook. 40 percent of these users also note that they socialise more on Facebook than face-to-face. In terms of mobile device usage, 91 percent of internet access is used for the purpose of engaging in social activities. In addition, there are an estimated 554 million users of Twitter, 9.6 million daily active users on average and 500 million users of Google+, 11.9 million daily active users on average. Additionally, 92 percent of users Twitter re-Tweet content which they find interesting while, each day, users total generated more than 500 million "Likes" on Facebook and 400 million Tweets. Over 350 million photos are uploaded to Facebook and more than two billion search queries are performed on Twitter. 432,000 Vine videos are shared on Twitter and one billion Likes are generated on Instagram. In terms of the Internet's most popular video service, YouTube, every day there are 33 million unique visitors, 200 million hours of watched footage and 144,000 hours of video uploaded (Bennett, 2013a; Bennett, 2013b).

This new technology is called social media or "Web 2.0" technologies, which are developed quickly, and new tools, functions and services are born every day. In spite of these modern technology benefits, it is also giving rise to challenges, such as privacy, legislation and freedom of speech. In less than a

decade social media has revolutionised the world and empowered each of us with the ability to liaise with billions around the planet. It has changed the way people communicate. Social media has helped make real the idea of a “global village”. There is no doubt that the Web 2.0 technologies and social media have transformed our lives as individuals, societies and organisations. The 2011 Arab Spring is a good example of the power of social media’s influence. So, what is “Web 2.0”? And what are the potential effects of “Web 2.0” and social media technologies in the educational field? The next section will present a general background of Web 2.0, and explain some of its current uses in an educational context.

## **1.1 Background for Web 2.0 and Social Media**

According to Cleveland-Innes (2013, p. 388), Web 2.0 is “a term loosely describing a second generation of World Wide Web content in which users themselves provide a significant portion of a website’s content”. In fact, the concept of Web 2.0 is relatively new in academic and media fields. It was officially invented in 2004 by Dale Dougherty, a vice-president of O’Reilly Media Inc., during a conference brainstorming session between O’Reilly and MediaLive International. Then, in 2005, Tim O’Reilly led a conference session to investigate the meaning of this concept (O’Reilly, 2005b). He defined Web 2.0 as “the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources,

including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation," and going beyond the page metaphor of Web 1.0 to deliver rich user experiences" (O'Reilly, 2005a). He wrote in detail about Web 2.0 in a groundbreaking paper: What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software. He determined and illustrated seven principles that distinguish Web 2.0: The Web as platform; Harnessing collective intelligence; Data as the next 'Intel inside'; End of the software release cycle; Lightweight programming models; Software above the level of single device; and Rich user experiences (O'Reilly, 2005b).

In simple terms, Web 1.0 was a read-only medium whereas Web 2.0 is a read / write medium. Web 2.0's features facilitate communication, secure information sharing, interoperability and collaboration on the World Wide Web. It also offers mechanisms for content production, communication and collaboration. In the early 1990s, usually users visited cyberspace to find information. It was usually a one-way experience. In contrast, the second generation web relies on user participation. These features enable a large group of people to create a collective body of work whose value far exceeds that provided by any of the individual participants. Good examples of Web 2.0 applications are Wikipedia, YouTube, blogs, Facebook, Twitter, MySpace and Flickr.

However, Sir Tim Berners-Lee, the inventor of the World Wide Web, has a different a viewpoint. He argues that Web 2.0 is really just an extension

of the original ideals of the Web. The ability to create Web 2.0 technology is based on so-called 'Web 1.0' standards. Scott Laningham, host of the developerWorks podcasts, interviewed Berners-Lee and asked him about his view on the common explanation that Web 1.0 is about connecting computers and making information available and that 2.0 is about connecting people and facilitating new kinds of collaboration. His reply was:

“ Totally not. Web 1.0 was all about connecting people. It was an interactive space, and I think Web 2.0 is of course a piece of jargon, nobody even knows what it means. If Web 2.0 for you is blogs and wikis, then that is people to people. But that was what the Web was supposed to be all along. And in fact, you know, this 'Web 2.0', it means using the standards which have been produced by all these people working on Web 1.0. It means using the document object model, it means for HTML and SVG, and so on. It's using HTTP, so it's building stuff using the Web standards, plus JavaScript, of course. So Web 2.0, for some people, means moving some of the thinking client side so making it more immediate, but the idea of the Web as interaction between people is really what the Web is” (Laningham, 2006).

In spite of the inventor of the Web's opinions, the term Web 2.0 has become widespread in academic and media fields. It has taken hold with more than 3,270,000 citations in Google Scholar and hundreds of millions of results from Google's search engine. In addition, research organisations, such as the Joint Information Systems Committee (JISC) and the Joint Research Centre of the European Commission, have supported numerous research

projects that aimed to take the popularity, participation and general energy of Web 2.0 into education, to raise levels of relevance, motivation and engagement. Also, the Journal of Computer Assisted Learning had a special issue featuring Web 2.0 in February 2009.

With regard to social networking services, they are defined as “internet- or mobile-device-based social spaces designed to facilitate communication, collaboration and content sharing across networks of contacts” (Redecker, 2009, p. 31). Facebook, Twitter, Google+, Tumblr, and MySpace are good examples of social networking services. In general, social networking tools enable users to connect to friends and colleagues, to interact and meet new people, to join their interest groups, to send mails and instant messages, and to blog and post personal information profiles.

There is a wide range of applications that illustrate the basics of the Web 2.0 concept. Many of these applications are already being used in the education context, despite being invented for other purposes. Indeed, the “Back to school with Web 2.0”<sup>1</sup> series are good comprehensive lists of Web 2.0 applications within education. Redecker (2009) categorises Web 2.0 applications into ten categories: social networking services, syndication and notification technologies, blogs, wikis, tagging - social bookmarking and Folksonomies, media-sharing services (podcasts and vodcasts), podcasts and vodcasts, virtual worlds and immersive environments, online office

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<sup>1</sup> “Back to school with Web 2.0” series available at <http://www.solutionwatch.com/512/back-to-school-with-the-class-of-web-20-part-1>



applications and Web 2.0 tools designed for learning purposes. Some of these categories are imbricated, as a result of which several social computing applications either provide a variety of integrated tools or integrate different services around a topic. In addition, the number of education institutions that use Web 2.0 technologies and social networking in an education context is increasing dramatically. There are many cases of social networking being adopted by educators, schools and universities. Redecker (2009) references numerous examples. In addition, there are a number of online collaboration applications that have been specially created for educational aims, such as Moodle, Sloodle, Ning in Education and Elgg.

## **1.2 The development of my research interest**

I was awarded a Kuwait Government scholarship to pursue my postgraduate degrees in the UK. The Kuwaiti Government has ambitions to improve outcomes of the education system through the use of information and communications technology (ICT). I chose to conduct my PhD in Educational Technology as I see my future as contributing to the development of education in my home country. However, I realised that educational technology is an extremely broad field of study and I had to choose to research a very specific area. In actual fact, when I began my PhD journey I did not have a clear idea of my research topic. Thus, I asked my supervisor for advice. He suggested that I search for recent trends in educational technology, which are best seen in Web 2.0 technologies and social

networking for learning purposes. I began by reading the relevant literature and finding out about the use of Web 2.0 technologies and social networking for learning purposes. In addition to reading the literature related to this topic, I was given the opportunity to take part in an educational social network course during my MSc in Educational Research course offered by the Graduate School of Education at the University of Exeter. This course was delivered by The Hive, the brand name for the Elgg system, which is an open source social networking engine with an educational focus. This experience helped me to reflect on the literature and experience the practical and theoretical perspectives of the social networking environment. For instance, I was impressed by the experience of being able to learn at any time and from any location. I understood in practical terms the value of being able to communicate with my colleagues. In addition, I benefited from taking part in the online discussion board. Indeed, this experience gave me a much clearer idea on the focus of my work and helped me to visualise what I was intending to do. I was particularly interested in educational social networking and employing online discussion message analysis methodology for my research.

I spent the rest of the time in the first year of my PhD journey continuing to read literature and methodology books. My primary sources were the university library service, Google Scholar and EBSCO's databases. I searched for publications within the Joint Information Systems Committee (JISC) and the Joint Research Centre of the European Commission. I also read academic articles published in the Journal of Computer Assisted Learning, Computers and Education, the Journal of Computing in Higher

Education, The Internet and Higher Education, and the Journal of Educational Computing.

Indeed, reading the literature allowed me to orientate myself to the field. Also, it helped me to discover the fundamental concepts and arguments within my research interest.

The first key source that I identified was published by the European Commission's Joint Research Centre-Institute for Prospective Technological Studies and was entitled Review of Learning 2.0 Practices: Study on the Impact of Web 2.0 Innovations on Education and Training in Europe (Redecker, 2009). It is a study that aims to evaluate the projected impact of social networks on learning and analyse its potential in supporting innovation and inclusion within education and training. Redecker (2009) reviewed and summarised dozens of researches and practices of Web 2.0 technologies in learning institutions cross Europe. She presented and explained four notable concepts, which form a theoretical framework for the use of social networks for learning in the digital era. This study was my starting point to narrow down the scope of my research.

I began reading about these four concepts. Then, I realised that one of these four prominent concepts, the community of inquiry, had considerable citations. According to Garrison and Araugh (2007), Google Scholar shows that the initial article by Garrison, Anderson, and Archer (1999), which explained the community of inquiry framework, has been cited in more than

225 other published articles as of May 2007. The other foundational journal articles about community of inquiry, such as Garrison, Anderson and Archer (2000), Anderson, Rourke, Garrison and Archer (2001), and Rourke, Anderson, Garrison and Archer (1999), have been cited by nearly 1000 other papers in the field of online learning research (Shea et al., 2010). In the present day, according to Google Scholar, Garrison and his colleagues' initial article has been cited in other works at least 1865 times as of September 2013. The second edition book *E-Learning in the 21st Century: A Framework for Research and Practice* (Garrison, 2011), which is largely an introductory text that gives an overview of community of inquiry framework research and theoretical implications, has been cited in other works at least 1735 times. In addition, Elsevier's journal *The Internet and Higher Education* released a special issue featuring the community of inquiry framework in 2010. As such, the growing interest in this framework got my attention. In respect of all these facts, it seems that the community of inquiry framework may become one of the leading models guiding research into the online learning environment in higher education.

So, what is the community of inquiry? The next section will attempt to illuminate this concept.

### **1.3 The community of inquiry framework**

The foundation of the Community of Inquiry framework can be found in the works of John Dewey and Matthew Lipman. Dewey states, "this

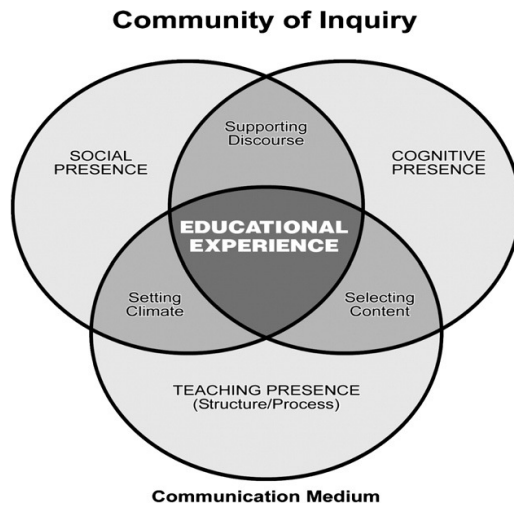
educational process has two sides - one psychological and one sociological; and that neither can be subordinated to the other or neglected without evil results following. Of these two sides, the psychological is the basis" (Dewey, 1959, p. 75). However, according to Lipman (2003), the phrase Community of Inquiry was coined by Charles Sanders Peirce (Peirce, 1955), although Lipman believed that Peirce meant the scientific community. Lipman converts the classroom into a community of inquiry, where students (children) and teachers are involved in inquiry under certain circumstances. It is learning from the experience of others. Indeed, dialogue plays a significant role in the community of inquiry. In his description of this community "students listen to one another with respect, build on one another's ideas, challenge one another to supply reasons for otherwise unsupported opinions, assist each other in drawing inferences from what has been said, and seek to identify one another's assumptions. A community of inquiry attempts to follow the inquiry where it leads rather than being penned in by the boundary" (Lipman, 2003, p. 20). It is characterized by non-adversarial deliberation, shared cognitions, the cultivation of literacy and philosophical imagination, the encouragement of a deep reading, and the enjoyment of dialogical texts. He identifies some features of a community of inquiry, such as inclusiveness, participation, shared cognition, face-to-face relationships, the quest for meaning, feeling of social solidarity, deliberation, impartiality, modelling, thinking for oneself, challenging as a procedure, reasonableness, the reading, the questioning and the discussion. He determines two crucial components of the educational process in society, democracy and reasonableness. He assumes that in the education context, for the improvement of thinking in an inquiry-driven society,

the critical, the creative and the caring thinking will allow educators to identify the primary aspect of its educational process. Lipman believes that the mission of education is to improve students' (children) thinking or what he called multidimensional thinking. The most important dimensions of thinking to be promoted are the critical, the creative and the caring. According to Lipman (2003) this multidimensional thinking should "aim at a balance between the cognitive and the affective, between the perceptual and conceptual, between the physical and the mental, the rule-governed and the non-rule governed" (pp. 199-200).

However, according to Rovai (2002) and Thompson and MacDonald, (2005), there is evidence that a sense of community can be created online. Moreover, this online community is connected with perceived learning (Shea, 2006; Shea, Li & Pickett, 2006). Hence, Randy Garrison, Terry Anderson and Walter Archer (2000) expanded and applied the ideas of Dewey and Lipman to online learning contexts, particularly in computer-mediated communication. They developed the community of inquiry framework as a dynamic process model and a comprehensive framework to guide the research and practice of online learning communities, and to describe and measure the elements supporting the development of these communities, particularly in higher education. The purpose of the model is exploratory and explanatory. Also, it could be used as a guideline to construct an effective learning environment where learners feel a connection with other learners and instructors and engage in collaborative learning activities (Akyol & Garrison, 2013; Garrison, 2011). According to Garrison (2013), a community is "a group of individuals

who are connected and communicate with regard to mutual interests and similar expectations as to process and outcomes” (p. 10), while inquiry is “a process of critical thinking and problem solving based on the generalized scientific method leading to resolution and the growth of personal and collective knowledge (p. 11). He defines the community of inquiry as “a learning community where participants collaboratively engage in purposeful critical discourse and reflection (cognitive presence) to construct personal meaning and shared understanding through negotiation” (p. 10). In order to engage learners in creating knowledge, technology is used as a meditational instrument to create authentic and meaningful tasks by creating a community of inquiry where learners and participants experience a sense of membership (Tolu & Evans, 2013).

The community of inquiry framework consists of three overlapping elements – social, teaching and cognitive presence – as well as categories and indicators to define each presence and to guide the coding of transcripts (see Figure 1 and Table 1). These categories and indicators emerged from the literature and were amended within the community of inquiry. The indicators are “key words or phrases that suggest the presence of the three elements and, in total, a quality educational experience” (Garrison, 2011, p. 25). The deep significant learning occurs within the community through the interaction of these three elements.



**Figure [ 1 ]** Community of Inquiry Framework

Adapted from (Garrison, 2011, p. 23)

Elements	Categories	Indicators [Examples Only]
<b>Social Presence</b>	Personal / Affective Open Communication Group Cohesion	Self projection/ expressing emoticons Learning climate/risk-free Expression Group identity/ collaboration
<b>Cognitive Presence</b>	Triggering Event Exploration Integration Resolution	Sense of puzzlement Information exchange Connecting Ideas Apply new Ideas
<b>Teaching Presence</b>	Design and organization Facilitating discourse Direct instruction	Setting curriculum & methods Shaping constructive exchange Focusing and resolving issues

**Table [ 1 ]** Community of Inquiry: Elements, Categories and Indicators

Adapted from (Garrison, 2011, p. 25)



### **1.3.1 Social Presence**

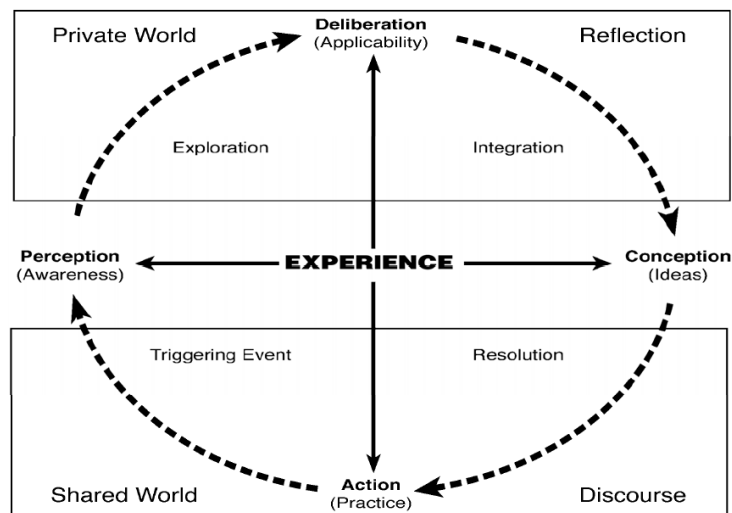
Social presence is defined as “the ability of participants to identify with the group or course of study, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by way of projecting their individual personalities” (Garrison, 2011, p. 34). The aim of social presence in an educational context is to inspire the conditions for inquiry and quality interaction, in order to reach educational goals collaboratively. Garrison (2011) and Rogers and Lea (2005) argue that sharing social identity within a group leads to enhancing group cohesion, and then the group will be more productive. Furthermore, Garrison et al. (2000) claim that socio-emotional interaction and support are crucial in realizing meaningful and worthwhile educational outcomes. According to Garrison and Arbaugh (2007), “social presence must move beyond simply establishing socio-emotional presence and personal relationships. Cohesion requires intellectual focus (i.e. open and purposeful communication) and respect” (p. 160). Garrison et al. (2000) assume that a high level of social presence with an associated high degree of commitment and participation are important for the development of higher-order thinking skills and collaborative work. Also, they argue that social presence is essential for the development of cognitive presence (to be defined and described later). They maintain that cognitive presence is more easily sustained when a significant degree of social presence has been established. The community of learners indirectly assists the process of critical thinking, which encourages students to approach a problem strategically and actively to seek out sources of knowledge, discover

biases, and formulate and defend their own intellectual positions. Garrison et al. (2000) state, “social presence marks a qualitative difference between a collaborative community of inquiry and a simple process of downloading information. The difference is the quality of the message; in a true community of inquiry, the tone of the messages is questioning but engaging, expressive but responsive, skeptical but respectful, and challenging but supportive” (p. 15). However, the categories of social presence are interpersonal communication / affective responses, open communication and group cohesion (Garrison, 2011). In the first version of the categories of social presence, Garrison and other researchers used the term affective responses. Recently, however, Garrison changed this term to interpersonal communication. He believes that affective responses may not be the defining characteristic of social presence. It could be one of the indicators under interpersonal communication category. He argues that group identity may take priority over personal identity. Therefore, it is a vital to establish interpersonal communication between learners in online learning environment. He thinks that interpersonal communication assists to create a climate and sense of belonging to the group, which is facilitating condition for engagement in meaningful dialog (Garrison, 2011).

### **1.3.2 Cognitive Presence**

Cognitive presence may be defined as “the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse” (Garrison & Arbaugh, 2007, p. 161). This extent is partly

dependent upon how communication is restricted or encouraged by the medium. Cognitive presence reflects higher-order knowledge acquisition and application and it is grounded in the critical thinking and practical inquiry literature, in particular the works of Dewey and Lipman. The model of critical thinking assumes “an iterative and reciprocal relationship between the personal and shared worlds. That is, there is a synergy between reflection and communicative action” (Garrison et al., 2000). Garrison and Arbaugh (2007) argue that, “cognitive presence is defined in terms of a cycle of practical inquiry, where participants move deliberately from understanding the problem or issue through to exploration, integration and application” (p. 162) (see Figure 2). Garrison (2011) and Garrison et al. (2001) identify a four phase process for cognitive presence: a triggering event, exploration, integration and resolution.



**Figure [ 2 ]** Practical Inquiry Model Adapted from Garrison (2011, p 46).

### I.A Triggering Event:

This is the initiation of the inquiry process. It is a state of dissonance or feeling of unease resulting from an experience, where some issue or problem is acknowledged for further inquiry. In an educational context, this phase may be a task set by the teacher or any group member.

### II. Exploration:

In this phase, participants explore and clarify the issue and the nature of the problem, both individually and cooperatively through critical reflection and discourse. They search for information, knowledge, possible explanation and alternatives that might help to make sense of the situation or problem. They “shift between the private, reflective world of the individual and the social exploration of ideas” (Garrison et al., 2001, p. 4). It is a phase of questioning, brainstorming, exchanging information and sharing experiences.

### III. Integration:

In this phase, participants construct meaning from the ideas developed during exploration. They integrate the information and knowledge into a coherent idea or concept. Garrison et al. (2001) argue that teaching presence (to be defined and described later) plays a significant role in this phase. The participants need to provide probing questions, comments and additional

information in an effort to ensure continuing cognitive development, and to model the critical thinking process.

#### IV. Resolution

In this phase, the problem raised by the triggering event must be formulated and solved. The participants apply the recently acquired knowledge to educational or workplace contexts. In an educational context, “the end of this phase may require moving on to a new problem with the assumption that students have acquired useful knowledge” (Garrison et al., 2001, p. 5).

### **1.3.3 Teaching Presence**

Teaching presence is defined as “the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (Garrison, 2011, p. 24). According to Garrison and Anderson (2003), teaching presence integrates all the elements of a community of inquiry “in a balanced and functional relationship congruent with the intended outcomes and the needs and capabilities of learners” (p. 29). Garrison and Arbaugh (2007) argue that teaching presence is a significant determinant of student satisfaction, perceived learning and sense of community.

The categories of teaching presence include instructional design and organization, facilitating discourse and direct instruction.

- I. Instructional design and organization refer to “the planning and design of the structure, process, interaction and evaluation aspects of the online course” (Garrison and Arbaugh, 2007, p. 163).
- II. Facilitating discourse is described as “the means by which students are engaged in interacting about and building upon the information provided in the course instructional materials” (Garrison and Arbaugh, 2007, p. 164).
- III. Direct instruction is conceptualized as “the instructor’s provision of intellectual and scholarly leadership, in part through sharing their subject matter knowledge with the students” (Garrison and Arbaugh, 2007, p. 164).

However, further clarifications and details about elements, categories and indicators of the community of inquiry framework will be presented in the literature review and research design and methodology chapters.

## **1.4 Purpose of the study and the research questions**

The Web 2.0 technologies and social networking sites have become popular with the young generation. These recent technologies have high potential to support collaborative approaches to teaching and learning. In

general, there are assumptions that Web 2.0 technologies and social networking are attractive, allowing greater student independence and autonomy, greater collaboration and increased pedagogic efficiency.

However, the major educational theories, such as behaviourism, cognitivism, and constructivism, were developed at a time when learning was not influenced by recent technology. In recent decades, information communication technology (ICT) has been widely used in the educational context. Consequently, this has strongly influenced teaching and learning theories. Actually, there have been significant theoretical developments in the field of distance learning over the past 25 years that have provided improved understanding, teaching and learning in the online learning context. One of these theories is the community of inquiry framework, which particularly focuses on higher education. This framework has attracted significant attention and growing interest. There have been numerous publications in prestigious journals and presentations at worldwide conferences. As mentioned previously, the community of inquiry framework identifies three core elements, namely social presence, cognitive presence and teaching presence. This study aims to explore and understand the nature of these presences, in particular teaching and social presence. It examines the role of teaching presence in social presence development. The aim of the study is to understand the influence of different types of teaching presence on students' development of social presence. This study provides a more comprehensive picture of developing students' social presence over changing teaching presence in the social network environment in a Kuwaiti higher education

context. In order to achieve the purpose of this study, the following research questions are explored:

1- How does students' sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?

- a. Does students' sense of social presence (affective responses, open communication and group cohesion) change as a result of a different teaching presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?
- b. Why do participants maintain or change their social presence level during the course?

2- How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context within the social network environment?

## **1.5 Significance of the research**

According to Garrison and Arbaugh (2007), the conclusions of numerous studies suggest that there is a strong relationship between social presence and learning outcomes. Social presence plays a significant role in promoting cognitive presence and critical discourse (Garrison et al., 2000;



Garrison & Vaughan, 2008; Bangert, 2008; Tolu & Evans, 2013; Akyol & Garrison, 2013; Pellas, Peroutseas & Kazanidis , 2013). A study by Shea and Bidjerano (2009) concludes that cognitive presence could be predicted based on perceived teaching presence and social presence. Swan, Garrison and Richardson (2009), maintain that social presence can and should be established in online learning communities. Furthermore, activities that cultivate social presence promote the learners' satisfaction with the Internet as an educational delivery medium (Arbaugh & Benbunan-Fich, 2006). A positive social climate contributes to rapid mastery of the 'hidden curriculum' of the technological aspects of distance learning (Anderson, 2001). Garrison and Anderson (2003) argue that establishing relationships and a sense of belonging is crucial in a learning environment since it can encourage the learners to ask questions, be critical of each other and contribute ideas. Also, Wegerif (1998) noted that creating positive personal relationships is important in maintaining a viable electronic partnership and engaging in intercultural learning. He states that "forming a sense of community, where people feel they will be treated sympathetically by their fellows, seems to be a necessary first step for collaborative learning. Without a feeling of community people are on their own, likely to be anxious, defensive and unwilling to take the risks involved in learning" (p. 48). He concludes that, "individual success or failure on the course depended upon the extent to which students were able to cross a threshold from feeling like outsiders to feeling like insiders" (p. 34). In order to minimize feelings of social isolation, Shamp (1991) suggested exchange of personal information that could contribute to the formation of individualized impressions of interlocutors. Cutler (1995) clarifies that "the more one

discloses personal information, the more others will reciprocate, and the more individuals know about each other the more likely they are to establish trust, seek support, and thus find satisfaction”.

It is clear that it is vital to establish social presence in a learning environment in order to create the community of inquiry. Further clarifications about the importance of social presence will be presented and discussed in the literature review chapter. However, I believe the assumption is questionable that social presence and social interaction between participants will automatically take place simply because the online learning environment permits it. Indeed, “students recognize that they are not there for purely social reasons. A sense of community is based upon common purposes and inquiry” (Garrison and Arbaugh, 2007, p. 159).

The literature review suggests that there is a gap in the current body of knowledge on the community of inquiry framework, in particular of social presence. The aim of this dissertation is to provide a step towards filling this gap. I believe a clear understanding of how social presence develops may help to create an effective online learning environment. Tolu and Evans, (2013) call for further research to better understand how social presence evolves in online learning environment.

To date there are very few studies that examine the development of social presence and only a limited number of studies that explore the relationship between teaching presence and social presence. Annand (2011)

call for further empirical research to study subcategories of social and teaching presences. Sheridan, Kelly, and Bentz, (2013) argue “interpersonal aspects of teaching and social presence a need to examine these constructs in tandem from students’ perspectives. Yet there are few studies that examine whether different aspects of teaching presence vary in terms of their relative important for students’ success in the online environment” p.69. In addition, Garrison and Arbaugh (2007) noted the demand for conceptual refinement of the relationships and interactions between the community of inquiry elements, both particularly and collectively. Garrison, Cleveland-Innes and Fung (2010) state, “what needs to be empirically demonstrated is that teaching presence significantly influences social and cognitive presence” (p. 32). Also, they state, “further research is also called for in exploring the dynamic relationships among the presences across disciplines and institutions. Moreover, each of the presences represent complex concepts consisting of sub-elements (i.e., categories) that need further study to confirm the existence of these categories and explore the dynamic relationships of specific categories across the presences” (p. 35). They state, “we need to better understand the dimensionality and order of importance (i.e., dynamics) of each of the categories of social presence across the duration of a course of studies in order to fully appreciate its complex relationship with the roles of teaching presence and the phases of cognitive presence” (p. 35). Previous research on the community of inquiry framework (e.g. Anderson et al., 2001; Rourke et al., 1999; Shea, Pickett & Pelz, 2003; Shea et al., 2006; Swan & Shih, 2005) has focused on a single component of the framework. Garrison and Arbaugh (2007) state that, “a clear understanding of how social presence shifts or

evolves in a purposeful online community is required” (p. 160). Theoretically, social presence is a mediating variable between teaching presence and cognitive presence. Teaching presence directly influences the creation and sustainability of social presence (Garrison, Cleveland-Innes and Fung, 2010). Social presence progresses from open communication to cohesion and then to personal connections (Garrison and Arbaugh, 2007). I think these hypotheses need to be examined, especially the order of the major stages of development of social presence and the role of teaching presence in this development. Furthermore, in reviewing the literature, it appears that, there are arguments and questions regarding the stability of the community of inquiry elements (Shea, Li, & Pickett, 2006; Ice et al., 2007; Shea, Vickers & Hayes, 2010; Shea & Bidjerano, 2010; Cleveland-Innes & Campbell, 2012; Annand, 2011). This study may enrich these arguments.

In addition, Garrison and Arbaugh (2007) state, “the challenge for researchers and practitioners is to better understand the interdependence of the three elements. Each element influences the others. We need to understand the specific nature of this influence under various educational contexts that vary according to discipline, goals, student entering knowledge, and the nature of the communication” (p. 166). The study by Garrison et al. (2000) was based on the analysis of computer-conferencing transcripts. This dissertation will be based on social networks. Schrage (1995) states that technology “inevitably shapes the way people relate to each other”. Therefore, it may be that different media have different potentials to address community of inquiry framework elements. Indeed, Garrison (2011) calls for further

research to apply to community of inquiry Web 2.0 and social media environments. Also, to date, little research has used a mixed methodology to study community of inquiry elements. I believe that this research can be advanced if we combine quantitative and qualitative approaches to illuminate the relationships between the elements of the community of inquiry.

In addition, Arbaugh, Bangert and Cleveland-Innes (2010) call us examine the dimensions of the Community of Inquiry framework in multi-disciplinary, multi institution, and other regions of the world. Indeed, most of the social presence studies, in particular the researches by Anderson and Garrison have been conducted from the perspective of Western culture, in the English language. On the contrary, my study has been approached from the Arab Kuwaiti cultural perspective and in the Arabic language. I believe culture and language are substantial matters and could reflect and raise different angles and new issues.

## **1.6 Overview of the thesis**

The thesis consists of seven chapters. Chapter One is an introductory chapter. It presents some background information about Web 2.0, social media and the community of inquiry framework. Also, this chapter concentrates on exploring the gaps in study, the purpose of the study and the research questions and significance of the research.

In Chapter Two, the related literature is reviewed. It discusses the role of teaching presence in social presence development. This discussion includes aspects of instructional design and organization, aspects of facilitating discourse, and aspects of direct instruction. Also, the author's reflection is presented followed by a section exploring the reasons why participants maintain or change their social presence level during the course. At the end of this chapter, the relationship between cognitive presence and social presence development will be discussed.

Chapter Three focuses on the research design and methodology where the research approach is presented. There is an emphasis on the importance of mixed methods and the experimental research design. In addition, the methods and procedures of data collection and analysis are discussed and justified. Moreover, the study validity and ethical issues are discussed.

In Chapter Four, the quantitative data are presented and discussed, which include a general description of message analysis, social presence density results and independent samples t-test results.

In Chapter Five, the qualitative data resulting from the analysis of the interviews and focus group interviews are presented and discussed. Also, the constructed topics, categories and sub-categories are presented.

Chapter Six discusses my research findings reflecting on the literature reviewed. Finally, this thesis concludes in Chapter Seven by presenting the

summary of my research. Also, some suggestions for further research are given in this chapter.

## **1.7 Summary of the chapter**

In this chapter, an introduction to the research was provided. I have explained how and why I became involved in this topic. Detailed information was given about the community of inquiry framework. Exploring the gaps in study, the aims of the research and the significance of the research were also discussed. This thesis continues with a literature review.

## Chapter 2: Literature Review

### ❖ Introduction

The explanatory and exploratory nature of the community of inquiry model makes it appropriate for addressing various issues relating to the pursuit of higher education through online platforms. It is just as well that the social, cognitive, and teaching presences form the foundation of this framework. The framework also provides indicators and categories for defining each presence and guiding the process of coding transcripts. An in-depth understanding of these three presences is crucial for promoting social presence within the online environment in a higher education context.

This literature review examines the research trends in the community of inquiry model, particularly in the context of the pursuit of higher education through the social network platform. The review of literature is also aimed at identifying areas where researchers agree, where disagreements arise, as well as where research gaps exist. To start with, the research work addresses issues relating to social presence, teaching presence and cognitive presence. For instance, it is important for this literature review to explore the role of teaching presence in social presence development. Also, explore the relationship between cognitive presence and social presence.



Another crucial issue is the view of social presence as a mediating variable between cognitive presence and teaching presence. It is evident that teaching presence has a direct influence on the way social presence is created and sustained. In this regard, an issue that requires to be researched into involves how students' sense of social presence changes in response to change in teaching presence within online learning and social network environments in higher-education context.

The students' sense of social presence is explored in reference to open communication, affective responses, and group cohesion. The chapter explores how these aspects of social presence change in relation to changes in teaching presence; particularly direct instruction and facilitating discourse. Moreover, it is obvious that participants change their level of social presence during higher education courses that are facilitated in online environments. Such changes are also of great relevance to this literature review. The underlying objective is to determine how the various uses of teaching presence promote the development of social presence among higher education students operating in a social network environment.

This chapter is organised in the following sequence: firstly, there will be a general discussion about the role of teaching presence in social presence development. This discussion includes aspects of instructional design and organisation, aspects of facilitating discourse, and aspects of direct instruction. This is followed by the author's reflections. Secondly, there is a section exploring the reasons why participants maintain or change their social

presence level during the course. Finally, the relationship between cognitive presence and social presence development will be discussed.

## **2.1 The role of teaching presence in social presence development**

Indeed, teaching presence is a fundamental element to bring all community of inquiry elements together to form and sustain the community. Cleveland-Innes (2013) define teaching presence as “the use of planning, facilitation and instruction activities on the part of a leader in an instructional activities; the extent to which instructional activity can be identified and ascribed to one individual in a learning group” (p.400). The literature review demonstrated that teaching presence is a crucial predictor of student satisfaction, perceived learning and sense of community (Akyol & Garrison, 2008; Arbaugh, 2008; Bangert, 2008; Shea & Bidjerano, 2009; Garrison, Cleveland-Innes & Fung, 2010; Shea et al., 2010; Tolu & Evans, 2013). Teaching presence is the process of designing, facilitating and directing social and cognitive processes with the aim of realising educationally worthwhile and personally meaningful outcomes. The teaching presence includes the three core categories instructional design and organisation, facilitating discourse and direct instruction (Garrison et al., 2000; Anderson et al., 2001; Garrison & Anderson, 2003; Garrison & Arbaugh, 2007; Garrison, 2011; Akyol & Garrison, 2013).

However, there are questions regarding the stability of the categories or dimensions of teaching presences. There are arguments that the original three categories of teaching presences need to be revisited. Shea, Li, and Pickett (2006) conducted a large-scale study (survey) involving 1,067 students across 32 different colleges. They concluded that the three categories failed to cohere as three separate constructs. Only two categories were identified: instructional design and organisation, and directed facilitation; the latter being a revised category incorporating categories of both facilitating discourse and direct instruction. The study analysis suggested that the participants could not distinguish direct instruction, as defined in the community of inquiry framework, as a construct distinct from facilitation of discourse. Also, a study by Ice et al. (2007) questioned whether learners conflated design and direct instruction. In contrast, Shea, Vickers and Hayes (2010) identified four categories for community of inquiry teaching presences. The fourth category is assessment. New indicators for the assessment include both formative and summative assessment across a broad range of instructor and student activities that occur within an online course. At the same time a numbers of studies have validated the original three dimensional teaching presence construct (Arbaugh & Hwang, 2006; Garrison & Arbaugh, 2007). I believe my study may enrich these arguments.

On the other hand, social presence could be defined as the ability by participants to identify with a specific group, to communicate in a trusting environment and to develop effective personal relationships progressively through projection of their individual personalities. The core categories

identified in social presence include interpersonal communication / affective responses, open communication and group cohesion. The indicators that reflect interpersonal communication / affective responses include expressing emotions, use of humour and self-disclosure. The indicators that represent open communication are continuing a thread, quoting from others' messages, referring explicitly to others' messages, expressing agreement or disagreement, asking questions and complimenting and expressing appreciation. The indicators that reflect group cohesion include vocatives, addresses or refers to the group using inclusive pronouns and phatics, salutations and greetings. (Garrison et al., 2000; Anderson et al., 2001; Garrison & Anderson, 2003; Garrison, 2011; Akyol & Garrison, 2013; Leppa, et al., 2013 ). More details about social presence categories indicators will be discussed and clarified in the research design and methodology chapter and the Appendix ( 1 ). However, Shea et al. (2010) suggest that the social presence construct is crucial to understanding online learning and requires additional specification.

Indeed teaching presence plays a crucial role in the development of social presence (Swan & Shih, 2005; Shea, Li & Pickett, 2006; Diaz et al., 2010; Garrison, 2011; Cleveland-Innes, 2013; Oskoz, 2013; Sheridan, Kelly, & Bentz, 2013; Tolu & Evans, 2013). There is a substantial connection between students' sense of learning community and effective instructional design and directed facilitation on the part of course instructors (Shea, Li & Pickett, 2006). The online learning environment has revolutionised the way academic discourse is facilitated. It has also brought about numerous

changes in direct instruction as well as instructional design and organisation. For instance, in the online learning environment, the learner and teacher are part of a larger process of learning (Garrison, 2011). Shea et al. (2010) use content and social network analysis to examine all components of the community of inquiry framework. Aspects of the findings suggest that the development of social presence may be contingent on instructors and students working in concert rather than on a stable pattern related to the passage of time in a course. Stenbom, Hrastinski, and Cleveland-Innes (2012) argue that teaching presence in an online learning environment involves both peer-to-peer teaching and instructor teaching. They observe that in the online environment, an increasingly large number of students are engaging in student-student online coaching and there are very few studies that have been carried out that have focused particularly on this issue. They believe the community of inquiry model is appropriate for creating a better understanding of the online coaching practice through the exploration of the extent to which teaching, social and cognitive presence continues to exist in online coaching environments. Stenbom et al. (2012) also claim that a new pattern of interaction appears to be emerging through online coaching. This new pattern appears to be redefining the nature of interactions between coaches and learners in online environments. An analysis of this new pattern from the perspective of relationship of inquiry is crucial for a better understanding of aspects of the online teaching environment such as online coaching. A study by Oskoz (2013; 290) suggests that “provided the course instructor settles the curriculum, designs a task with clear parameters, and provides specific guideline regarding effective use of the online medium,

learners will indeed start to adopt the role of the instructor and create a socially interactive community that achieves high levels of cognitive activity”.

According to Torras and Mayordomo (2011), teaching presence is a source of conceptual coherence for use in operationalising and interpreting the way online learning environments are regulated. They conducted a study aiming to analyse the relationship between the techno-pedagogical design of an electronic portfolio (Transfolio); the teaching presence focused on the use of the tool and the student regulation processes. They argue that it contributes significantly to the shift from internal regulation to external regulation. In terms of teaching presence, the focus is on regulation processes that address the nature of tools used and the tasks undertaken by students. In a study that made use of a mixed methodology involving content analysis, naturalistic observations and comparative statistics, they found that during the teaching and learning processes, clear patterns of self-regulation and co-regulation are observed. In such a situation, it is evident that the teacher is always responsible for providing techno-pedagogical support to learners. This support is in most cases inherent from an instructional design and organisation perspective. At other times, it manifests itself in the way information is presented to students as well as the importance that is attached to it during the process of teaching and learning.

The concept of teaching presence and the role of the instructor have been discussed in detail within the community of Inquiry framework (Garrison et al., 2000; Anderson et al., 2001; Garrison & Anderson, 2003; Shea, Li &

Pickett, 2006; Garrison & Arbaugh, 2007; Shea et al., 2010; Garrison, 2011; Stenbom et al., 2012; Akyol & Garrison, 2013). In this discussion, a lot of emphasis has been put on its contribution to a better understanding of the field of online learning context. Through this discussion, according to Morgan (2011), a lot of information is available on the interactions that instructors engage in during online teaching. However, she points out that this discussion is not of much help in shedding light on why instructors make certain interactive decisions. She found that online discussion forums are not homogenous interaction spaces. There is significant variation in how an instructor perceives the interaction spaces within a course and even when two interaction spaces share the same task functions and objectives, there can be variation between the two instructors (Morgan, 2011). These observations have far reaching implications on the discourse on the role of teaching presence and social presence development.

In all these respects, the online leaning environment seems complex. In this environment of complexity, I argue for a shift in the conventional understanding of teaching presence that appears to be taking shape. This shift appears to have important implications for the community of inquiry framework, particularly aspects of teaching presence categories. By extension, this has far-reaching implications for social presence in online learning contexts. For this reason, it may be necessary to create a new definition of the concept of teaching presence in efforts to acknowledge the impact that it has on social presence.

The next sections will discuss how teaching presence impacts upon the way social presence is created and sustained. I will try to outline and reflect on how teaching presence categories in a social network environment within a higher education context facilitate progress in social presence from open communication to cohesive relations and finally to interpersonal communication. Also, there will be my personal reflection.

The following paragraphs are constructed under these topics:

- Aspects of instructional design and organisation.
- Aspects of facilitating discourse.
- Aspects of direct instruction.
- Reflection

### **2.1.1 Aspects of instructional design and organisation**

Instructional design and organisation may be defined as the planning and elaborate design of an online course with specific emphasis on aspects of structure, interaction, process, and evaluation (Garrison & Anderson, 2003; Garrison & Arbaugh, 2007; Garrison, 2011; Akyol & Garrison, 2013). It is important to put into consideration the patterns of interaction and engagement in online learning in efforts geared towards instructional design and organisation (Pawan, Paulus, Yalcin & Chang, 2003).



According to Shea and Bidjerano (2009), teaching presence may be said to begin before the commencement of the course as the instructional designer, in this case the teacher, undertakes planning in preparation for the course of studies. It continues as learners go through the course, during which time the instructor undertakes course facilitation work. Whenever necessary, the teacher provides direct instruction. Indeed, in a community of inquiry framework clarifications, there are distinguishing differences between design and organisation. The design indicates a structural decision made before the process begins whereas organisation indicates similar decisions that are made to adjust to changes during the educational transaction (Garrison & Anderson, 2003; Garrison, 2011).

In an online learning environment, instructional design and organisation include several tasks, such as the utilisation of the medium, the creation of PowerPoint presentations and lecture notes on the course site, the development of audio/video mini-lectures, the provision of personal insights into the course material, the creation of a planned mix of individual and group activities, and the provision of guidelines on how to use the medium effectively. This component is likely to be the primary responsibility of the instructor.

In a community of inquiry framework, there are six indicators that reflect instructional design and organisation: a settings curriculum, design methods, establishing time parameters, utilising the medium effectively, establishing netiquette and making macro-level comments about course

content. Furthermore, instructional design and organisation include identifying resources, defining clear expectations and goals, process and content, addressing technological concerns, structuring activities, and devising assessment processes and instruments (Garrison & Anderson, 2003; Garrison, 2011).

In reality, it is difficult and complex to design and plan an online course. The difficulties are similar to those faced by teachers who engage in classroom-based teaching. Also, the design process is time-consuming and maybe expensive. Designing online courses should be thorough and achieve the needs of students, teachers and administrators as well as visitors. The designers should keep in mind components of structure, the educational goals, process, interaction and evaluation.

Ke (2010) highlights the important of interface design, which deals with the process of designing online learning environments such as websites, software or mobile applications. The aim of user interface design should be to make the user's interaction as simple and efficient as possible. Moreover, it is necessary for online learning designers to foster: 1) a shared identity, which can be developed by using social presence techniques such as shared goals and missions; 2) dialogue, to create a safe environment for exchange of diverse views and multiple perspectives, nurture smaller subgroups, mutual trust, intimacy, respect, and commitment; 3) spaces for social interaction; and 4) care for the common good of the members (Gunawardena, 2004; Gunawardena et al., 2006)

In fact, there is a considerable relation between online course design and students' social presence (Swan & Shih, 2005; Ke, 2010). Oskoz (2013) represent that students' social presence is only possible with clearly designed tasks and activities that inherently promote communication. According to Tallent-Runnels et al. (2006), online learning activities that are planned and structured carefully lead students to make correct interpretations of information and produce solutions to the problems presented to them. In addition, a well-designed online learning environment enhances the interaction between students and between students and their instructors.

Ke's study (2010) examined the nature and interactions of community of inquiry model elements and concluded that online instructional design is a crucial fundamental that can provide a successful online higher educational experience. In order to design an effective online learning environment, online instructors designed online activities that aimed to foster content comprehension through perspectives exchange, to evaluate content comprehension, to enable collaborative group-work, and / or to enable cooperative learning such as posting individual work for peer feedback (Ke, 2010).

There are various types of questions and activities that students can carry out in online environments. Instructors have a lot of control over which activities they do or questions they ask, and how they structure them. A recent a study by Richardson, Sadaf and Ertmer (2013) adopted a community of

inquiry framework and addressed cognitive presence, the relationships between types of initial question prompts and the levels of critical thinking demonstrated by students' responses in online discussions. The researchers examined discussion prompts from ten courses, which included undergraduate and post-graduate students who were taught by seven different instructors during five semesters. The study results indicate that there is a significant relation between different types of question prompt and the level of students' subsequent responses. I assume that this result has raised an interesting question about the role of question types and the activity that may play a part in students' social presence levels. Indeed, Swan and Shih (2005) suggest that the design of discussion questions and tasks may influence the development of social presence. However, they acknowledge that this suggestion needs further investigation.

Gunawardena et al. (2006) maintain that course designers must create educational contexts that support interaction and collaboration through networked communication. Without appearing to denigrate self-directed study and individual learning, it is important to stress the importance of active intervention by an instructor. Effective communication by instructors and the posting of timely feedback are beneficial in promoting students' interaction in the online learning environment (Tallent-Runnels et al., 2006). Supported by socio-constructivist learning theories, Gunawardena et al. (2006) introduced an online wisdom community model. The model design for the process of learning consists of five steps: 1) a learning challenge, 2) initial exploration, 3) resources, 4) reflection, and 5) preservation. Steps 2 and 4 build the wisdom

community while mentoring and learner support are preeminent design considerations in steps 3 and 5. In fact, often the success of an online discussion depends on how the online facilitators / mentors play their roles in planning and conducting the dialog. The online facilitators do not need to know everything but they should know how to access relevant and appropriate resources, and should also be keen to be friendly and advisory. Hence, Gunawardena et al. (2006) suggest that peer mentoring is effective if novice and expert learners can be matched carefully. Also, it is possible to invited online facilitators from outside the learning community.

Tallent-Runnels et al. (2006) reviewed 76 studies that investigated e-learning and distance education courses. They point out that there is more to formal distance education courses than just dialogue between learners and teachers. For instance, the courses also involve web explorations, course readings and exercises, as well as collaborative projects. All of these components are mediated by a teaching presence. As students and teachers go into conventional higher education, it is always expected that they will have gone through many years of educational experience and background within the formal education system. In the course of online learning, this prior experience and educational background appears to be less relevant in contextual terms. In such a situation, students and teachers are forced to explicitly redefine or even abandon their predefined roles. They also have to shelve numerous behavioural expectations (Tallent-Runnels et al., 2006; Garrison, 2011).

In all these respects, an instructor's online behaviour is a key construct of his or her teaching presence. Burnett (2003) found that specific instructor behaviour could increase social interaction, focus the conversations on specific threads, and improve its intellectual level. Baker (2010) employed empirical and quantitative methods to examine instructor immediacy and presence in an online learning environment in relation to students affective learning, cognition and motivation. The study results indicated that there is a statistically significant positive relationship between instructor immediacy and presence. Also, the linear combination of instructor immediacy and presence is a statistically significant predictor of students' affective learning, cognition and motivation. Blignaut and Trollip (2003) mention the significance of instructor "presence" in an online course and hypothesised that, in the online context, presence needs action. Also Oskoz (2013) concludes that instructor's presence is required for the best learning results. Ke (2010) points out the notions of power or authority, since students have identified instructors who demonstrated high presence online as the key to learning satisfaction. Therefore, online instructors are expected to skilfully orchestrate in online discussions. They should not dominate or ignore the online discussions. They should provide immediate and quick meaningful feedback, and monitor or support learners at an individual level. Also, Ke (2010) observes that a group of friends may dominate online discussions, thus intimidating others who are newcomers. This note highlights and questioned the ideal approach whereby participants should be divided into groups in online collaborative activities. However, Swan and Shih (2005) found a significant relationship between perceived social presence and satisfaction with online discussions. As such,

the perceived presence of instructors may be a more influential factor in determining student satisfaction than the perceived presence of peers.

While undertaking the activities relating to design and organisation, online instructors could contribute to social presence in many ways. A number of scholars argue that one way of influencing social presence development could be the design and administration of course content that is appropriate for a blend of individual and group activities, which is known as blended learning (Garrison & Vaughan, 2008; Garrison & Akyol, 2009; Garrison, 2011; Oskoz, 2013). According to Garrison and Vaughan (2008, p. 148), blended learning is “the organic integration of thoughtfully selected and complementary face-to-face and online approaches technologies”. Leppa et al. (2013, p. 388) define blended learning as “a mode of instruction in which a significant portion of learning takes place outside the classroom – usually but not necessarily online – replacing some in class time”. This can be achieved by repurposing materials so that there is room for online teacher commentaries, mini-lectures, personal insights, and customised views of content. Thus, teaching presence assigns the activities that learners will engage in. At this point, emphasis should be placed on those activities that enhance interactions and social cohesion among students as well as between students and their teachers, such as collaborative modes of communication (verbal and written) and a series of face-to-face and online courses that constitute a blended program of studies (Garrison & Akyol, 2009; Garrison, 2011). Oskoz (2013) examined the construction of a community of inquiry in a blended undergraduate course. She applied the same social presence coding

scheme developed by Rourke et al. (1999) in order to analyse four online discussions. The results indicate that the blended learning environment promoted different types of social interactions compared to those previously found exclusively in online discussions, with a lower presence of group cohesion and affective responses indicators. Oskoz (2013) suggests several reasons to explain these differences, including research methodology issues and the role of the instructor. Also, she assumes that the study participants were more concerned with the content of their message than with establishing a cohesive group because they did not need it since they already saw each other several times a week. So and Brush (2008) argue that since learners have the opportunity to socialise in the classroom in a blended learning context, they do not consider it an important need to comply with the norms of social interaction that are habitually required in online discussions.

It is obvious that much of the success of an online discussion depends on instructional design and organisation of the online learning course and how the online facilitator plays their role in planning and conducting the dialogue. There are numerous obtainable online learning systems. Instructors need to choose from the systems available and select those that will best meet the educational aims of the course. Besides, the instructor is responsible for providing students with organisational service through the provision of various tips and guidelines. Some of these guidelines relate to appropriate etiquette as well as the best ways of ensuring that the online medium is used effectively. For instance, by providing practical examples of how to use the quote and reply functions and how to repair communication breakdowns.



However, in order to enhance social presence, the online facilitator should encourage students to participate, expresses their feelings, generate ideas, link them, and summarise the discussions. I think the biggest aspect of satisfaction comes from how much the online facilitator cares about how the students do and, consequently, that he then uses his role to make sure the students do well. He should be always encouraging, and give plenty of positive feedback.

### **2.1.2 Aspects of facilitating discourse**

Facilitating discourse may be defined as the means through which students are continuously engaged in interactions that build upon the information supplied to them through course instructional materials. It enables and encourages the construction of personal meaning as well as shaping and confirming mutual meaning. It is a core pillar of teaching presence, and is of great importance in discussing issues of social presence in the social network environment (Garrison & Anderson, 2003; Garrison & Arbaugh, 2007; Garrison, 2011; Akyol & Garrison, 2013). Cleveland-Innes (2013) defines facilitation as “supportive action making something done easier or more readily accomplished” (p.400).

Swann (2010) emphasises the need to understand the teaching-learning process from the social construction perspective. In many models of online teaching, efforts are being made to promote the social construction perspective (Swann, 2010; Gunawardena, Lowe & Anderson, 1997; Salmon,

2000; Hammond, 1999). She argues that it may be particularly useful to discuss aspects of teaching presence in a manner that reflects the dialogical approach being adopted in all aspects of online facilitation. According to Swann (2010), encouraging the social construction approach is one of the ways through which the community of inquiry model can be extended to address the dialogical approach to online learning.

Shea, Vickers and Hayes (2010) point out that one of the core areas of inquiry is the role of instructor teaching presence on development of social presence within the online environment. Findings from the study by Bliss and Lawrence (2009) showed that there is a correlation between instructor activity and student participation rates, quality and quantity of posts generated by students, and the extent of threading. Indeed, it is sometimes difficult to establish what the productive efforts of the online instructor are like within an entire course. Most indicators of teaching presence take the form of asynchronous text-based discussions. According to Shea, Vickers and Hayes (2010), the most readily available pointers to the level of productivity are, in many cases, the main threaded discussions. One of the approaches used to determine this level of productivity is quantitative content analysis.

Online community of inquiry literatures suggest that teaching presence viewed as the essential role of the online instructor is a promising mechanism for developing the learning community in online environments (Shea, Li & Pickett, 2006). Facilitating discourse is first and foremost important for maintaining interest, engagement and motivation of students in active learning

in a social network environment. The task of facilitating discourse is required to maintain students' engagement and refers to focused and sustained deliberation that marks learning in a community of inquiry. This role is associated with sharing meaning, identifying areas of agreement and disagreement, and seeking to reach consensus and understanding. Therefore, facilitating discourse requires the instructor to review and comment upon student responses, the nature and timing of responses must be carefully considered. It is necessary to raise questions and make observations to move discussions in a desired direction, keep discussions moving efficiently, draw out inactive students, and limit the activities of dominating posters when they become detrimental to the learning of the group. The indicators that reflect discourse facilitation include the identification of areas of agreement and disagreement, seeking to reach consensus and understanding; encouraging, acknowledging, and reinforcing student contributions; setting the climate for learning, drawing in participants, prompting discussion, and assessing the efficacy of the process (Anderson et al., 2001; Shea et al., 2010; Garrison & Anderson, 2003; Garrison, 2011). More details about facilitating discourse indicators will be discussed and clarified in the research design and methodology chapter and the Appendix ( 2 ).

The vast majority of research that introduced the online community of inquiry framework, in particular the early researches by Anderson and Garrison, used computer conferencing transcripts and were conducted before the prevalence of social networks and smartphones. In the present day, I argue that in the social network environment, the line between formal and

informal environments, as far as facilitation of discourse is concerned, may be thin. Already, the online learning experience is said to be facilitated within a 'social network environment'. This assertion creates a mental image of the existence of an informal online learning experience, characterised by exciting social interactions among students as well as between students and the online instructor as part of the online community of inquiry. By being conversational and informal and by the instructor using slang and writing in an informal manner, students may become more motivated to engage in the online learning community.

The instructor operating in the social network environment has to support and encourage participation by all students. This role places him / her in a situation where he / she is able to model appropriate behaviours by encouraging student responses and comment upon them. In this process, the instructor is in a position to raise the alarm following less active participation. The instructor is also in a position to curtail effusive comments by students who may wish to dominate the virtual learning space. Also, in case of conflict, the online instructor has a responsibility to help students to come up with congruent linkages whenever two opinions that seem to be contradictory are expressed. Similarly, it is also helpful for students to be offered assistance in articulating shared understanding and consensus, even when they are implicit in discussions. Indeed, by identifying areas of agreement and disagreement, the instructor assists online learners in determining which areas need to be accorded most attention. Efforts to reach understanding and consensus also

enable learners to identify issues that may need to be emphasised even though they are implicitly stated in the discussion.

### **2.1.3 Aspects of direct instruction**

At the beginning, we must consider that matters of social presence and cognitive presence are interdependent. The relation between cognitive presence and social presence will be discussed later. However, the instructor is responsible for providing pedagogic leadership in a learning context. Cleveland-Innes (2013, p. 400) defines direct instruction as “supportive action explicitly identifying what must be learned”. In direct translation, instructors offer scholarly and intellectual leadership by sharing their knowledge of the subject matter with their students. The community of inquiry framework suggests seven indicators that reflect the direct instruction category: present content and questions, focus the discussion on specific issues, summarize the discussion, confirm understanding through assessment and explanatory feedback, diagnose misconceptions, respond to technical concerns and inject knowledge from diverse sources, such as textbooks, articles, the Internet or personal experiences. (Anderson et al., 2001; Garrison & Anderson, 2003; Garrison & Arbaugh, 2007; Garrison, 2011). More details about direct instruction indicators will be discussed and clarified in the research design and methodology chapter and in the Appendix ( 2 ).

According to Garrison (2011), the responsibilities for teaching in any learning environment are complex and multi-faceted. These responsibilities include being an expert in the subject matter, a designer of the educational

experience, a facilitator and a teacher. Indeed, the expectations of instructors and students in terms of the way content is communicated in the social network environment differ from those of the traditional classroom settings. For instance teaching in a social network environment, and an online learning environment generally, is influenced by the lack of close physical proximity between the instructor and the student and the absence of the non-verbal communication that occurs in the face-to-face settings of conventional education. There is also a limited amount of paralinguistic information transmitted, as compared to the traditional classroom settings. At the same time, the new flexible technologies embedded in the educational context provide extended opportunities and choice, connection and reflection. These facts challenge the instructor to establish, as well as communicate, the ideal climate for the online course that contributes to the development of social and cognitive presence within the online learning community.

The direct instruction aspect is related to the concepts of learner-centred and teacher-centred approaches (Conceição, 2007). In a teacher-centred approach, the teacher's role is to be the primary information giver and primary evaluator. Knowledge is transmitted from teacher to students, who passively receive the information. On the contrary, a learner-centred approach is based on the engagement of students who are actively involved by constructing knowledge through gathering and synthesising information and integrating it with the general skills of inquiry, communication, critical thinking and problem solving. In this approach, the teacher and students evaluate learning together and the teacher's role is to coach and facilitate. Indeed,

there is a commonly-held assumption that online learning leans more towards a learner-centred approach while classroom learning emphasises more the teacher-centred approach (Conceição, 2007; Garrison, 2011). This assumption aside, it is obvious that social presence development in these two contexts unfolds in very different ways. In a teacher-centred approach, students exercise a high degree of independence while in the learner-centred approach students are highly dependent on each other for success. In the latter scenario, learners may have difficulties differentiating issues that constitute an educational experience and those that do not.

According to Salmon (2011), the online instructor should be thought of as an 'e-moderator' whose role is simply to facilitate learning. She creates the impression that extensive expertise in the subject matter is not a necessity for one to qualify as an e-moderator. Anderson et al., (2001) argue that the main problem with this approach is that the online higher education students risk being given access to education that does not meet the threshold of high-quality professional education. Without any doubt, it is necessary for subject matter experts to participate actively in critical discourse facilitated through the social network environment. Direct instruction by the subject matter expert creates opportunities for students to be inspired by directing learners to the best sources of information and organizing activities that offer learners the opportunity to identify relevant content that fits into their personal contexts (Anderson et al., 2001). Indeed, aspects of direct instruction may require a knowledgeable instructor who manages the progression of the discussion in a collaborative and constructive manner and who also encourages and supports

students to gain an awareness of the inquiry process. The instructor's explicit guidance is always needed in all online learning contexts, including higher-education courses and online learning environments. Without such teaching presence, particularly direct instruction, learners simply become involved in what are termed 'serial monologues' that do not yield any benefits to the learners (Pawan, Paulus, Yalcin & Chang, 2003). According to Garrison (2011), scaffolding, which is a temporary support to develop higher cognitive skills, is an essential method that can be employed by online instructors in supporting learners to achieve intended higher-order learning experiences.

#### **2.1.4 Reflection**

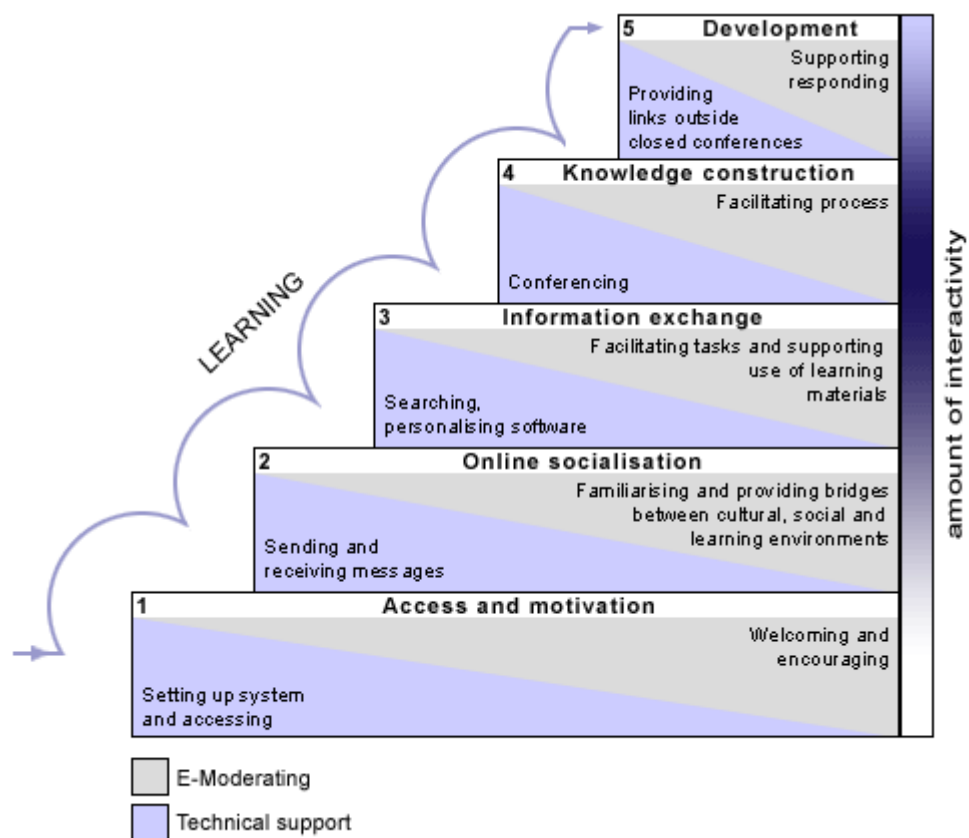
The community of inquiry model is broadly similar to a model for teaching and learning online through Computer Mediated Communication (CMC), a five-stage model (Salmon, 2011). Both models consider communication and engagement with interaction, which are ideal approaches to improve critical thinking and enhance the educational experience. Also, they maintain the vitality of learners' social interactions and teaching presence, in particular the role of the online instructor or the moderator in Salmon's model. Salmon (2011) suggests five stages of communication with increasing levels of cognitive thinking (see Figure 3).

1. Access and motivation
2. Online socialisation
3. Information exchange



4. Knowledge construction
5. Development

Each stage requires participants to master certain technical skills and each stage also calls for different e-moderating skills.



**Figure [ 3 ]** Model of teaching and learning online through CMC - a five-stage model. Adapted from (Salmon 2011, p. 32)

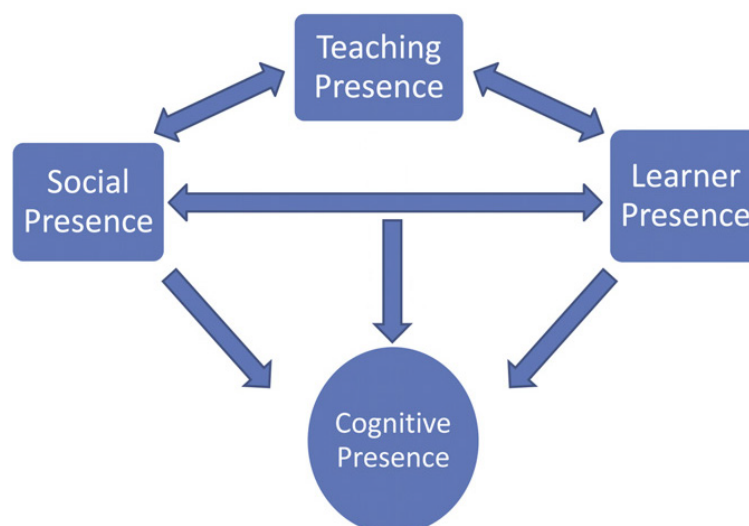
Stages One and Two concentrate on creating a community of learners. Stage One is in the vein of an instructional design and organisation category and part of the facilitating discourse category in the community of inquiry model. Stage Two is parallel to the social presence in the community of

inquiry model, where learners establish and share their online identities and then find others with whom to interact. Stages Three and Four are where learning can take place, which is broadly similar to cognitive presence in the community of inquiry model. Stage Three is comparable to the exploration category, where learners search for and share information relevant to the course. Stage Four is equivalent to the integration category, where learners engage in critical discourse that will shape understanding. They become more collaborative and write down their ideas and understanding of a topic. In stage Five, the development phase, learners need only little support beyond that already available. They develop and become responsible for their own learning process and start to challenge and criticise the basis of the system. As in the community of inquiry model, Salmon (2011) also introduces guidelines and examples for practice in the five-stage model that clarify the role of the instructor in each stage. However, I think the main significant difference between the two models is that the community of inquiry model is presented as a dynamic circular process and a comprehensive framework to guide the research and practice of online learning communities, whereas Salmon's model is presented as a hierarchical sequential steps model. In the community of inquiry model, when learners reach for the resolution stage, the fourth and final stages in the cognitive presence, they raise further questions and issues, triggering new cycles of inquiry and thereby encouraging continuous learning (Garrison & Anderson, 2003; Garrison, 2011). Conversely, in Stage Five of Salmon's model, learners explore how to integrate computer mediated communication into other forms of learning.

They are looking forward to more benefits from the system to help them achieve personal goals (Salmon, 2011).

However, social and teaching presence supports cognitive presence during both online discussions and activities. A primary goal of online discussions must be to promote critical thinking. It is clear that developing the learning process in the online learning environment, including a social network environment, is complex. In fact, the body of literature related to online learning values learner and instructor interactions fostered through online discussions. In line with the three elements of the community of inquiry framework, Shea and Bidjerano (2010) conducted a large-scale study involving 3165 participants online and from hybrid courses at 42 institutions. They examine the relationship between learner self-efficacy measures and their ratings of the quality of their learning in online learning environments. The study results indicate that the combination of social and teaching presences were predicted as being only a little better than 25% of cognitive presence. Shea and Bidjerano (2010) argue that community of inquiry framework could be enhanced through a fuller articulation of the roles of online learners. They suggest a modification version of the community of inquiry framework that integrates the influences of individual learner attributes on the learning process. They suggest a fourth element, which they called "learner presence," characterised as a combination of self-regulated learning and self-efficacy (See figure 4). Self-regulated learning is defined as "the degree to which students in collaborative online educational environments are metacognitively, motivationally, and behaviourally active participants in the

learning process” (Shea & Bidjerano, 2010, p.1723). With regards to self-efficacy, it emphasises the interface between learner motivation and cognition and can be defined as “a subjective judgment of one’s level of competence in executing certain behaviours or achieving certain outcomes in the future” (Ibid). Learners’ self-efficacy could be shaped by interpretation and reflection of various previous experiences and the vicarious experiences of successes and failures in a specific domain. Vicarious experiences are incidents such as interpretations of the experiences of others who have been successful or unsuccessful in performing comparable tasks. Besides, learners’ self-efficacy includes the development of the interpretation of psychological and emotional states. However, Shea and Bidjerano (2010) consider that combined learning, teaching and social presences predicted better than 75% of perceived cognitive presence in both blended and online learning environments. Certainly, all of these assumptions require further research.



**Figure [ 4 ]** Revised community of inquiry model

Adapted from (Shea and Bidjerano , 2010, p. 1727)

As indicated previously, the success of an online discussion depends on teaching presence, especially the course instructional design and organisation and the role of the instructor or the online facilitator. Without doubt, teaching presence is a significant factor in promoting learner engagement and interaction. One of the most crucial roles of teaching presence in the online learning environment is to enhance collaborative interactions among learners. Through collaborative interactions, social presence is enhanced. Therefore, the syllabus, and the online learning environment, should be designed in such a way that collaborative learning is encouraged. It is important for the instructor to give attention to proper methods whereby learners should be divided into groups in online collaborative activities. In addition, the syllabus and teaching presence should be established through a learner-centred approach. In this situation, discussions should give greater authority and responsibility to the learners, who are able to identify with the rest of the online class, communicate purposefully and develop effective relationships in such a way that their individual personalities are projected. Indeed, it is recommended for instructors to give learners the appropriate training and modelling for them to undertake these roles effectively.

The literature emphasises the position of the online facilitator, who plays a role no less important than that of the instructor in a traditional classroom context. Indeed, the online facilitator has a key role in reducing learner dropout from online activities. He / she has the responsibility for ensuring that learners do not feel a sense of isolation inherent in online

learning. The learners need to experience the feeling of engagement in interactive discussions. Thus, the core objective for the online facilitator is to assist learners in integrating and creating ideas through the regularity of participation by the online facilitator, such as by asking questions and posting encouraging comments to the learners. This could enhance learners' attendance in the online learning environment, which is a positive aspect in developing social and cognitive presence. Indeed, it is not necessary that the instructors become the online facilitators. The most important aspect of a positive and effective online learning community is that it assists in achieving the educational aims. For that reason, on occasion, expert learners or guest experts from outside the learning community may be more valuable as online facilitators.

## **2.2 Reasons why participants maintain or change their social presence level during the course**

Whether participants maintain or change their social presence in an online course depends first on the criteria and methods that are applied to the study participants' social presence level. As mentioned previously, social presence in the community of inquiry framework can be classified through a series of indicators that fit into the following categories: interpersonal communication / affective responses, open communication and group cohesion. The indicators representing interpersonal communication / affective responses; express emotions, use of humour and self-disclosure, while

continuing a thread, quoting from or referring explicitly to others' messages, expressing agreement or disagreement, asking questions, complimenting and expressing appreciation, which all represent open communication. Regarding the indicators of group cohesion category, they are vocatives, addresses or refer to the group using inclusive pronouns and phatics, salutations and greetings. The definitions for each indicator, as well as examples of each taken from the study data, are summarised in the Appendix ( 1 ).

According to Cleveland-Innes and Campbell (2012), learners' emotions occupy a large part of social presence indicators. They argue that the community of inquiry framework model provides a social and communal approach to the way emotive experience, thinking skills, mental acts and informal fallacies are integrated into an excellent approach for improving reasoning and judgment. Hence emotional aspects cannot be considered separate from the learning environment. This view is also shared by Lipman (2003), who adds that emotional expression is an integral part of maintaining online social presence. Indeed, aspects of teaching presence such as design and organisation have a far-reaching impact on learners' emotions. For example, when the instructions provided are unclear, online learners may experience anxiety. Learners also respond emotionally to cognitive issues such as the complexity of the content provided in learning materials and the level of success. They also give emotional responses when social issues are being addressed, for example during the communication process. In other words, the emotions disclosed during an online course are influenced a great

deal by teaching, social and cognitive presence (O'Regan, 2003; Cleveland-Innes & Campbell, 2012).

The emotions disclosed by learners during online learning may be positive or negative. For instance, learners may show joy, excitement and enthusiasm because of the element of flexibility that is provided in online learning. Their excitement may predominate particularly during the first few weeks of an online course. The learner may be contented that he or she has fulfilled all of the course requirements. They may also be excited at being a part of the emotionally charged environment in which online communication takes place. On the other hand, learners may also experience negative emotions such as fear and anxiety. In most cases, feelings of fear and anxiety are triggered by the unknown modes used by learners to engage in online learning. The demands of this new mode are different from those of the traditional classroom, particularly in terms of structure, technology and time management. In addition, participants in the social network environment sometimes feel alienated, and thereby feel the need for connectedness. As cited in the study by Cleveland-Innes and Campbell (2012), Weiss (2000, p. 3) declares "as an instructor, it's crucial that you set up the learning situation in a manner that arouses learners' feelings of security, well-being, and self-confidence. It's equally important to challenge them without threats, intimidation, or pressure".

In a study on emotional expression during online learning, Zembylas (2008) found out that, during the first few weeks, online students had



difficulties identifying satisfying methods of communication. In a study that applied qualitative methodology by using learners' monthly emotion journals and other interview approaches, the learners appeared unsure of the best way of initiating meaningful communication with both their instructor and their classmates. They also felt guilty about being unable to balance multiple responsibilities in the online learning environment. In reality, the online learning context may put learners in a position where they have to balance their professional, social and family lives, thus making it increasingly difficult for them to cope with the demands of online programs.

Delfino and Manca (2007) elaborate on the use of figurative language in the online learning environment by highlighting the various ways in which it can influence changes in social presence during the course. The study investigated how the learners in an online learning environment employed written language in a creative way through the spontaneous use of figurative language. The results indicate that figurative language was a means to express the social dimension either to refer to the self, feelings and emotions, or to conceptualize the components of the virtual learning context. In this study, figurative language was for students a crucial resource for creating reality out of their new virtual learning environment. In conclusion, Delfino and Manca (2007) stated that one of the most important future directions could entail investigating how figurative language production creates fruitful interaction between the cognitive and social spheres of online learning. According to Delfino and Manca (2007), the adoption of figurative language

seems to be related more to learner attitude, than to other factors such as educational background.

In all these respects, a crucial question is how emotional aspects could be impacted by design and organisation, known as aspects of facilitation, as direct instruction. In fact, there is a need for further research on how the community of inquiry as well as other pedagogical models can account for the overlap of various interactivities of all these aspects.

Cleveland-Innes and Campbell (2012) suggest a revision version of the community of inquiry model whereby, instead of expressing emotions in a situation where the “affective responses” component is embedded in social presence, there is a need for it to be made into an independent aspect of the community of inquiry model. They introduce the concept of emotional presence, which is defined as “the outward expression of emotion, affect, and feeling by individuals and among individuals in a community of inquiry, as they relate to and interact with the learning technology, course content, students, and the instructor” (Cleveland-Innes and Campbell, 2012, p. 283). In such a situation, the community of inquiry model would comprise of four presences instead of three.

Certainly, many factors determine whether participants maintain or change their social presence in online learning communities. For example, Schrage (1995) argued that technology media shape the way people relate to each other. Therefore, the type of technology used to create social presence

may also determine the extent to which online learners will retain that presence. Lomicka and Lord (2007) investigated the development of social presence in communities of language teachers at two universities. The study results point out that the characterization of social presence depends on the technological tool that is used to connect the virtual community. Indeed, numerous online instructors tend to design the structure and function of an online course based on the tools available within a learning management system, such as Blackboard, WebCT or Moodle. Subsequently, the learning management system used has a major influence in how learners and instructors are interacting in the online learning community. Usually, online learners are easily dissatisfied by instructors who use obsolete technologies during discussions. Newer technologies are emerging all the time. It is therefore imperative that instructors remain informed regarding the emergence of new Internet technologies for use in creating, publishing and distributing content in order to maintain social presence throughout the course. Dunlap and Lowenthal (2009, p. 129) argue that most learning management systems are “modeled after classroom settings with drop boxes, grade books, announcements, and so on. What tends to be missing is the just-in-time, and sometimes playful, interactions that happen before and after class, during a break, and when students and faculty bump into each other between class meetings”. In fact, classroom interactions like these have potential pedagogical values that can facilitate and strengthen interpersonal relationships between and among learners and faculty that enhance the learning community inside the classroom or in the online learning environment. Dunlap and Lowenthal (2009) claim that contact between

learners and instructors both in and outside of the class and instructors staying in touch with learners through formal and informal communication are crucial for learner engagement since it influences learner motivation and involvement and keeps on working.

According to Nippard and Murphy (2007) social presence is about how effectively one is able to project oneself in an effective manner within a medium. They argue that social presence exists when learners continually make sense of the bond that links them with the teacher. In the view of Nippard and Murphy (2007), determining the ways in which social presence is manifested by students is not all that difficult. Students manifest social presence in many ways; for instance, through complimenting cheers, expressions of dissatisfaction and the use of self-deprecation. A high frequency of these responses indicates that the level of social presence is rising. Although this is a simplistic view of social presence, it helps a great deal in creating a better understanding of the circumstances under which social presence may be maintained or changed. Nippard and Murphy (2007) conducted a study to explore how students and teachers manifest social presence in an online learning context. Data collection techniques relied on structured and unstructured observations and field notes. They concluded that there was a correlation between the choice of tool and providing affective, interactive and cohesive responses related to the social presence level. This view is similar to the suggestions by Schrage (1995) and Lomicka & Lord (2007).

Nevertheless, the study by Nippard and Murphy (2007) seems weak as it does not address the issue of social identity and its influence on the way social presence is expressed by students in the online learning environment. Rogers and Lea (2005) address the issue of social identity by pointing out that it is not appropriate for too much attention to be directed at personal identity. This is because whenever group members come together in a distributed online learning environment, the resulting collaboration and communication process may lead to a variety of identities relating to gender, work interests, nationality and organizational affiliation. They suggest that instead of focusing too much on personal identity, researchers should highlight the salient aspects of shared identity as a way of facilitating social presence. This form of thinking is based on the rationale that the norms adopted by the collaborating group are highly likely to be the ones that are finally adopted by members of the group. According to Rogers and Lea (2005), a salient social identity can be attained by means of the use of design and task interventions and the use of relatively simple, text-based computer mediated environments. However, Rogers and Lea (2005) claim that using complex technologies that offer increased cues to the interpersonal may be detrimental to the shared social identity.

In addition, it seems that participants' social presence level is changing with the passage of time. According to Gunawardena (1995) and Stein et al. (2007), learners' social presence increases as online discussion progresses. However, Stein et al. (2007) indicated that learners did not change their strategy for achieving resolution level (cognitive presence). Also, the learner

participants did not change the pattern of how they allocated their discussion time. Thus, Stein et al. (2007) concluded that time does not seem to influence how groups work through the practical inquiry model in this case. Akyol and Garrison (2008) found significant changes in teaching and social presence categories over time. In terms of social presence categories, according to Swan (2002) and Swan (2003), there is a change in the kinds of social presence indicators employed over time. She found that group cohesion indicators decreased as the course progressed, but, in contrast, open communication indicators increased. In terms of affective responses indicators, it remained at about the same level throughout the course.

Aragon (2003) introduced a strategy that assists in creating and maintaining learners' social presence within online environments. This strategy involved course designers, instructors and participants. He identified over ten different ways to create and sustain social presence levels in online courses, such as developing welcome messages from instructors, including student profiles by using a picture of the student and biography, posting introductions, sharing personal stories and experiences incorporating audio and video, striking up a conversation, giving frequent feedback, limiting class size, contributing to discussion boards, using humour and emoticons and allowing students to address the instructor.

In reviewing the literature, it appears that the main responsibility for creating social presence is placed on the instructors, particularly in terms of the instructors' manner and immediacy of response. Arbaugh and Hwang

(2006) and Baker (2010) realized that instructors who have well-established presence in online courses have developed consistent patterns of interaction, communicated accessibility, provided consistent and substantive feedback, moderated discussions effectively, and provided content expertise through discussion posts to restart stalled discussions.

Arnold, Ducate, Lomicka and Lord (2005) draw attention to the importance of the sort of online activity. They noted that tasks and questions that require learners to share personal information and previous experience lead to higher levels of affective and self-disclosure indicators than other tasks or questions. On the contrary, tasks and questions that require discussion are conducive to higher levels of reference to specific content of the discussion, and are indicators of agreement and disagreement. The task's effect on learners' interactions is also mentioned by Oskoz (2013) and Swan and Shih (2005).

### **2.3 The relationship between cognitive presence and social presence**

Indeed, it is difficult to discuss social presence in isolation from cognitive presence. As mentioned previously, social presence, as defined by the community of inquiry framework, has a critical role in the learning process and promoting cognitive presence. Garrison and Anderson (2003) declare that, "social presence is intimately connected to cognitive presence in that the

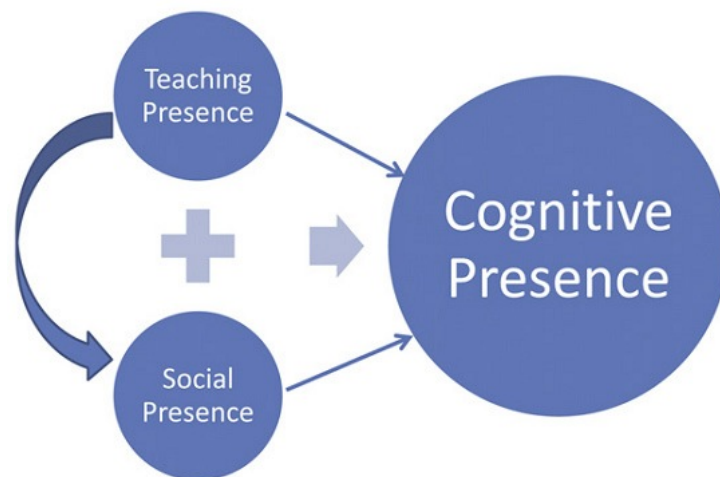
subject and purpose of much discourse is of cognitive nature and focused on understanding a specific curriculum” (Garrison & Anderson, 2003, p. 84). They consider that matters of social presence and cognitive presence are interdependent and inseparable. To clarify, when a learner decides to become involved in online discussion and responds to an individual’s message, expressing agreement / disagreement or asking questions, these add to both social presence and cognitive presence. In addition, cognitive interaction, which is crucial to the collaborative constructivist educational experience, is based on the social relationships and cohesion of the group (Garrison, 2011).

The literatures stressed that social presence without cognitive presence does not lead to creating the community of inquiry; also, it is difficult to develop critical discourse without creating social presence first (Garrison, 2011; Garrison & Anderson, 2003; Garrison & Vaughan, 2008; Tolu & Evans, 2013; Akyol & Garrison, 2013).

Garrison and Vaughan (2008) highlighted this view by stating: “social relationships create a sense of belonging, support freedom of expression, and sustain cohesiveness, but they do not structure and focus academic interests among students. Social interaction is insufficient to sustain a community of inquiry and achieve educational goals ... higher levels of learning inevitably require purposeful discourse to collaboratively construct, critically reflect, and confirm understanding. This is what is referred to as cognitive presence” p. 21.



However, Shea and Bidjerano (2009) find that cognitive presence could be predicted based on perceived teaching presence and social presence. Garrison, Cleveland-Innes and Fung (2010) used a survey instrument to explore the relation between the three presences in the community of inquiry framework. Also, the findings indicated that the cognitive presence factor could be predicted by the quality of teaching presence and social presence reported by learners in online courses. The results of both studies point out the dynamic and causal relationship between the three presences. It suggested that social presence developed as a function of instructor teaching presence and there is an indirect or mediating effect of social presence on cognitive presence. Figure [ 5 ] illuminates the relationship between the community of inquiry elements.



**Figure [ 5 ]** The relationship between teaching, social, and cognitive presences. Adapted from adapted from (Shea and Bidjerano , 2010, p. 1723)

Shea et al. (2010) employed social network analysis and quantitative content analysis to examine all components of the community of inquiry. The results concluded complex relationships between these variables that have implications for the development of higher order thinking and meaningful learning in online environments. The researchers suggest that the social presence construct is crucial to understanding online learning and requires additional specification and further investigation.

The results of a recent study by Pellas, Peroutseas and Kazanidis (2013) that seeks to explore the correlations that emerged between presence indicators - cognitive, social and teaching - in a virtual community of inquiry, indicate that social presence is significantly correlated with the cognitive presence and the teaching presence. Furthermore, the researchers concluded that the interaction among participants seems to be directly correlated with the cognitive presence by determining the exploration, collaboration, teaching plan organization and construction knowledge from community members.

On the other hand, Shea and Bidjerano (2008) found that social presence does not predict learner satisfaction. In contrast, the results indicate the relative importance of instructional design and organization to the prediction of online satisfaction. This consequence opens a discussion regarding the role of social presence in asynchronous online higher education. Annand (2011) challenges the community of inquiry framework. He reviews, analyses and interprets the methodology and results of the numerous community of inquiry studies, in particular, the validity and function of social

presence construct. He concludes that, “the framework derived from this limited evidence has overstated the effects of sustained collaboration on the construct of social presence. This in turn inappropriately magnified the effect of social presence on cognitive presence” (Annand, 2011, p. 52). According to Annand’s (2011) viewpoint, social presence does not appear to have an essential effect on cognitive presence. He argues that higher-order cognition may be achieved through wide and varied combinations of learner-teacher, learner-content and learner-learner interaction. He goes on to assert that appropriately structured learning materials, timely, non-contiguous, one-on-one instructor-learner communication, and a teaching focus that enhances individual learner attributes and effort may be the best instructions for successful online learning in higher education.

Despite extensive studies, these different conclusions are questions regarding the stability of the categories of the community of inquiry framework. It seems that further research is required to better understand how social presence evolves in the online learning community.

## **2.4 Concluding summary of the literature**

This chapter presented and discussed how teaching presence impacts upon the way social presence is created and sustained. It also was clarified how teaching presence in the online learning environment within a higher education context facilitates progress in social presence. In fact, many

researchers have carried out numerous studies on the influence of all the three elements of teaching presence; namely instructional design and organisation, direct instruction, and facilitating discourse. These elements have been proven to play a critical role in ensuring that all communication is structured in a manner that promotes social presence. The studies reviewed have shown a correlation between instructor activity and student participation rates, the quality and quantity of posts generated by students, and the extent of threading. Nevertheless, in the present literature review, there are many instances where declarations and assertions have been supported with enough empirical evidence. The main challenge in this regard is how to determine the relationship between perceptions of the value of social presence and the actual contribution of social perception to learning outcomes.

Several conclusions can be deduced from this literature review. For instance, the process of constructing meaning is a complicated one that involves both teaching and social presence. The teaching presence plays a vital role in the development of social presence. Through instructional design, direct instruction and facilitation, instructors contribute in many ways to the development of social presence. The power of the online instructor over the development of social presence is evident in his / her role in encouraging students to make contributions as well as acknowledging and reinforcing these contributions. In addition, the way learning activities are designed greatly influences the development of cognitive presence. However, there are

questions and arguments regarding the stability of the community of inquiry model and I believe my study may enrich these debates.

The next chapter concentrates on the research design and methodology. It will explain the research approach, how the study was conducted, which types of data were gathered and why. Reflection upon ethical issues, validity and reliability are also discussed in the next chapter.

## Chapter 3: Research design and methodology

### ❖ Introduction

This study explores and aims to understand the nature of the teaching presence and social presence. It examines the role of teaching presence in social presence development. As I described in the previous chapter, theoretically, social presence is a mediating variable between teaching presence and cognitive presence. Teaching presence directly influences the creation and sustainability of social presence (Garrison, Cleveland-Innes and Fung, 2010). Social presence progresses from open communication to cohesion and then to personal connections (Garrison and Arbaugh, 2007). The specific aim of the study is to understand the influence of different types of teaching presence on students' development of social presence. This study hopes to provide a more comprehensive picture of developing students' social presence over changing teaching presence in the social network environment in a Kuwaiti higher education context. In order to achieve the purpose of this study, the following research questions are explored:

1- How does a students' sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?

- a. Does a students' sense of social presence (affective responses, open communication and group cohesion) change as a result of a different teaching presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?
- b. Why do participants maintain or change their social presence level during the course?

2- How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context within the social network environment?

This chapter presents the research design and methodology that formed the basis of the main study in this thesis. It explains how this study was conducted, which types of data were gathered and why. This chapter is organised in the following sequence: firstly there will be a general description of the study context. Secondly, there will be general overview of the methodology. Thirdly, there will be discussion of the research approach and the experimental research design. Then, there will be discussion of the development of implementation of the study. There will then be discussion of methods of data collection, which includes the message analysis, interviews and focus group interviews. Reflection upon ethical issues, validity and reliability are also discussed in this chapter.

## 3.1 General description of the study context

### 3.1.1 Kuwait's location and a brief historical background

Kuwait is a hot and dry desert country, located in the Middle East region, bordered to the north and northwest by the Republic of Iraq, the Kingdom of Saudi Arabia to the south and southwest, and the Arabian Gulf to the east, separating Kuwait from the Islamic Republic of Iran. The country occupies a total area of 17,818 square kilometres with a population of approximately 3,065 million according to the 2011 census. The Kuwaitis comprise only 35.6% of the whole population; the rest are foreign nationals and comprise 64.4% (Kuwait Central Statistical Bureau, 2013). Oil constitutes the main source of income in the Kuwaiti economy. According to OPEC Annual Statistical Bulletin (2013), Kuwait owns 101.50 billion barrels of proven crude oil reserves.

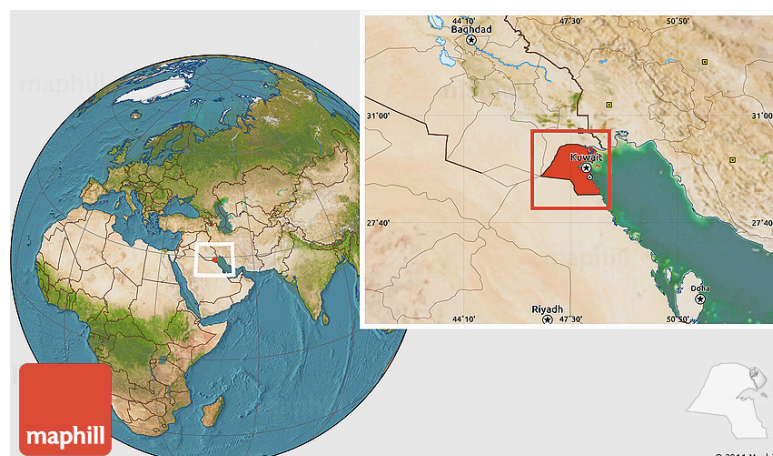


Figure [ 6 ] Map of Kuwait



In fact, it is quite difficult to indicate a specific date for the very beginning of the foundation of Kuwait City due to the lack of historical references or evidence that gives a clear cut date. According to Al-Diwan Al-Amiri website (2014), a letter from Sheikh Mubarak, the Amir of Kuwait (1896-1915), to the British Resident Representatives in the Gulf region proclaimed the establishment of Kuwait City was in 1613 A.D. However, other historians, such as Al-Qenae (1968), Al-Rasheed (1978) and Abu Hakima (1984), mention different dates. Whatever the case may be, it is most likely that Kuwait was a small village, which some Bedouin fishermen took as a dwelling sometime during the seventeenth century. Those people settled around the Kut (fort), which was founded by Bani Khalid therein. Thereafter, groups of Arab tribes came and settled in this village from Najd, in the central area of the Arab Peninsula, led by the Al-Sabah family, the present ruling family in Kuwait. In the beginning, Al-Sabah and their followers were under the domination of Bani Khalid, the strongest Arab tribe in the area at that period. However, the power of this tribe began to gradually weaken due to their internal disputes, and the continuous attacks directed at them by the Saudis between 1785 and 1795, which expedited their fall, and thereby Kuwait completely got rid of their control. In 1752, Sheikh Sabah Bin Jaber was selected as the governor of Kuwait by its inhabitants and the small community at that time. It was said that the main reason for his selection was that his father was the leader of his people since they were in Najd. At the end of 19th century, in order to protect Kuwait from the ambitions and interference of the Othmanic authorities, the new Amir of Kuwait, Sheikh

Mubarak (1896-1915), forwarded an application to the British Resident Representative in the Arabian Gulf to put Kuwait under Great Britain's protection. On the 23rd January 1899, Sheikh Mubarak signed a strategic protection treaty with Great Britain and Kuwait came under British protection (CRSK, 1994; Al-Kandari et al., 2003; Al-Diwan Al-Amiri, 2014). Indeed, Kuwaiti-British relations had witnessed significant growth, particularly in the economic and cultural fields in addition, of course, to political and military ties, especially after the discovery of oil in Kuwait at the end of the third decade of the twentieth century. In 1961, Kuwait declared its independence from the United Kingdom and joined the League of Arab States and the United Nations. Politically, Kuwait is a constitutional monarchy under the reign of the Al-Sabah royal family. The ruling system in Kuwait is democratic and based on the split between the legislative, executive and judicial authorities, which exercise the necessary cooperation pursuant to the provisions of the constitution. Kuwait has the oldest parliamentary system in the region and sovereignty resides in the people, the source of all powers. The head of state is the Amir of Kuwait, who exercises his power through his chosen Prime Minister. Not long ago, the Prime Minister himself was the Crown Prince, but now the title has been transferred to another member of the ruling family.

### **3.1.2 Development of Public Education in the State of Kuwait**

Until the beginning of the twentieth century, like other Emirates in the Arabian Peninsula, education in Kuwait was restricted to only teaching lessons on the Holy Quran and learning it by heart, along with Arabic language, reading and writing, and the principles of accounting. This process was taking place in Kuttab, which was similar to small community schools. The lessons were conducted by religious men and women. The teacher of males was called the Mullah or Mutawaa while that of females was called the Mullayah or Mutawaah. This education system had no age limit for beginning or completing. Once the student was able to read and write, they would leave to pursue their own interests (Al-Aidarous, 2002).

In 1911, the first modern educational institution was established in Kuwait under the name of Al-Mubarkiya school. Although Al-Mubarkiya school was founded as a private school funded by a collective effort of Kuwaiti merchants and nominal fees were collected from the students, it is considered the first public school in Kuwait. After almost a decade, a second school was opened, Al-Ahmadyah School. In 1936, the formal educational system in Kuwait became more serious when the Council of Knowledge, which was a kind of small Ministry of Education, was established to manage and supervise the public schools in the state. The number of schools at that time was two elementary schools for boys. During the academic year 1937/1938, the first elementary school for girls was established. In the same year, the first secondary school for boys was founded. Indeed, primary and secondary

education was not completely determined until 1942 when many schools were opened and more teachers were brought from Palestine, Egypt and Syria. In 1953, the first modern secondary school for males was founded and was called Al-Shwaikh School. Likewise, in the same year, Al-Murgab became the first secondary school for females. In the academic year 1954/1955, the first two kindergartens in Kuwait were opened, namely Al-Mahallab and Al-Tareq, receiving children (males and females) from the age of 4 years old. Furthermore, in order to prepare young Kuwaitis for the technical labour market, the Vocational Secondary School was established in 1954. In 1955, the first special needs school for blind pupils was established under the name of the Al-Noor School. Indeed, the number of public schools steadily rose, from a handful to 92 schools in 1957. It was not until 1956 that the education system was divided into three stages: elementary, intermediate and secondary school. The duration of study in each stage was four years, in addition to the two years of kindergarten. However, these education stages were changed in 2004 to two years for kindergarten schools, five years for primary schools, four years for intermediate schools and three years for secondary schools. In 1961, the first Kuwaiti cabinet was founded and the Ministry of Knowledge replaced the Council of Knowledge. In 1965, the name was changed to the Ministry of Education. Indeed, the sixties saw the further development and enhancement of the public education system in Kuwait and the number of schools opening increased dramatically. In pursuance of a continuous educational process, Kuwait University was inaugurated in 1966. (Al-Aidarous, 2002; Al-Mgadi, 2008; Al-Kandari et al., 2003; Kuwait Ministry of Education, 2012).

### **3.1.3 Current educational system in the State of Kuwait**

According to Articles [13] and [40] of the Kuwait Constitution (1962), education is compulsory and free of charge.

“Education is a fundamental requisite for the progress of society, assured and promoted by the State” Article [13].

“Education is a right for Kuwaitis, guaranteed by the State in accordance with law and within the limits of public policy and morals. Education in its preliminary stages is compulsory and free in accordance with the law.

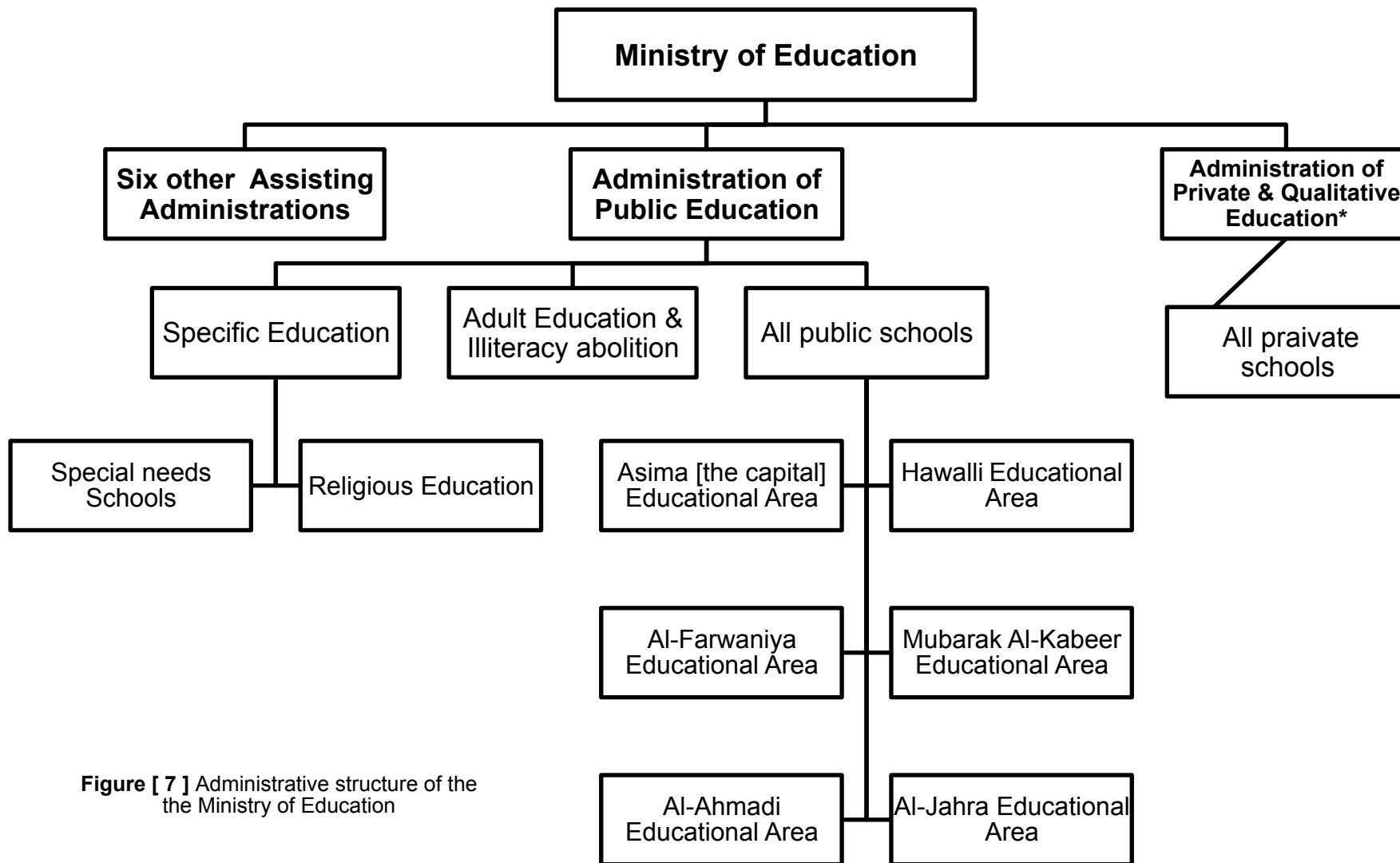
The law lays down the necessary plan to eliminate illiteracy.

The State devotes particular care to the physical, moral, and mental development of the youth” Article [40].

(Kuwait Constitution, 1962)

In addition to this, scholarships are granted to graduates from the secondary or university stage to follow their undergraduate or postgraduate studies in the United States, United Kingdom and other countries around the world. However, the Ministry of Education in Kuwait administers all sorts of schools via two main administrative departments: the Administration of Public Education and the Administration of Private and Qualitative Education, supported by six other assisting administrations. All private schools fall under the Administration of Private and Qualitative Education, while the

Administration of Public Education manages adult education and the abolition of illiteracy, religious education schools, special needs schools and all government schools. The Administration of Public Education supervises and administers government schools in six educational areas that are geographically distributed all over Kuwait. The general structure of education is overseen by the Ministry of Education in the state of Kuwait and is explained in Figure [ 7 ].



**Figure [ 7 ]** Administrative structure of the the Ministry of Education

The general education in Kuwait consists of three educational stages: the elementary, intermediate and secondary schools, which are preceded by the kindergarten stage. The only obligatory ones are the elementary and intermediate stages. Children at the age of 3½ join the kindergarten stage and the term of study is two years. The elementary school term is five years, from the age of six up to the age of eleven. The intermediate school stage term is four years from the age of eleven up to fifteen. The secondary school term is three years from the age of fifteen up to eighteen. It is worth mentioning that public schools are only available for Kuwaiti citizens and that non-Kuwaiti students are not allowed to use public education except in some cases, such as their parent is a university lecturer, a public school teacher, a doctor or a diplomat. Otherwise, non-Kuwaiti students have to study in private schools (Ministry of Education, 2012b). The following tables show the number of schools, teachers and students in Kuwait from 2003 up to 2013.



<b>Schools and Classes in Government and Private Schools</b>								
2013/2012 - 2004/2003								
Year	Literacy and Adult Education		Vocational Education		General Education			
	Class-rooms	Schools	Class-rooms	Schools	*Private		Government	
					Class-rooms	Schools	Class-rooms	Schools
2003/2004	381	72	363	40	4,821	379	10,313	650
2004/2005	437	75	409	44	5,177	409	11,306	644
2005/2006	449	74	332	46	5,879	453	11,632	664
2006/2007	468	73	385	44	5,965	445	12,323	703
2007/2008	535	81	402	40	6,429	451	13,195	742
2008/2009	591	87	382	39	6,526	444	14,401	773
2009/2010	659	88	395	41	6,868	474	14,781	779
2010/2011	722	89	378	40	7,014	460	14,542	788
2011/2012	745	93	371	40	7,382	475	14,986	794
2012/2013	749	93	384	40	7,786	488	15,107	797

\* Not Include Schools and Classes of Special Needs .

**Table [ 2 ]** Schools and classes in government and private schools  
Adapted from (Central Statistical Bureau, 2013, p. 324)

<b>Teachers and Students in Government and Private Schools</b>								
2013/2012 - 2004/2003								
Year	Literacy and Adult Education		Vocational Education		General Education			
	Students	Teachers	Students	Teachers	*Private		Government	
					Students	Teachers	Students	Teachers
2003/2004	11,270	1,553	4,991	1,234	145,534	8,310	332,223	33,204
2004/2005	12,570	1,440	4,913	1,310	155,773	9,440	331,555	36,175
2005/2006	16,096	2,585	4,324	1,359	165,550	9,649	335,888	40,026
2006/2007	17,861	2,001	4,863	1,571	177,862	10,362	340,999	43,029
2007/2008	21,699	2,376	4,662	1,700	181,181	11,261	343,416	44,906
2008/2009	18,996	2,821	4,768	1,765	191,357	11,273	343,782	50,570
2009/2010	24,888	3,110	4,645	1,937	198,144	11,874	347,422	52,719
2010/2011	26,785	3,436	4,744	1,814	209,867	12,554	353,327	53,960
2011/2012	27,900	3,545	4,570	1,984	224,268	13,029	357,273	57,042
2012/2013	25,608	3,528	4,551	2,045	235,739	13,941	358,475	58,869

\* Not Include Schools and Classes of Special Needs .

**Table [ 3 ]** Teachers and students in government and private schools  
Adapted from (Central Statistical Bureau, 2013, p. 324)

### **3.1.4 Higher Education in the State of Kuwait**

Higher education in Kuwait is under the supervision of the Ministry of Higher Education and is offered by Kuwait University, the Public Authority of Applied Education and Training (PAAET) and several private sector universities. In addition, the Kuwait Government offers scholarships for Kuwaiti students to study undergraduate and postgraduate stages abroad. It should be noted that public Higher Education institutions are only available for Kuwaiti nationals and that non-Kuwaiti students are allowed to study in these institutions only in accordance with strict conditions. Otherwise, non-Kuwaitis have to study in private sector universities.

Kuwait University was the first university in the State of Kuwait and was established in 1966, under Act number 29/1966. At the time of its establishment it consisted of two colleges: the College of Science and Arts and Education and the College for Women. In April 1967 an Amiri decree was issued to establish two more colleges, which were the College of Law and Sharia and the College of Commerce and Economy and Political sciences. Since then, the number of colleges has been increasing and nowadays the university consists of 16 colleges and various general services and work centres. The university awards Bachelors', Masters' degrees and PhD degrees. The number of students enrolled at Kuwait University in 2013/ 2014 is 39,000 students, of which 87.3% are Kuwaiti nationals (Kuwait University, 2014).

In terms of Public Authority of Applied Education and Training (PAAET), it was established in Kuwait on 28 December 1982 by law number 63. It is an autonomous educational body supervising technical and vocational training. The main aim of PAAET is to develop the national technical manpower and to meet the human resource needs of the country. It mainly grants Diplomas although it also offers a few Bachelor degrees. The PAAET consists of 13 colleges and institutes and several general services and work centres. Indeed, some of these institutes were founded independently in the 1950s and 1960s to prepare the manpower needed for the oil industry. However, the State found it essential to establish a central body to supervise and coordinate the activities of these numerous institutes. In 1972, the Technical and Vocational Education Department was established to supervise technical and vocational education, whereas the Central Training Department was established to supervise training centres. The technical and vocational education institutes and training centres had evolved under these two departments and became the nucleus of PAAET colleges and institutes (PAAET, 2014). Currently, the number of students enrolled at PAAET in 2012/2013 is approximately 38,857 students, of which 83.8% are Kuwaiti nationals (Central Statistical Bureau, 2013). The PAAET has two sectors: applied education and training. The applied education sector includes five colleges, which offer several majors:

1. College of Basic Education (Bachelor's degree)
2. College of Health Sciences (Bachelor's degree)
3. College of Nursing (Bachelor's degree)

4. College of Technological Studies (Diploma degree)
5. College of Business Studies (Diploma degree)

In addition to the five colleges, there are a number of training institutes which mainly grants Diplomas, such as

1. High Institute of Telecommunication and Navigation.
2. High Institute of Energy.
3. Secretary and Office Administration Institute.
4. Tourism, Beautification and Fashion Institute.
5. Industrial Training Institute.
6. Construction Training Institute.
7. Vocational Training Institute
8. Nursing Institute.
9. Courses for Special Purposes

It is worth mentioning that the parliament passed a law according to which two of the PAAET colleges, the College of Basic Education and the College of Health Sciences, are to be the nucleus of the establishment of a new public university called Jaber Al-Ahmad University. However, the law has not been implemented yet.

## 3.2 Methodology

The methodology is “the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes” (Crotty, 1998, p.3). Methodology aims to describe, evaluate and justify the use of particular methods and assist readers to understand the research process (Wellington, 2000). Cohen, Manion and Morrison (2007) define methods as a “range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction” (p.47). In spite of this, there are many different research methodologies and methods that can be adopted to investigate the research questions, and the appropriateness of the methodology and methods is determined by the type of information a researcher aims to obtain from a study. Tashakkori and Teddlie (1998) emphasise that the methods must follow the research questions and the focus should be on the research questions rather than methods or paradigms. They maintain that researchers are free to use the methods most appropriate to answering research questions and the best method is the one that answers these questions most efficiently and with foremost inference quality. Hence, in the process of searching for an appropriate methodology and methods to investigate my research questions, I considered diverse research methodologies and methods that have been used previously to study community of inquiry elements.

Some argue that there are two major research paradigms or models often used in educational research: positivist and interpretative research paradigms (Tashakkori and Teddlie, 1998; Creswell, 1994; Creswell, 2003; Pring, 2004). A paradigm is “a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done and how results should be interpreted” (Bryman, 2008, p. 605). The positivist paradigm is also known as the quantitative and scientific paradigm and is usually associated with quantitative strategies and methods such as surveys, experiments, closed-ended questions and numerical data. Meanwhile the interpretative paradigm is usually associated with qualitative strategies and methods such as ethnography, case study, text and open-ended questions.

Generally, quantitative researchers intend to test a theory or hypotheses, whereas qualitative researchers often intend to establish or develop a theory. The quantitative approach holds that the research problem develops from the literature and the problem is best addressed and explained by understanding what factors or variables influence an outcome. This research approach tests hypotheses, seeks cause and effect relationships and believes that there are some lawful reasonably stable relationships among social phenomena. The qualitative approach, on the other hand, tends to be used when a research problem needs to be explored since little information exists on the research topic. The qualitative approach seeks an in-depth understanding of social phenomena and believes that all entities simultaneously shape each other. Thus, it is impossible to distinguish causes

from effects. The quantitative approach maintains that a researcher should remain distant and independent of that which is researched. It assumes that the researcher views reality as 'objective', 'out there' and independent of the researcher; something can be measured objectively by using an instrument. The researcher needs to develop standardised measuring methods to fit the broad views of participants into a limited number of predetermined response categories to which numbers are assigned. In contrast, the qualitative approach maintains that the researcher should minimise the distance between him or herself and those being researched and interact with them. The qualitative approach holds that reality is constructed by the individuals involved in a research situation, such as the researcher, the individuals being investigated and the reader. Every individual has their own view on what they perceive reality to be. Thus, we could say that multiple realities exist in any given situation (Bryman, 2008; Cohen et al., 2007; Tashakkori and Teddlie, 1998; Creswell, 1994; Creswell, 2003).

Both research paradigms are very rich and have ebullient supporters who believe their paradigms to be ideal for research. Indeed, both research paradigms have advantages and disadvantages. Johnson and Onwuegbuzie (2004) list a number of strengths and weaknesses of each paradigm. For decades, the advocates of quantitative and qualitative paradigms have debated over the superiority of these two major social science research paradigms. Tashakkori and Teddlie (1998) have described this debate as "paradigm wars". Purists believe that qualitative and quantitative research paradigms, including their associated methods, cannot and should not be

mixed. As cited in the study by Johnson and Onwuegbuzie (2004), Guba (1990, p.81), a leading qualitative purist, claims “accommodation between paradigms is impossible ... we are led to vastly diverse, disparate, and totally antithetical ends”. However, recently the paradigm wars have become part of history, as support for a mixed methods approach to research has emerged strongly and numerous researchers integrate quantitative and qualitative research within a single project. Crotty (1998) argues that the distinction between qualitative research and quantitative research does not arise at the level of theoretical perspective. It arises at the level of methods. He states that research can be qualitative or quantitative, or both qualitative and quantitative, without any dilemma. Also, he states that “objectivity and subjectivity need to be brought together and held together indissolubly” (Crotty, 1998, p.44). Johnson and Harris (2002) declare “the choice of predominantly qualitative or quantitative research design is then a matter of which is appropriate in the light of the research question being asked.... It is important to recognise that quantitative and qualitative research methods need not live in total isolation from each other. The two approaches should not be seen as discrete either/or options. They can be viewed as labels that describe two ends of a continuum. The two methodologies can complement each other” (p.100).

The mixed methods approach uses the advantages of both qualitative and quantitative paradigms. The researchers who adopt this approach are concerned with application – ‘what works’ – and solutions to problems (Patton, 1990). Tashakkori and Teddlie (1998) define mixed methods studies as “studies that are products of the pragmatist paradigm and that combine the



qualitative and quantitative approaches within different phases of the research process” (p.19).

Pragmatic researchers would not privilege any one methodology over another. They argue that both science and constructivism offer different sets of tools for investigating different aspects of the world. They are a rationale for non-ideological, compromising, reformist muddling-through (Badley, 2003). The main idea of pragmatism is that “the meaning of any concept is determined by its practical implications; and that the truth of any judgment is determined in and through practical activity, whether in the context of science or in life more generally” (Lewis-Beck, Bryman, & Liao, 2004). Therefore, the pragmatic paradigm is driven by anticipated consequences. It seeks to clarify meanings and looks to consequences. The choices about how to go about it are conditioned by where we want to go in the broadest of senses. Pragmatic researchers do not pretend to have an answer. They deny foundationalism, the view that grounded meaning and truth can be determined once and for all (Cherryholmes, 1992). They believe that they cannot deal in certainties but can only offer the tentative, the possible and the suggested (Badley, 2003).

Greene, Caracelli, and Graham, (1989) reviewed 57 mixed methods studies and concluded that mixed methods have five purposes:

1- Triangulation: seeking convergence, corroboration and correspondence of results from the different methods.

2- Complementarity: seeking elaboration, enhancement and clarification of the results from one method with the results from the other method.

3- Development: seeking to use the results from one method to help develop or inform the other method.

4- Initiation: discovering paradox and contradiction, new perspectives of frameworks, the recasting of questions or results from one method with questions or results from the other method.

5- Expansion: seeking to extend the breadth and range of inquiry by using different methods for different inquiry components.

The mixed methods approach can be conducted as parallel/simultaneous or sequential studies (Tashakkori and Teddlie, 1998; Creswell, 1994). In parallel / simultaneous mixed method designs, “the quantitative and qualitative data are collected at the same time and analyzed in a complementary manner” (Tashakkori and Teddlie, 1998, p.47). The results of the quantitative phase would be reported separately and not essentially relate to or confirm the results from the qualitative phase. In sequential mixed method designs, “the researcher conducts a qualitative phase of a study and then separate quantitative phase or vice versa” (Tashakkori and Teddlie, 1998, p.46). The researcher uses the first phase essential for planning the second phase. Creswell (1994) called this design a two-phase design. Creswell (2003) identified three sequential strategies: sequential explanatory strategy, sequential exploratory strategy and sequential transformative strategy. In sequential explanatory strategy, the researcher starts with quantitative data collection and analysis, which is

followed by the collection and analysis of qualitative data. This strategy is used to explain and interpret relationships and to examine surprising results in more detail. In contrast, sequential exploratory strategy is used to explore the phenomenon and to build and test a new instrument. This strategy starts with qualitative data collection and analysis on a relatively unexplored topic. It is then followed by the collection and analysis of quantitative data. Both strategies may or may not have a specific theoretical perspective and often the researcher uses the second phase of the study to assist in explaining and interpreting the findings of the first phase. The sequential transformative strategy, on the other hand, has a theoretical perspective, such as a conceptual framework or specific ideology. The purpose of theoretical perspective is to guide the study. The sequential transformative strategy also has two distinct data collection phases, one following the other. However, in this strategy either the quantitative phase or the qualitative phase may be used first. The purpose of the third strategy is to “employ the methods that will best serve the theoretical perspective of the researcher” (Creswell, 2003, p.216). However, each strategy has strengths and weaknesses.

According to Tashakkori and Teddlie (1998), there are three models of mixed methods design:

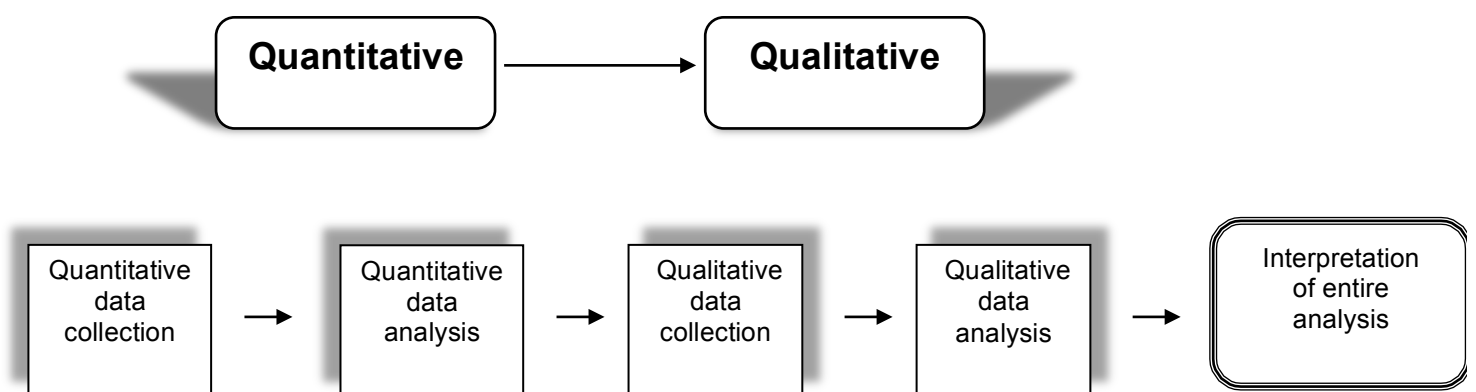
- 1- Equivalent status designs: sequential and parallel / simultaneous
- 2- Dominant / less dominant design: sequential and parallel/simultaneous
- 3- Designs with multilevel use approaches

In equivalent status mixed methods design, the researcher “conducts a study using both the quantitative and qualitative approaches about equally to understand the phenomenon under study” (Tashakkori and Teddlie, 1998, p.44). In dominant / less dominant design, “the researcher presents the study within a single, dominant paradigm with one small component of the overall study drawn from the alternative paradigm” (Cresswell, 1994, p.177). Meanwhile in mixed methodology design, the researcher would “mix aspects of the qualitative and quantitative paradigm at all or many methodological steps” (Cresswell, 1994, p.178). Each model has advantages and disadvantages.

In reality, the mixed methods approach is challenging and complex. According to Wall et al. (2013), the mixed methods approach could produce contradiction, ambiguity and cognitive dissonance, especially if the approach is conducted without clear strategy as to how it can be combined to achieve the intentions of the research. Wall et al. (2013) emphasise “it is important to note that unless some focus or strategy is applied to the combination of qualitative and quantitative analyses, the aspects of potential triangulation and complementarity could be missed” (p. 19). They recommend a mixed methods analysis phase rather than a mixed methods process starting from the research question and data collection.

### 3.3 My research approach

While I was developing my research design, I was inspired by the concept of consequences and solutions problems. This study uses the equivalent status mixed methods design to answer research questions. The sequential explanatory strategy is embedded within an applied quasi-experimental approach (see Figure 8). Quantitative data is collected and analysed, then followed by the collection and analysis of qualitative data. In the first phase, I used message analysis to reveal the level of social presence in an online community and to develop stimulated recall interview questions. I converted students' contributions to online discussion forums into quantitative data through a content analysis approach. A content analysis approach produces numerical findings that contribute to representing students' levels of social presence. There was then a combination of interviews and focus group interviews. Finally, the data from each method were triangulated. The definition and justification for each method will be discussed later.



**Figure [ 8 ]** Sequential explanatory design, adapted from Creswell (2003, p.213)

Indeed, I recognise that all methodologies and methods have some possible limitations. My aim was to make use of the advantages of both qualitative and quantitative paradigms. I think the mixed methods approach allows me to address a research problem using varied methods that have overcome the weaknesses of each method and complementary strengths. Also, the combination of more methods can achieve greater validity. Many researchers suggest applying the mixed methods approach to study the community of inquiry framework (Swan & Shih, 2005; Garrison & Arbaugh, 2007; Ke, 2010; Garrison, 2011; Diaz et al., 2010). The mixed methods approach offers better understanding of the concept being tested or explored by revealing more information than could have been gleaned through one approach alone. Two phases of the sequential explanatory strategy could provide a more comprehensive picture of developing students' social presence. Quantitative and qualitative data are used to obtain varied perspectives. In the first phase, the quantitative research question addresses the relation between students' sense of social presence and different teaching presence. However, the limitation of the quantitative approach is that it does not reveal much detailed insight into individual social presence. Hence, the qualitative phase is used to explain and interpret the results of the quantitative phase and explore participants' perspectives. I used the information collected in the first phase to develop second-phase instruments: interview questions. Stimulated recall interviews and focus group interviews allow the researcher to understand students' experience in an online community.

### **3.4 Experimental research design**

In order to improve the community of inquiry framework and to examine the relationship between the framework's elements, Garrison and Arbaugh (2007) call for more empirical studies. Experimental research is a systematic and scientific approach that follows a set of logical procedures. A quasi-experiment is "a research design that is close to being an experiment but that does not meet the requirements fully" (Bryman, 2008, p.696). In an experimental and quasi-experiment research approach, the researcher deliberately manipulates one or more variables, and controls and measures any change in other variables. There are two main variables: independent and dependent. Independent variables are variables under the control of the researcher and cause, influence or affect outcomes. Dependent variables are variables that are caused or influenced by independent variables. Dependent variables are the outcomes or results. It is assumed that independent variables lead to changes in dependent variables (Cohen et al., 2007; Creswell, 2003). In this study, the independent variables are the teaching presence categories, facilitating discourse and direct instruction, while the dependent variable is participants' social presence.

In order to implement experimental research, Cohen et al. (2007) suggest these ten steps:

1. Identify the purpose of the experiment.
2. Select the relevant variables.

3. Specify the level(s) of the intervention (e.g. low, medium, high intervention).
4. Control the experimental conditions and environment.
5. Select the appropriate experimental design.
6. Administer the pre-test
7. Assign the participants to the group(s).
8. Conduct the intervention.
9. Conduct the post-test.
10. Analyse the results.

The aim of the experiment is to examine the role of teaching presence (facilitating discourse and direct instruction) in social presence development and to answer the first research question:

- a. Does students' sense of social presence (affective responses, open communication and group cohesion) change as a result of a different teaching presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?

In terms of the research hypothesis:

H<sub>1</sub>: There is a significant difference between the effects of facilitating discourse and direct instruction (teaching presence) in terms of students' social presence level.



H<sub>01</sub>: There is no significant difference between the effects of facilitating discourse and direct instruction (teaching presence) in terms of students' social presence level.

Anderson et al. (2001) and Shea et al. (2010) develop and introduce indicators in order to define and clarify facilitating discourse. The Appendix (2) clarifies the coding scheme for the facilitating discourse category. In addition, Garrison and Anderson (2003) suggest guidelines and examples for facilitating discourse practice, for example:

- a. Acknowledge and welcome participants as they enter a discussion.
- b. Be encouraging, gentle and supportive while directing a discussion.
- c. Project your personality as a teacher and allow students to get to know you as a person to the appropriate degree.
- d. Suggest that students log on at least three times per week.
- e. Encourage students to acknowledge individuals when responding to specific contributions.
- f. Laud contributions when appropriate.
- g. Be conversational and not too formal in communications.
- h. Encourage 'lurkers' to participate.
- i. Express feeling but avoid flaming.
- j. Be cautious when using humour, at least until familiarity is achieved.
- k. Encourage students to inform the teacher by email of tensions or anxiety.

Regarding direct instruction, Garrison and Anderson (2003) also suggest guidelines and examples for practice, for example:

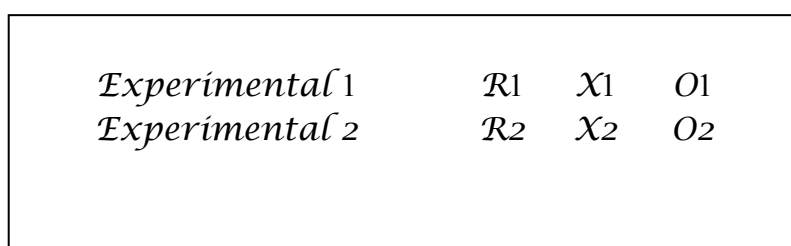
- a. Shape discussion but don't dominate.
- b. Provide feedback with respect.
- c. Be constructive with corrective comments.
- d. Be open to negotiation and providing reasons.
- e. Deal with conflict quickly and privately.

Furthermore, Anderson et al. (2001) and Shea et al. (2010) develop and introduce indicators in order to define and clarify direct instruction. The Appendix ( 2 ) clarifies the coding scheme for the direct instruction category.

Garrison and Anderson (2003) suggest guidelines and examples for instructional design and organisational practice, for example:

- a. Establishing curriculum
- b. Identifying resources
- c. Defining clear expectations and goals
- d. Addressing technological concerns
- e. Structuring activities
- f. Setting timeframes
- g. Devising assessment processes and instruments
- h. Selecting media

I have adopted the post-test two experimental groups design (Cohen et al., 2007). Creswell (2003) called this design alternative treatment post-test only, with non-equivalent group design. In this design the “participants are randomly assigned to each of two experimental groups. Experimental group 1 receives intervention 1 and experimental group 2 receives intervention 2. Only post tests are conducted on the two groups” (Cohen et al., 2007, p.278).



**Figure [ 9 ]** The post-test two experimental groups design,  
 adapted from Cohen et al., (2007, p.278)

X represents the exposure of a group to an experimental variable or event, the effects of which are measured.

O refers to the process of observation or measurement.

Xs and Os vertical to one another are simultaneous.

R indicates random assignment to separate treatment groups.

I am aware of the difficulty of controlling all the variables involved in research. There are many uncontrollable factors, such as access to the internet, social and emotional difficulties, students’ experiences, students’ motivation and attitudes towards learning topics or ICT. In addition, Gunawardena (1995) claims that students’ social presence increases as

online discussion progresses. Akyol and Garrison (2008) found significant changes in teaching and social presence categories over time. In addition, I was concerned about the low response rate because it could cause bias. Therefore, in order to strengthen validity and reliability, I integrated research methods and approaches from both qualitative and quantitative research paradigms, such as focus groups, interviews and message analysis. I also reiterated the quasi- experiment three times. The participants were divided into two main teams: Team A and Team B. Each team consisted of four groups, and each group consisted of five to seven students. They were asked to do three online activities using the Elgg software system, an open source social networking engine with an educational focus. In terms of the first and second activities, the participants were asked to watch several speech video clips and use discussion forums to evaluate and criticise the speeches. I was the online facilitator. In the first activity, I increased direct instruction and decreased facilitating discourse for Team A (Groups 1 to 4). In contrast, I increased facilitating discourse and decreased direct instruction for Team B (Groups 5 to 8). However, in the second activity I reversed the order. In terms of the third activity, the participants were asked to watch an interview and reportage about a television series producer (guest expert). Then there were open online discussions between all students and the producer. However, the aims of the study were clarified to the guest expert. I asked him not to get involved in discussion unless he received direct questions from the participants. I increased direct instruction and decreased facilitating discourse for Team A. Quite the opposite, I increased facilitating discourse and decreased direct instruction for Team B (see Table 4). I think this technique

assists the researcher to study and compare participants' responses to different teaching presence, which contributes to enriching simulated recall interview questions. This facilitates the development of a volume of evidence that supports the theoretical principles and answers research questions. More details about the experiment will be addressed in the implementation of the study section.

<b>Activities</b>	<b>Team A</b>	<b>Team B</b>
<b>First Activity</b>	Direct Instruction [ + ]	Direct Instruction [ - ]
	Facilitating Discourse [ - ]	Facilitating Discourse [ + ]
<b>Second Activity</b>	Direct Instruction [ - ]	Direct Instruction [ + ]
	Facilitating Discourse [ + ]	Facilitating Discourse [ - ]
<b>Third Activity</b>	Direct Instruction [ + ]	Direct Instruction [ - ]
	Facilitating Discourse [ - ]	Facilitating Discourse [ + ]

**Table [ 4 ]** The three activities

## **3.5 The development of implementation of the study**

### **3.5.1 The pilot study**

I was given an opportunity to take part in an educational social network during my MSc in Educational Research course offered by the Graduate School of Education at the University of Exeter. This course was in the first semester of 2008 / 2009 and delivered by The Hive, brand name for the Elgg system, which is an open source social networking engine with an educational focus. This experience helped me to reflect on the literature and provided me with a better understanding of the difficulties and opportunities of the social network environment. It also helped me to experience a theoretical perspective of developing a social presence in the online community.

In order to achieve my study's research aims, I conducted a small pilot study. Robson (2002) defines a pilot study as: "a small-scale version of the real thing, a try-out of what you propose so its feasibility can be checked" (p.185). Yin (2003) adds that: "the pilot study will help you to refine your data collection plans with respect to both the content of the data and the procedures to be followed" (p.79). The main aims of my pilot study were to become familiar with the community of inquiry framework, examine the coding system, experience data collection and data analysis and develop the research questions. This helped to orientate me for the main study period.

I selected and examined transcripts from the Interpretive Methodologies Module (ERPM001) of the MSc in Educational Research course offered by the Graduate School of Education at the University of Exeter in the United Kingdom. This course was in the first semester of 2009/2010 and delivered by The Hive. There were 42 students on this course. The student participants were divided into six groups; each group consisted of six to nine students, and they were asked to do a number of tasks and activities using The Hive features. The students came from a range of backgrounds and countries. Randomly, I selected one of the groups to apply the pilot study. This group consisted of seven students. Randomly, I selected the first module activity task, which started on 15 October 2009 and ended on 28 October 2009. The students were asked to watch a video clip and use The Hive to discuss and contribute up to six key points on the ways in which student personal experiences, values and cultural influences shape interpretation of this video clip in particular, and research evidence in general. I printed out the transcripts and read them several times. I used pencil and colours for circling, highlighting and colouring rich and significant participant contributions. I separated the text into short paragraph-length units and broke them down into categories, and used the count analysis to measure the frequency of each unit analysis that accrued in each category. I did not commit to one particular unit of analysis, allowing the use of different units of meaning.

I used Rourke et al. (1999) and Garrison and Anderson (2003) coding schemes. I found these coding schemes to be limited and I felt the need to

clarify them further. I read further literature about social presence coding protocol. I subsequently merged the Rourke et al. (1999) and Garrison and Anderson (2003) coding schemes with the Swan and Shih (2005) and Shea et al. (2010) coding schemes. Also, I deleted some indicators and added some initial indicators. These indicators were in turn counted, classified and interpreted to create a deeper understanding of the content. However, I did not implement all these changes in the main study, since some categories and indicators are developed later.

In order to assist the process of transcript analysis and organise the data, I used the NVivo 8 software package. NVivo 8 is Computer Assisted Qualitative Data Analysis Software (CAQDAS). It has been designed for qualitative researchers working with textual data and multimedia information. The software offers various means of analysis, organising, structuring, searching and modelling the data. I had no previous experience with NVivo software. Therefore, I had seven hours of online tutorials and read a book to learn how to use this software. Since the main study was conducted in the State of Kuwait and the participants use Arabic language, I checked if NVivo 8 supports Arabic language text. Unfortunately there were some difficulties, however the main NVivo 8 features do support Arabic language.

Also, in order to explore and understand the relation between teaching presence and social presence, understand social network communication and draw inferences about its meaning, I carried out an interview with a participant. Since the main study is in an Arab cultural context, I selected an



interviewee from Saudi Arabia. The interview was designed to gain insight into the participant's perspectives on the research questions of this study, and to gather suggestions for improving the research and learning process about social networks. The interview lasted nearly 25 minutes. I asked him some questions about his experience of taking part in The Hive and his opinion about the influence teaching presence role. I also asked him about advantages, disadvantages and difficulties he faced when using The Hive.

By conducting the pilot study, I improved and clarified the research aims and questions. This experience of data collection and analysis gave me a better understanding of the research process. I gained some ideas on suitable research design and data collection methods. This gave me a much clearer idea on the focus of my work and the validity and reliability of what I am intending to do. For example, I found it difficult to disable some teaching presence categories 100%. This related particularly to design and organisation. Garrison (2011) distinguishes between design and organisation. Design refers to "structural decisions made before the process begins" whereas organisation refers to "similar decisions that are made to adjust to changes during the learning – teaching transaction". Also, possibly tutors have to post comments or answer student questions after the task process has begun. These comments may be coded under the design and organisation, facilitating discourse or direct instruction categories. Therefore, the experimental design is based on decreasing / increasing the level of one teaching presence category in each task instead of disabling one teaching presence category. I also acquired confidence by carrying out the interview

and message analysis. Another significant benefit was developing my computer skills by learning to use NVivo software.

### **3.5.2 The implementation of the main study**

#### **3.5.2.1 Stage one: Preparations before the implementation of the main study**

I visited the fieldwork location, Kuwait State, in August 2010. The objectives for this visit were:

- a. To agree with teachers in the university education system in Kuwait to implement this study in the second semester of the school year 2010/2011.
- b. To create technical support in the area of teaching technology implementation during the study implementation period.

In order to achieve the first aim, I contacted many faculty members. Some of them apologised for not being able to participate in the study, others had some conditions. In the end, Dr. Khalid Alkandari expressed interest in the study subject and granted us initial approval. Several meetings were held with Dr. Alkandari. I had agreement from Dr. Alkandari to implement this study in the Educational Communication module in the second semester of 2010/2011. The advantage of using this module in the study is that the

majority of participants have previous experience in the use of computers and the Internet.

With regard to the second aim related to the technical aspect, Janicki and Liegle (2001) developed a list of ten concepts they believe support effective design of web-based instruction. These are: instructors acting as facilitators, use of a variety of presentation styles, multiple exercises, hands-on problems, learner control of pacing, frequent testing, clear feedback, consistent layout, clear navigation and available help screens.

The participants used the Elgg software system, which I think has most features of Janicki and Liegle's list. The Elgg system is an open source social networking engine with an educational focus. This system was designed by multimedia instructional designers and the modules' contents are designed by content experts and contain a variety of learning activities including discussions and individual and group assignments. Web 2.0 applications are applied in the Elgg software system. This system enables:

- a. Access to course content (PDF files, PowerPoint presentations, audio and video files)
- b. Collaboration (discussion forums encouraging reflection on ideas and explaining specific course content)
- c. Communication
- d. Personalisation

In terms of technical support, after a search and comparison between several individuals and organisations specialising in technology, an agreement was reached with Tamkeen Information Systems to provide technical support during the study period, and a website was secured on the internet: [www.alshuaib.net](http://www.alshuaib.net). Also, the Elgg system was downloaded. At the beginning we faced technical difficulties, such as support of the Arabic language, but these difficulties were overcome later on. I called the system a local Arabic name *Dewaniya*, which is the reception area where a man receives his relatives, colleagues, neighbours and male guests. Usually, *Dewaniya* takes place in the evening in a special room that is separate from the rest of the house. It is a social event where people gather and sit around on soft benches or cushions, conversing casually, playing cards, watching TV, nibbling snacks and drinking tea or coffee. The host's job is to be hospitable to his guests. Usually, Kuwaiti men try to visit at least two different *Dewaniya* weekly.

In the middle of December 2010, I visited the fieldwork location for the second time. I met the technical team. I tested the beta version of the website (*Dewaniya*). The opinions and remarks of a faculty member and two students were solicited in the design of the website. Also, I met Dr. Khalid Alkandari to discuss the students' tasks and activities. I contacted Mohammad Alenizi, a television series producer, to interview him about his experience, media ethics and advertising and media campaigns. This is related to activity 3.



Figure [ 10 ] Elgg software system (Dewaniya)

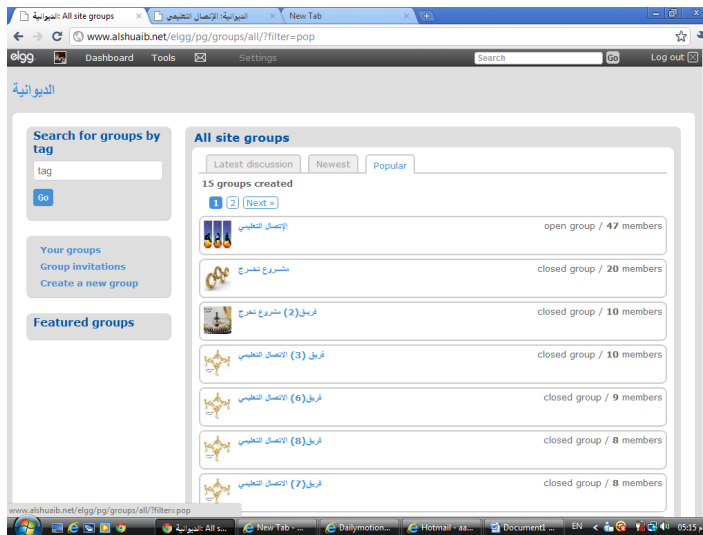


Figure [ 11 ] Elgg software system (Dewaniya)

### **3.5.2.2 Community of the study**

The study was conducted in the second semester of 2010/2011 in the Education Technology Department, the College of Basic Education, and the Public Authority for Applied Education and Training (PAAET), within the State of Kuwait. The College of Basic Education's mission is the preparation of teachers and specialists in the field of education enabling them to carry out educational work in the age of knowledge and technology through educational programmes that combine theoretical and applied aspects (College of Basic Education, 2013). The Education Technology Department aims to present students with the general concepts of education technology, such as theoretical foundations, psychological and various learning theories and their applications in design, production, use and evaluation of teaching materials. Students graduating from the department can work in diverse fields, such as designing and producing educational media for schools, designing and organising educational exhibitions and managing learning resource centres (Education Technology Department, 2013).

The study was carried out as part of the Educational Communication module and involved 46 male participants. They were aged between 20 to 22 years. All of them are of Kuwaiti nationality except one who is from Philippines. However, he was born, grew up and studied in Kuwait.

### 3.5.2.3 Module description

<b>Module Name</b>	Educational Communication
<b>Module Code</b>	112
<b>Number of Units</b>	3 units
<b>Number of Hours</b>	3 hours
<b>Type of Module</b>	Compulsory

**Table [ 5 ]** Module description

This module shed light on the communication theories and elements of successful and effective communication in the educational context, as well as the essential skills required in individual, group and mass communications. In addition, the module discusses the role of audio, video and readable communication in learning and training, and methods used to solve educational problems.

In terms of module aims, upon successful completion of this course a student can:

1. Recognise concepts related to communication.
2. Recognise different communication theories and models.
3. Explain technical communication skills.
4. Recognise the role of communication in effecting behaviours and trends.

5. Use printed, visual and heard media effectively in educational situations.
6. Use communication effectively to solve educational problems.
7. Use communication to manage effectively.

#### **3.5.2.4 Stage two: The actual implementation of the main study**

Officially the course started on 21 / 2 / 2011 but since there was a week's holiday due to national days, the first lecture was on 6 / 3 / 2011. The course ended on 5 / 6 / 2011. I was the online tutor who facilitated and directed online activities and replied to emails. In order to elucidate *Dewaniya*, the Elgg software system and the online activities, I gave two lectures and before starting each activity I spent 15 minutes explaining the activity and answering students' questions. In the first two weeks, I opened accounts for all students and answered their questions. During the first four weeks, I received nearly 50 emails. Some emails were from the same person. Most of these emails related to access issues, asking questions about where to find course content and groups and how to upload files or post comments. Some questions were posted on my wall.

As mentioned previously, the participants were divided randomly into two main teams: Team A ( 24 participants ) and Team B ( 22 participants ). Each team consisted of four groups, and each group consisted of five to seven students. They were asked to do three online activities using the Elgg software system, *Dewaniya*. These activities' tasks were developed together



with Dr. Alkandari, the module tutor, according to the schools' curriculum goals. The first activity started on 16 / 3 / 2011 and closed on 25 / 3 / 2011. The participants were asked to watch four speech video clips and use group discussion on the *Dewaniya* to discuss, evaluate and critique these speeches. On the third and fourth day, I was involved in the discussion. I increased direct instruction and decreased facilitating discourse for groups 1 to 4. In contrast, I increased facilitating discourse and decreased direct instruction for groups 5 to 8.

The second activity started on 18 / 4 / 2011 and closed on 27 / 4 / 2011. The participants were asked to use group discussion on the *Dewaniya* to discuss, evaluate and critique two former students' speech video presentations. On the third and fourth days, I was involved in the discussion. I increased facilitating discourse and decreased direct instruction for groups 1 to 4. In contrast, I increased direct instruction and decreased facilitating discourse for groups 5 to 8.

The third activity was scheduled to take place from 8 / 5 / 2011 to 18 / 5 / 2011. I recorded a video interview with guest expert Mohammad Alenizi, a television series producer. I asked him about his experience, media ethics and advertising and media campaigns. I also uploaded a video reportage about his work. The participants were asked to watch the interview and the reportage. There was then an open online discussion between all students and the producer. During the open online discussion, I phoned the producer to ask him if he had any comments or questions. I increased direct instruction

and decreased facilitating discourse for Team A. However, for Team B I reversed the order.

At the end of each activity, I asked the tutor and some students about their opinions. Also, in order to develop stimulated recall interview questions, I started an initial code of participant contributions. There were two focus group interviews and 11 stimulated recall interviews. The participants in these 11 particular interviews were members of different groups selected for message analysis, which represented two levels of social presence: high and low levels. High-level social presence indicates that the environment is warm while low frequencies indicate that the social environment is cold. It also represents two different online behaviours: maintaining or changing a student's social presence level during the course. I had phoned all learner interviewees and invited them to be interviewed. Some interviews were in Dr.Khalid Alkandari's office. Others were in Caribou café. Each interview lasted between 45 and 55 minutes. In addition, I conducted telephone interviews with the two participants who had not contributed to the online activities. During the interviews, some biscuits, chocolate, juice and water were offered as a way of refreshment and hospitality. However, more details about the interviews will be addressed in the interviews section.

I conducted two focus group interviews. The first one was on 23 / 5 / 2011 and involved eight participants while the second one was on 25 / 5 / 2011 and involved six participants. The interviews lasted 55 and 75 minutes respectively. These interviews were at the College of Basic Education. All

research interviews were digitally recorded with the interviewees' permission and saved in a secure safe place. However, more details about the focus group interviews will be addressed in the focus group interviews section.

In terms of research implementation obstacles, there was a technical problem related to instructional design and organisation. I clarified and fixed this during the course. Also, since Elgg is free open source social networking and anyone can register as a user, I suffered from spam users and advertising, so I had to delete several spam users every night.

### **3.6 The research methods**

This section presents a review of the methods I used for collecting and analysing my data. It looks particularly at message analysis, interviews and focus group interviews. It introduces, explains and justifies the research methods.

#### **3.6.1 Message analysis**

Message analysis is a rich source of data. It can describe and throw light on the online learning process (Henri, 1992; Gunawardena et al., 1997). Although Chappel et al. (2002) consider message analysis as being “very experimental and in early trial stages” (p.57), they believe that it gives “strong interpretative clues to the character of online learning” (p.57). For example, it

could reflect the attributions of media users' attitudes, intentions and belongingness and provide evidence of social relationships and public behaviours (Rourke and Anderson, 2002), disclose the types of learners (communicative learners and quiet learners) (Hammond, 1999), the depth of discussion (Lai, 1997) and the level of responsiveness of learners within a group (Kumari, 2001). Indeed, many researchers aim to characterise learning experiences by analysing messages (Henri, 1992; Gunawardena et al., 1997; Garrison and Anderson, 2003). In this study, message analysis was used first to reveal the level of social presence in an online community, to develop stimulated recall interview questions and to select interviewees.

Strijbos, Martens, Prins and Jochems (2006) argue that the analysis of communication transcripts in computer-supported collaborative learning (CSCL) and computer-mediated communication (CMC) have broadly two approaches: the quantitative approach and the qualitative approach. In the first approach, the transcript is coded and summarised and it permits frequencies or percentages to be determined for comparison purposes and/or statistical testing. On the other hand, in the second approach researchers apply methods such as participant observation, case summaries and ethnomethodology to infer trends or a specific phenomenon in transcripts without computing frequencies for statistical testing. Krippendorff (2004) and Garrison, Cleveland-Innes, Koole, & Kappelman (2006) argue that analyses of text should be considered as qualitative even when characteristics of texts are transformed into numbers, since "the goal is descriptive, not predictive" (Garrison et al., 2006).

I assume that qualitative analysis has a part in my message analysis. It is the key element that throws light on what participants do in the online discussion. This study translates qualitative data into quantitative data through content analysis. Hatch (2002) suggests that a pattern can be characterised by similarity, difference, frequency, sequence, correspondence and causation. I used a quantitative content analysis approach to investigate the development of students' social presence. Content analysis is "an approach to analysis of documents and texts that seeks to quantify content in terms of predetermined categories and a systematic and replicable way" (Bryman, 2008, p.275). Anderson et al. (2001) define content analysis as "a research methodology that uses a set of procedures to make valid inferences from text. The set of procedures includes identifying and defining a target variable, collecting samples of representative text, and devising reliable and valid rules for categorizing segments of the text" (p.10). Riffe, Lacy and Fico (1998) define quantitative content analysis as "the systematic and replicable examination of symbols of communication, which have been assigned numeric values according to valid measurement rules using statistical methods, in order to describe communication, draw inferences about its meaning, or infer from the communication to its context, both of production and consumption" (p.22). Krippendorff (2004) believes that content analysis goes below the surface-level measurement of online communications to examine the rich source of data learners generate as they create meaning.

Quantitative content analysis has been proven to be a valuable research method in many research disciplines such as mass communication

and political sciences (Krippendorff, 2004). It could be used in descriptive or experimental research design (Rourke et al., 2001). In spite of the measurements of online social presence being claimed problematic by researchers (Garrison and Anderson, 2003; Tu and Corry, 2002), there are plenty of studies that have used the quantitative content analysis approach to investigate social presence level, such as Shea et al. (2010), Rourke et al. (1999), Stacey (2002) and Swan and Shih (2005) and Ke (2010)

According to Rourke et al. (2001), in order to implement quantitative content analysis the researcher needs to:

1. Identify representative samples of the communication that should be studied. In this study, these samples are transcripts of students' contributions on online discussion forums.
2. Create a protocol to identify and categorise the variables (units of analysis).
3. Have coders code the transcripts and compare their decisions for testing reliability.
4. Analyse the data in order to describe the variables or identify relationships between variables.

The following paragraphs will discuss implementation of the quantitative content analysis steps.

### **3.6.1.1 Unit of analysis**

Selecting the unit of analysis involves identifying the segments of the transcript that will be recorded and categorised. Krippendorff (1980) describes the unit of analysis as a discrete element of text that is observed, recorded and thereafter considered data. Rourke et al. (2001) acknowledge “the selection of the unit of analysis is complex and challenging for the quantitative content analyses researcher” (p.19). The aim is to select a unit that multiple coders can reliably identify. In spite of many units having been experimented on, none has been sufficiently reliable, valid or efficient to achieve superiority (Rourke et al., 1999). There are fixed units or syntactical units such as single word, proposition, sentence, paragraph or entire messages. There are also dynamic units such as ‘units of meaning’ (Henri, 1992). Fixed units are easily recognisable but may represent more than one construct, while dynamic units may be subjective and unreliable among multiple coders. Rourke et al. (2001) identify five units of analysis that could be used in the coding system, such as sentence unit, paragraph unit, message unit, thematic unit and illocutionary unit. Each unit has advantages and disadvantages. For instance, sentence unit is usually easy and reliable to identify (Fahy, Crawford, Ally, Cookson, Keller and Prosser, 2000; Hillman, 1999). However, in the case of online discussion, often the authors learn not to use whole sentences and proper grammar. Therefore, identification of sentences can be challenging. Also, the

transcript can be very long and contain an enormous number of sentences that lead to difficulty in identifying a relevant variable (code) in each and every sentence (Rourke et al., 2001).

In terms of the paragraph as the unit of analysis, although it could reduce the number of cases compared to the number of cases of sentence units, it is difficult to identify paragraph structures since there is a lack of formal usage of proper grammar in online discussion. Thus, the coders identify graphical blocks of text as a paragraph unit. Indeed, often authors tend not to break down messages and single ideas into paragraphs. Sometimes one paragraph covers multiple ideas or two continuous paragraphs deal with the same idea. Therefore, the paragraph may encompass multiple variables or one variable may span multiple paragraphs (Hara, Bonk and Angeli, 2000; Rourke et al., 2001).

Message units have also been used to analyse online discussion transcripts by a number of researchers, such as: Ahern, Peck and Laycock (1992); Marttunen (1997); Anderson et al. (2001) and Garrison et al. (2000). Rourke et al. (2001) enumerate the advantages of the message unit, for instance it is objectively identifiable, it produces a manageable set of cases, it exhaustively and exclusively contains the object of study, and it is determined by the author of the message as a unit. Once again, the challenge with this unit is that often more than one idea or concept is expressed in a single message.



On the other hand, Henri (1992) rejected the process of authoritatively fixing the size of the unit and adopted a 'unit of meaning'. She argues "it is absolutely useless to wonder if it is the word, the proposition, the sentence or the paragraph which is the proper unit of meaning, for the unit of meaning is lodged in meaning" (p.134). 'Unit of meaning' is similar to the thematic unit described by Budd, Thorp and Donohue (1967) as "a single thought unit or idea unit that conveys a single item of information extracted from a segment of content" (p.34). Boyatzis (1998) explains a theme: "at a minimum describes and organizes possible observations or at the maximum interprets aspects of the phenomenon. A theme may be identified at the manifest level (directly observable in information) or at the latent level (underlying the phenomenon)" (p. vii). A number of researchers such as Blanchette (1999), Henri (1992) and McDonald and Gibson (1998) have used a thematic unit as the unit of analysis. However, the subjective nature of this type of analysis leads to inconsistent identification of the units and therefore low reliability between multiple coders (Rourke et al., 2001).

Based on an examination of the literature from related studies, I think the most appropriate analysis unit for this study would be combining the flexibility of the thematic unit with the syntactic unit. Rourke et al. (1999) justify this approach by arguing that the thematic unit allows coders to capture a unit in its natural form with the reliable identification attributes of a syntactical unit. This approach has been used to study social presence by Rourke et al. (1999), Liang (2006) and Wanstreet (2007).

### **3.6.1.2 Social presence coding protocol**

I am aware that coding is a challenging and time-consuming task. While I was developing my own analysis approach, I was influenced by the coding manual for qualitative research by Johnny Saldana (Saldana, 2009). He defines a code in qualitative research as “a word or short phrase that symbolically assigns a summative, salient, essence-capturing and / or evocative attribute for a portion of language-based or visual data” (Saldana, 2009). He believes coding is developing a procedure and the data could be coded during the first cycle and, if needed, the second cycle. The first cycle is initial coding of data that can range in volume from a single word to an entire page of text. The coding in the first cycle consists of early, simple and direct coding schemes. The aim in second cycle coding is to develop a sense of categorical, thematic, conceptual and theoretical organisation that is laid out from the first cycle. Each cycle has coding methods. However, these methods have common characteristics to a slight extent. Hence, they can be ‘mixed and matched’ for implementation in one particular study (Saldana, 2009).

As I used the coding schemes from Rourke et al. (1999), Garrison and Anderson (2003), Swan and Shih (2005) and Shea et al. (2010) to detect social presence, the message analysis data was coded into procedural methods / protocol coding in the first cycle. According to Saldana (2009), procedural coding methods “consist of a pre-established coding system or very specific ways of analysing qualitative data” (p.127). A protocol in human research refers to “detailed and specific procedural guidelines for conducting

an experiment, administering a treatment or in qualitative inquiry, conducting all aspects of field research and data analysis” (Saldana, 2009, p.130). The protocol coding is a “pre-established coding system developed by other researchers in subject areas related to your own inquiry” (Saldana, 2009, p.130). The list of codes and categories is then provided to the researcher for application after his own data collection. Sometimes there are recommendations of specific qualitative and quantitative data analytic techniques with the coding system. In general, the new researcher “accepts another researcher’s assumptions, projection and biases” (Boyatzis, 1998).

However, I found that previous coding schemes are limited and need to be developed. Indeed, the indicators and categories of the community of inquiry elements are open to refinement and development across various educational contexts (Garrison et al., 2006). As mentioned previously in the introduction and literature review chapters, the vast majority of social presence research, in particular the research by Anderson and Garrison, has been in the context of Western culture, in the English language and based on the analysis of computer conferencing transcripts. In contrast, my study has been in the Arab Kuwaiti cultural context, the Arabic language and based on Web 2.0 applications (social networks) media. To overcome this obstacle, Saldana suggests using the elaborative coding method in second cycle coding. Elaborative coding is “the process of analysing textual data in order to develop theory further” (Auerbach and Silverstein, 2003, p.104). This kind of coding is based on previous studies. The new researcher aims to improve theoretical constructs from a previous study and he may support, strengthen,

modify or disconfirm the previous results (Saldana, 2009). Auerbach and Silverstein (2003) argue that, sometimes, textual data fits with old theoretical constructs. This is advantageous since it will lead a researcher to develop his constructs further and may enhance the researcher's understanding of research concerns. However, sometimes, textual data does not fit with old theoretical constructs.

Considering an analytic strategy for coding, Miles and Huberman (1994) state that the majority of qualitative researchers code their research data both during and after data collection. At the end of each activity, in order to develop stimulated recall interview questions and reveal the level of social presence in an online community, I started to code the participants' contributions in the online activities and recoded again after the end of data collection. As mentioned previously, there were certain difficulties in using NVivo 8 software since the participants used the Arabic language. However, the main NVivo 8 features do support Arabic language. Therefore, first I coded manually by papers and colours. Once the participants' contributions had been coded, Microsoft Word files were created for each participant. This process resulted in generating 46 files on the number of students. In each file, there are three sections, on the number of activities. I copied and pasted each participant's contributions (only the unit of analysis) to the word file with my initial codes attached to it. Then I used NVivo software to calculate frequency, by copying and pasting only the contributions that are encoded and then organised under "tree nodes". Figures 12 and 13 are examples of NVivo screen shots.

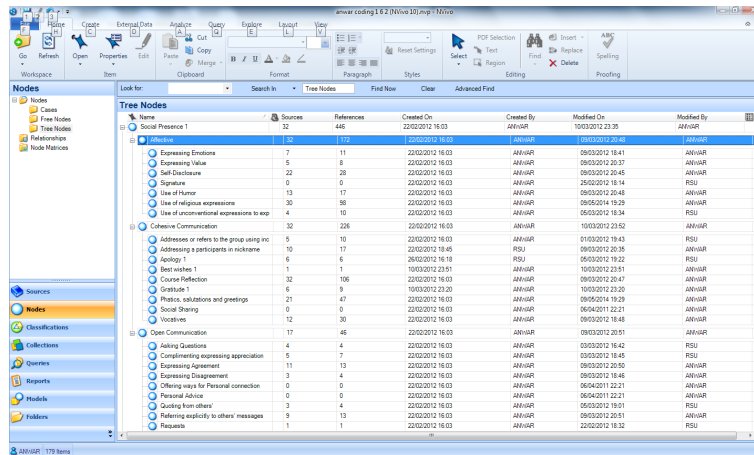


Figure [ 12 ] example of an NVivo screen shot.

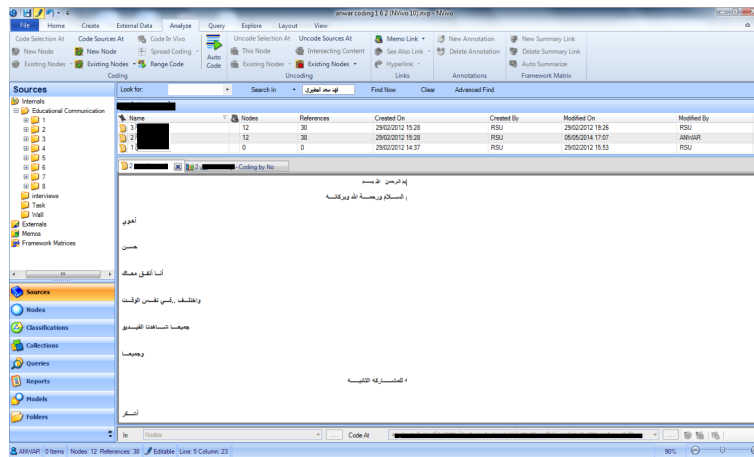


Figure [ 13 ] example of an NVivo screen shot.

By following Saldana’s technique, the coding procedure was carried out repeatedly. As a result of this procedure, I developed categories and indicators according to Rourke et al. (1999), Garrison and Anderson (2003), Swan and Shih (2005) and Shea et al. (2010). I added some new indicators

that would be more suitable in my study context. The coding protocol schemes are presented in Appendix ( 1 ).

### **3.6.1.3 Reliability**

Garrison et al. (2006) state that “coding transcripts is a challenge under the best circumstances, but many of the validity and reliability deficiencies can be mitigated with valid models, discrete categories, and clear indicators” (p. 7). The reliability of coding procedure is attributed to the ability of multiple coders to “reliably and consistently identify and qualify each instance of the object or variable they are looking for in the content” (Anderson and Kanuka, 2003, p. 174). According to Fink (2005), a reliable data collection method is one that is relatively free from measurement error. In case of content analysis, interrater reliability is critical to reporting and assessing the finding from a research study (Lombard, Snyder-Duch and Campanella Bracken, 2010; Potter and Levine-Donnerstein, 1999; Rourke et al. 2001). Interrater reliability refers to “the extent to which content classification produces the same results when the same text is coded by more than one coder” (Weber, 1990). The simplest and most common tests of reporting interrater reliability are Holsti’s (1969) Coefficient of Reliability (CR) and Cohen’s kappa (1960) statistic to determine reliability (k).

The formula for calculating Holsti’s Coefficient of Reliability (CR), which measures per cent agreements, is:

$$CR = 2m / (n_1 + n_2)$$

Where:

m = the number of coding decisions upon which the two coders agree

n<sub>1</sub> = number of coding decisions made by rater 1

n<sub>2</sub> = number of coding decisions made by rater 2

The formula for calculating Cohen's kappa is:

$$K = (F_o - F_c) / (N - F_c)$$

Where:

N = the total of number of judgments made by each coder

F<sub>o</sub> = the number of judgments on which the coders agree

F<sub>c</sub> = the number of judgments for which agreement is expected by chance

The agreement by chance (F<sub>c</sub>) is calculated in four steps:

1. Begin by counting the number of times a category of a coding scheme is used by the coders
2. This figure is then converted to a percentage of all coding decisions
3. This percentage is then squared
4. The squared percentages for all categories are summed

For Cohen's kappa, Capozzoli, McSweeney and Sinha (1999) state that: "Values greater than 0.75 or so may be taken to represent excellent agreement beyond chance, values below 0.40 or so may be taken to represent poor agreement beyond chance, and values between 0.40 and 0.75 may be taken to represent fair to good agreement beyond chance" (p. 6). With regard to the percentage agreement figure, a minimum level of 80% is usually the standard and acceptable for a communication study (Riffe, Lacy and Fico, 1998).

Kaid and Wadsworth (1989) and Wimmer and Dominick (2006) argue that levels of reliability should be assessed initially on a subsample of the total sample to be analysed before proceeding with the actual coding. When the initial test of reliability reveals satisfactory results the main body of data is coded. If the study has a very large amount of data, Kaid and Wadsworth recommended that a subsample of 5% to 7% of the total is probably sufficient for assessing reliability, whereas Wimmer and Dominick recommended a subsample of probably between 10% to 25%.

I am aware that multiple coding is challenging in the coding process. I consider this obstacle can be overcome by training and clear definition of coding scheme categories. To achieve acceptable levels of reliability, Wimmer and Dominick (2006) recommended these steps: define category boundaries with maximum detail, train the coders and conduct a pilot study. As mentioned previously in the methodology chapter, the biggest advantage of my pilot



study was that I became familiar with the coding scheme. With regard to the second coder, he has previous experience in coding online discussion transcripts. Also, he is familiar with the study context. He is a Kuwaiti postgraduate student in Education Technology at Cardiff Metropolitan University. At the beginning of the coding process, he received a copy of the community of inquiry coding scheme. It includes definitions and examples of each of the categories and indicators. The examples were from previous community of inquiry research studies, such as those by Anderson, Archer, Garrison, Rourke, Shea and Swan. At a preliminary meeting with the coder, he began to code a set of transcripts from the pilot study. I think this process could help him to further understand the coding scheme and become familiar with the coding. Then the coder independently coded a series of messages from randomly selected transcripts from the main body of data. He coded around 18% of the main data. Both Holsti's (1969) Coefficient of Reliability (CR) and Cohen's (1960) kappa (k) were used to determine the interrater reliability of the coding process employed in this study. The Coefficient of Reliability (CR) was 0.89 (89%) and Cohen's kappa (k) was 0.83. These are excellent reliability figures, as stated by Riffe et al. (1998) and Capozzoli et al. (1999). When the initial test of reliability yields satisfactory results, the main body of data is coded.

### **3.6.2 Interviews**

As a social researcher interested in social communication, I try to understand the multiple ways in which individuals perceive reality. Therefore,

the second instrument used in this study was interviews, which are a research technique that is employed to collect verbal / non-verbal information systematically. Valerie Janesick (1998) defines an interview as: “a meeting of two persons to exchange information and ideas through questions and responses, resulting in communication and joint construction of meaning about a particular topic” (p.30). Indeed, interviews are widely used by social researchers. Cohen et al. (2007) suggested that research interviews can be used as the primary means of gathering information having direct bearing on the research aims. They provide access to what a person knows and values and their preferences, attitudes and beliefs. As a distinctive research technique, interviews may be applied to test hypotheses or to suggest new ones or an explanatory device to assist with identifying variables and relations. They may also be used in conjunction with other research methods in order to follow up unexpected results or validate other methods.

In the current study, the interviews aimed to probe the insights of the participants to obtain qualitative data and consequently build up a picture of the complex relationships and interactions between social presence and teaching presence. The interviews were used to allow for in-depth data collection and as a source complementary to other methods in the study. The results from the interviews were used to draw comparisons and consider similarities with the quantitative data results. More specifically, they were used to enrich the message analysis results and to get further information from participants to explain their contributions to responses on the online discussion forum.

However, Esterberg (2002) distinguished between types of interview according to the degree of structure and amount of control exerted by the researcher during the interview. She named three types of interview: structured, semi-structured and unstructured. The structured interview is the most formal and controlled type. Often, it has predefined questions in a pre-established order and with fixed wording. It could have open-ended questions that allow interviewees to respond in their own words, and it could also have closed-ended questions that force interviewees to select a fixed response. A semi-structured interview, sometimes called an in-depth interview, is relatively informal and much less rigid than a structured interview. Although it also has predefined questions, the order can be changed based upon the interviewer's perspectives of what seems most appropriate. It uses a number of open-ended questions that are devised to elicit responses to the research question in a useful way. By using semi-structured interviews, the researcher aims to explore a topic more openly and to allow interviewees to express their opinions and ideas in their own words. An unstructured interview, on the other hand, is the least structured of all and tends to be more spontaneous. Typically, the interviewer does not have a set of questions prepared in advance. He / she has a general area of inquiry and a number of key issues, which the interviewer raises in informal conversational style. The types of interview used are based on the experience of the interviewer and the purposes of the interview.

It seems to me that semi-structured interviews are more suitable for the aims of the current study. This type of interview provides for flexibility of

approach during the interview. It allows for a much freer exchange between interviewer and interviewees. The interviewer has a clear list of issues to be addressed and some questions to be answered as well as the interviewee being allowed to express themselves in their unique way using their own words with issues that are important to them, therefore eliciting participant responses that are more authentic. Radnor (2001) adds that the semi-structured interview has a number of benefits. For instance, it keeps the conversation smooth and enables the interviewer to ask subsidiary and emergent questions in a way that is coherent with the style of the interview. Furthermore, it ensures that equivalent information that is needed for the topics covered is collected in different interviews in achieving the research objectives. Besides, it permits the interviewee the opportunity to expand on what they see as a priority in their own situation.

### **3.6.2.1 Stimulated recall interview technique**

A variety of interview techniques are available to open the channels that enhance interviewees' reflection and reveal interviewees' actual thought processes. I used stimulated recall technique. Stimulated recall interview is a research method that allows investigation of the cognitive processes by inviting interviewees to recall their concurrent thinking during an event when prompted by visual recall such as photos, video sequences or text (Fox-Turnbull, 2009; Lyle, 2003). Stimulated recall technique was first used by Bloom (1954) as a method to study the recall reliability of students after a classroom event. Since then, it has been used fruitfully in numerous studies in

a variety of forms including experimental and laboratory contexts, counselling, problem solving, medical consultations and teaching (Stough, 2001; Lyle, 2003). The procedure of stimulated recall technique should contain opening interviews with background questions and open-ended prompts to give the researcher information on participants' understanding (Stough, 2001).

Lyle (2003) argues that stimulated recall is an indirect method of obtaining evidence of cognitive activity. Mackey and Gass (2005) point out that one of the benefits of using stimulated recall interview technique is that it is a flexible research tool and allows participants to explain their decision making. Therefore, it is an effective approach to gain the perspectives of learners, their interpretation of events and their thinking at a particular point in time. Besides these benefits, stimulated recall in the current study was used as a strategy to check the message analysis coding process through asking research participants to verify whether the researcher had accurately described their statements.

### **3.6.2.2 The implementation of stimulated recall interviews**

In order to enhance the strength of the stimulated recall procedure, Bloom (1954) emphasises using a variety of cues from the original situation. Typically, videotaped passages of behaviour are taken by researchers as part of their observation, which are then used in the interview process to stimulate recall of interviewees' concurrent cognitive activity (Moreland and Cowie,

2005; Stough, 2001). The current study differs. I initialised the interview by clarifying the aims of the interview and estimating the time needed for the interview. I then asked the interviewee general questions about his opinions on the website (*Dewaniya*) and the online activities and how the website and activities could be developed. I think this start offered the opportunity to the interviewee to reflect on what was most meaningful to him and indicated that I was interested in what he had to say. In order to stimulate further reflection and interpretation and to build up a detailed picture of the development of students' social presence, the interviewee was asked to browse the website and read the tasks and contributions. The researcher used follow-up probing questions to recall, as far as possible, the interviewee's thoughts and emotions during the online activities. I asked the interviewee some questions like: What were you thinking / feeling when you read this? Why did you write this particular sentence? Why did you write / reply in this style to this participant? Why did you not reply? Did you recognise the difference between tasks? Did you recognise the difference between these sentences? How would you characterise your group? How much did you learn about others in your group? Did you read students' profiles? Why? How did the discussion in the group get started? Could you please tell me about how you followed the discussion and how you wrote the contributions? etc.

### **3.6.2.3 Focus groups**

The third method used in this study was focus groups, which is interviews with small groups, usually with fewer than ten participants. Focus group interviews, similar to individual interviews, can be structured or unstructured. The moderator or facilitator – the person who guides the questioning of a focus group – plays a significant role in the structure of the focus group dynamic. The use of focus groups in social research has become much more commonplace in the last two decades. The focus group interview is a powerful method of data collection. In addition to individual interview advantages, focus group interview participants can build on one another's ideas and opinions. It also allows for collection of a large amount of data in a short period of time (Esterberg, 2002).

In this study, focus groups were used to gain additional insight from the participants' perspectives. They provided an opportunity to confirm and expand upon the themes that had been identified through the analysis of the data collected through message analysis and individual interviews.

### **3.6.2.4 The implementation of focus group interviews**

As mentioned previously, two focus group interviews were conducted and involved eight and six participants respectively. The protocol for these sessions was as follows. The researcher for this study was the facilitator for both focus groups. Like individual interviews, the stimulated recall interview

technique was applied. I used a laptop and data projector to browse the website to read the tasks and contributions. I used follow-up probing questions to recall, as far as possible, the participants' thoughts and emotions during the online activities. I facilitated an open discussion forum where participants were allowed to question and debate the comments that had been made by others in a roundtable forum. I made an effort to ensure that each participant had an opportunity to voice his thoughts and opinions.

### **3.7 Qualitative data analysis techniques**

I used thematic analysis method which is “a term used in connection with the analysis of qualitative data to refer to extraction of key themes in one's data. It is rather diffuse approach with few generally agreed principles for defining core themes in data” (Bryman, 2008. p700). Indeed, the analysis of the data collected from the individual interviews and focus group interviews began with the transcription process. The transcription was a time consuming process. The digital records from each interview were transcribed verbatim by the author of this study. The transcript was translated from Arabic into English. Each transcript entails the conversation between one interviewee and the researcher. The separation between the speakers was achieved by using a table. A statement in each row of table represents a unit of data. A unit number is given to each unit of data in order to assist the analysis process. I printed out the first transcript and read it several times. A summary document for this set of interview was also produced. I used pencil and colours for



circling, highlighting and colouring rich and significant statements. Initial sub-categories, categories and themes were identified and coded for each of the interview questions. These sub-categories, categories and themes were then placed in a Microsoft Word table and related quotes from each of the transcripts were copied and pasted into this document. I repeated the same procedure for the second, third and fourth transcripts. A number of sub-categories, categories were identified. The set of codes was then updated. The first transcript was recoded according to the most updated set of code. The remaining transcripts were coded. At the end of this phase, some sub-categories and categories were collapsed due to the fact there was a limited amount of data coded therein. Finally, all of transcripts were then re-coded according to the final codes.

### **3.8 Validity**

Validity is a determination of whether an instrument actually measures what it is intended to measure (Wallen and Fraenkel, 2001). In other words, it is the level of trust in the report's research outcomes. Robson (2002) asserts that triangulation can help address threats to validity. Garrison and Anderson (2003) suggest that this type of validity can be achieved in the analysis of computer conference transcripts through: theoretical consistency, correlation with other works and the use of triangulated measures. Triangulation is using multiple research methods to obtain data, such as surveys, interviews, focus groups and the analysis of other forms of student work such as assignments

and exams (Cohen et al., 2007). Tashakkori and Teddlie (1998) argue that triangulation techniques provide “the lynchpin for improving the quality of inferences” (p.169). A combination of two or more research methods adds to credibility and makes the data and study stronger. Cohen et al. (2007) point out that: “Triangular techniques in the social science attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and, in so doing, by making use of both quantitative and qualitative data” (p.141). Denzin (1978) describes four different types of triangulation method including data triangulation, investigator triangulation, theory triangulation and methodological triangulation (Cited in Tashakkori and Teddlie, 1998, p.18)

In the current study, I have been influenced by some research books (e.g. Cohen et al., 2007; Tashakkori and Teddlie, 1998; Patton, 1990) and some works in my literature review (e.g. Greene et al., 1989; Wegerif, 1998; Hammond, 1999; Swan, 2002) to employ multiple data sources with a view to enhancing the rigour of my research. Triangulation is the main source to explore the social phenomenon. Multiple data sources such as quantitative content analysis in message analysis, interviews and focus groups are used to strengthen the trustworthiness of the research findings. This study, as discussed earlier, involved both qualitative and quantitative data. The rationale is that the use of one method can overcome the deficiency of another and provide a better understanding of a concept being tested or explored (Cohen et al., 2007; Tashakkori and Teddlie, 1998). This is because each method has its own strengths and weaknesses. Indeed, it is difficult for a

single method to generate comprehensive findings. In addition, one advantage of triangulation is completeness, which refers to the notion that “the researcher can bring together a more comprehensive account of area of enquiry in which he or she is interested if both quantitative and qualitative research are employed” (Bryman, 2008, p.609). I used quantitative data and message analysis to reveal the level of social presence in an online community and to develop stimulated recall interview questions. I then used qualitative data, interviews and focus groups to reveal much detailed insight into individual social presence development. In addition, I reiterated the quasi-experiment three times.

### **3.9 Ethical issues**

Ethical issues in educational research play a significant role. Cohen et al. (2007) stress that: “whatever the specific nature of their work, social researchers must take into account the effects of the research on participants, and act in such a way as to preserve their dignity as human beings: responsibility to participants” (p.58). Mason (2002) argues that: “You will need to consider the ethics and politics of your arguments, analyses, and explanations, and of the way you are presenting them to a wider audience” (p.120). The most vital concern in this regard is that a researcher has to assure that no harm will be caused to the participants of his research. Numerous research authorities such as universities in the United Kingdom and United States apply a great deal of attention to this essential element of

educational research. The British Educational Research Association (BERA) and the American Educational Research Association (AERA) have set codes of inquiry, principles and rules that should guide research ethically. The development of this research design respects these codes. The researcher concerned obtained official permission from PAAET management to accomplish the research. The BERA Revised Ethical Guidelines for Educational Research rules number 10 and 11 stress “Voluntary Informed Consent” (BERA, 2004). Also, Esterberg (2002) asserts that the researcher must ensure that participants freely agree to participate in the research, and he / she must protect the privacy of his / her research participants. The researcher informed PAAET management, the College of Basic Education, the Education Technology Department and participant students about the aims and procedures of the study and the level of commitment that would be involved. They were asked whether they wished to participate and they had the right to refuse to take part. In addition, it is accepted that individual students have the right to withdraw from the sample at any point during the research, without the need to give a reason for this.

The BERA Revised Ethical Guidelines for Educational Research numbers 23, 24, 25 and 26 emphasise privacy and data protection (BERA, 2004). At the beginning of each individual interview and focus group discussion permission was obtained by the researcher to digitally record the interview and discussion. The confidentiality of the information given was stressed, and the participants were informed that there were opportunities to ask the researcher any questions regarding the study, in a non-threatening

environment. PAAET management, the College of Basic Education and the Education Technology Department were informed that they would not have access to interview data and data interpretation regarding individual participants. Assurances were given that all information would be treated in the strictest confidence, and that all participants would remain anonymous in the presentation of research findings.

In alignment with these principles and in order to protect research participants' identities, pseudonyms are used for all research participants, from the outset of the study.

With regard to message analysis, *Dewaniya* participants were clearly informed that communication made within *Dewaniya* was monitored and investigated for the research aims. I have not received any objection to this.

### **3.10 Summary of the chapter**

This chapter presented general description of education system of Kuwait. Also, this chapter has explained how a naturalistic inquiry approach was utilized to investigate the research questions for this study. I have explained and justified my research methods, which are grounded on the equivalent status mixed methods design. The sequential explanatory strategy is embedded within an applied quasi-experimental approach. Quantitative data is collected and analysed, then followed by the collection and analysis of qualitative data. The main evidence collection methods for the study were

messages analysis, interviews and focus group interviews. Reflection upon ethical issues, validity and reliability were also discussed in this chapter. Table [ 6 ] is a summary table to show what data were collected and what analysis will be performed to answer each research question.

Phase	Research Questions	Research Methods	Analysis techniques
The first phase of the study <u>Quantitative Data</u>	<p>1-How does a student's sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?</p> <p>a. Does a student's sense of social presence (affective responses, open communication and group cohesion) change as a result of a different teaching presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?</p>	Message analysis	Content analysis
The second phase of the study <u>Qualitative Data</u>	<p>b. Why do participants maintain or change their social presence level during the course?</p>	A combination of individual interviews and focus group interviews	Thematic analysis

Phase	Research Questions	Research Methods	Analysis techniques
The second phase of the study <u>Qualitative Data</u>	2- How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context in the social network environment?	A combination of individual interviews and focus group interviews	Thematic analysis

**Table [ 6 ]** summary table of data collection and analysis processes

In the next chapters the quantitative and qualitative findings of the current study will be presented.

## Chapter 4: Quantitative Analysis Findings

### ❖ Introduction

As indicated previously, this study intends to understand the influence of teaching presence on students' development of social presence in a social network environment in a Kuwaiti higher education context. This chapter seeks to answer the first research question.

1- How does a students' sense of social presence change a different teaching presence within the social network environment in a Kuwaiti higher education context?

- a. Does a students' sense of social presence (affective responses, open communication and group cohesion) change as a result of teaching presence (facilitating discourse – direct instruction) in the social network environment in a Kuwaiti higher education context?

As mentioned in the methodology chapter, the study uses equivalent mixed status methods and a sequential explanatory strategy (Tashakkori and Teddlie, 1998) or, in other words, a two-phase design strategy (Creswell, 1994). According to this strategy, the use of the first phase is essential for planning the second phase. I start with quantitative data collection and analysis, which is followed by the collection and analysis of qualitative data.



This chapter reports the results of the first phase. It presents the descriptive research finding from message analysis. I used message and content analysis approaches to reveal the level of social presence in an online community and develop stimulated recall interview questions. The content analysis approach produces numbers that indicate a student's development of social presence level. The quantitative data was analysed using SPSS. The researcher used specialist SPSS statistics.

This chapter is organised in the following sequence: firstly, there will be general description of message analysis. Secondly, there will be a section giving detailed information about social presence density. There will then be a presentation of independent samples' t-test results.

#### **4.1 General description of message analysis**

The transcripts of discussion forums on three activities were analysed. The discussion forum transcripts contained 172 posted messages containing 18,503 words. The messages that the course instructor or the guest expert posted were excluded from the analysis and calculation. The student participants produced the largest amount of output during the first discussion, with a total of 8978 words. The teams A and B produced 4999 words and 3979 words respectively. Nevertheless, the third discussion had the lowest number of words, with 3094 words. The teams A and B produced 1866 words and 1288 words respectively. Overall, the participants produced the largest number of posted messages (80) in the first discussion. Team A posted 45

messages while team B posted 35 messages. However, this decreased considerably in the third discussion to 35 posted messages. Team A posted 21 messages while team B posted 14 messages (see table 7).

	<b>Category</b>	<b>Team A</b>	<b>Team B</b>	<b>Total</b>
<b>Activity 1</b>	<b>Messages</b>	45	35	80
	<b>Words</b>	4999	3979	8978
<b>Activity 2</b>	<b>Messages</b>	39	18	57
	<b>Words</b>	4069	2362	6431
<b>Activity 3</b>	<b>Messages</b>	21	14	35
	<b>Words</b>	1866	1228	3094
<b>Total</b>	<b>Messages</b>	105	67	172
	<b>Words</b>	10934	7569	18503

**Table [ 7 ]** The number of words and posted messages on discussion forums

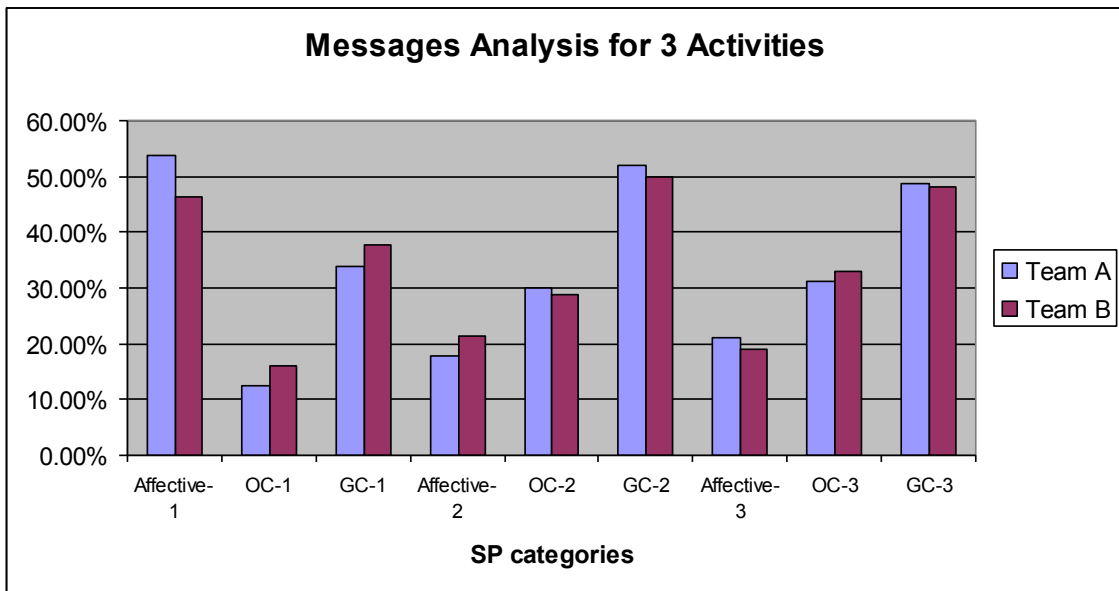
With regard to social presence, overall, there were 963 instances that indicated social presence. Team A had 565 instances and team B had 398 instances of social presence. Figure 14 and Table 8 clarify the coding results for categories of social presence. The result of instances of social presence is significantly higher than what was found in the studies by Rourke et al. (1999), Akyol and Garrison (2008) and Oskoz (2013). Rourke et al.'s (1999) investigation covered thirteen-week course, involved 31 participants, and a total of 507 instances of social presence were obtained. Akyol and Garrison's (2008) investigation of a nine-week course involved 16 participants, and a total of 534 instances of social presence were obtained. Oskoz (2013) study was a blended course that involved 20 participants and covered a twelve-week course and a total of 599 instances of social presence were obtained. However, my result is significantly lower than Liang's (2006) investigation of an intensive three-week course, which involved 12 participants, and a total of

4,548 instances of social presence were obtained. As indicated in the research design and methodology chapter, my study involved 46 participants and covered a twelve-week course.

When examining the amount of social presence in each activity, the results of teams A and B in the first activity show that interpersonal communication / affective responses have 53.7% and 46.2% respectively, open communication has 12.4% and 16% respectively and group cohesion has 33.9% and 37.8%. The results of teams A and B in the second activity show that interpersonal communication / affective responses have 17.9% and 21.3% respectively, open communication has 30% and 28.7% respectively and group cohesion has 52.1% and 50%. The results of teams A and B in the third activity show that interpersonal communication / affective responses have 21.2% and 18.9% respectively, open communication has 31.2% and 33.1% respectively and group cohesion has 48.6% and 48%. I think that all of these results are relatively close. The independent samples t-test was conducted in order to compare between the two teams by the use of category interaction in each activity. The test results will be discussed later.

Although the frequency of social presence categories for teams A and B in each activity seem relatively close, the message analysis presents that the students' participants respond differently to every activity. For illustration, the most frequent social category for both teams in the first activity was interpersonal communication / affective responses followed by group cohesion and open communication categories. In the second and third

activities, also for both teams, the most common social presence category occurring in the data was group cohesion, followed by open communication, first, and interpersonal communication / affective responses, second. The results of this study are different from the study by Oskoz (2013). The participants were asked to take part in four identical online activities and she used content analysis to analysis the transcripts of four discussion boards. In these four activities, the most frequent social category found in the data was open communication (interactive), followed by the group cohesion and the affective categories (Oskoz, 2013). Indeed, the previous studies (Akyol et al., 2009; Shine, 2008; Lomicka and Lord, 2007) agreed with Oskoz's (2013) results. I think the qualitative data analysis may explain why the results of my study differ from previous studies.



**Figure [ 14 ]** Percentages of the categories of social presence in each activity

		Category	Team A		Team B		Total	
<b>Activity 1</b>	Affective Responses	100	53.7%	72	46.2 %	172	50.3 %	
	Open Communication	23	12.4%	25	16 %	48	14 %	
	Group Cohesion	63	33.9%	59	37.8%	122	35.7 %	
	Instances of social presence	186	100%	156	100%	342	100%	
<b>Activity 2</b>	Affective Responses	34	17.9 %	20	21.3%	54	19 %	
	Open Communication	57	30 %	27	28.7%	84	29.6 %	
	Group Cohesion	99	52.1%	47	50 %	146	51.4 %	
	Instances of social presence	190	100%	94	100%	284	100%	
<b>Activity 3</b>	Affective Responses	40	21.2%	28	18.9%	68	20.2 %	
	Open Communication	59	31.2%	49	33.1%	108	32 %	
	Group Cohesion	90	48.6%	71	48%	161	47.8 %	
	Instances of social presence	189	100%	148	100%	337	100%	
<b>Total</b>	Affective Responses	174	30.8%	120	30.2%	294	30.5 %	
	Open Communication	139	24.6%	101	25.4%	240	25 %	
	Group Cohesion	252	44.6%	177	44.4%	429	44.5 %	
	Instances of social presence	565	100%	398	100%	963	100%	

**Table [ 8 ]** Percentages of the categories of social presence in each activity

## 4.2 Social presence density

In order to facilitate comparisons of social presence across studies, Rourke et al. (1999) introduced “social presence density”, which was based on the work of Mason (1991). Social presence density is the sum of instances of social presence divided by the total number of words. The figure is then multiplied by 1,000. This yields a unit of incidents per 1,000 words. Team A in each activity are 37.2, 46.7 and 101.3 respectively. The aggregate social presence density results of Team B in each activity are 39.2, 39.8 and 120.5 respectively. Figures 15 and Table 9 clarify the social presence density. Both teams’ results in the first and second activities are relatively high compared with Rourke et al.’s (1999) study, which yielded 33.54 and 22.83 social presence density. I think these are acceptable and expected results if we consider that the Rourke et al.’s (1999) study used a different medium and was conducted before the prevalence of social networks and smartphones. However, both teams’ results in the third activities are significantly higher than Rourke et al.’s (1999) and Liang’s (2006) results. Liang’s (2006) study yielded a 61.91 social presence density. I think stimulated recall interview questions could reveal the rationale for this significant difference.

<b>Activities</b>	<b>Team A</b>	<b>Team B</b>
<b>Activity 1</b>	37.2	39.2
<b>Activity 2</b>	46.7	39.8
<b>Activity 3</b>	101.3	120.5

**Table [ 9 ]** Social presence density for three activities

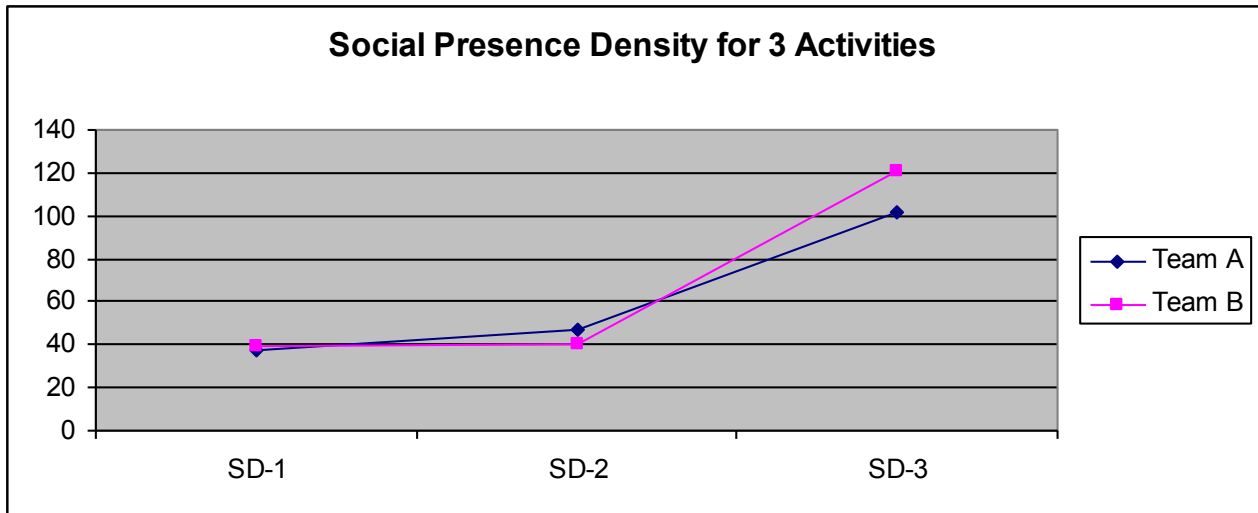


Figure [ 15 ] Social presence density for three activities

## 4.3 Independent samples t-test results

### 4.3.1 The first activity

In order to compare between the two teams by using category interaction in each activity, an independent samples t-test was conducted. The t-test failed to reveal a statistically significant difference between two teams by evaluating category interaction in the first activity. As reflected in tables (10) and (11), the results did not yield a statistically significant difference in terms of social presence i.e.  $p > \alpha$  ( $t(44) = .288$ ,  $p = .775$ ,  $\alpha = 0.05$ ) interpersonal communication / affective responses, i.e.  $p > \alpha$  ( $t(44) = .050$ ,  $p = .96$ ,  $\alpha = 0.05$ ). Also, open communication i.e.  $p > \alpha$  ( $t(44) = .59$ ,  $p = .558$ ,  $\alpha = 0.05$ ) and group cohesion, i.e.  $p > \alpha$  ( $t(44) = .384$ ,  $p = .703$ ,  $\alpha = 0.05$ ).

### Independent t-test for the first activity

	Team	N	Mean	Std. Deviation
<b>Affective Responses</b>	A	24	.8333	.76139
	B	22	.8182	1.23727
<b>Open Communication</b>	A	24	.1917	.23204
	B	22	.2850	.73698
<b>Group Cohesion</b>	A	24	.5583	.62687
	B	22	.6727	1.30525
<b>Social Presence</b>	A	24	1,5833	1.44814
	B	22	1.7759	2.91002

Table [ 10 ]

	F	Sig	T	df	Sig. (2-tailed)	Mean Difference
<b>Affective Responses</b>	1.721	.196	.050	44	.960	.01515
			.049	34.333	.961	.01515
<b>Open Communication</b>	2.979	.091	-.590	44	.558	-.09333
			-.569	24.803	.575	-.09333
<b>Group Cohesion</b>	2.235	.142	-.384	44	.703	-.11439
			-.373	29.611	.711	-.11439
<b>Social Presence</b>	2.667	.110	-.288	44	.775	-.19258
			-.280	30.196	.781	-.19258

Table [ 11 ]

### 4.3.2 The second activity

With regard to the second activity, As reflected in tables (12) and (13), the results did not yield a statistically significant difference between two teams in terms of social presence i.e.  $p > \alpha$  ( $t(44) = .245$ ,  $p = .808$ ,  $\alpha = 0.05$ ). Interpersonal communication / affective responses, i.e.  $p > \alpha$  ( $t(44) = -.277$ ,  $p = .783$ ,  $\alpha = 0.05$ ).also, open communication i.e.  $p < \alpha$  ( $t(44) = .285$ ,  $p = .777$ ,  $\alpha = 0.05$ ) and group cohesion i.e.  $p < \alpha$  ( $t(44) = .359$ ,  $p = .722$ ,  $\alpha = 0.05$ ).



### Independent t-test for the second activity

	Team	N	Mean	Std. Deviation
<b>Affective Responses</b>	A	24	.3458	.46127
	B	22	.3823	.42955
<b>Open Communication</b>	A	24	.5804	.81166
	B	22	.5173	.67624
<b>Group Cohesion</b>	A	24	1.0108	1.02147
	B	22	.9027	1.02175
<b>Social Presence</b>	A	24	1.9371	1.97861
	B	22	1.8023	1.72977

Table [ 12 ]

	F	Sig	T	df	Sig. (2-tailed)	Mean Difference
<b>Affective Responses</b>	.544	.465	-.277	44	.783	-.03644
			-.277	43.986	.783	-.03644
<b>Open Communication</b>	.002	.963	.285	44	.777	.06314
			.288	43.625	.775	.06314
<b>Group Cohesion</b>	.053	.819	.359	44	.722	.10811
			.359	43.652	.722	.10811
<b>Social Presence</b>	.015	.902	.245	44	.808	.13481
			.246	43.910	.806	.13481

Table [ 13 ]

### 4.3.3 The third activity

In terms of the third activity, the t-test failed to reveal a statistically significant difference between two teams by category interaction. As reflected tables (14) and (15), the results did not yield a statistically significant difference in terms of social presence i.e.  $p > \alpha$  ( $t(44) = -.852$ ,  $p = .399$ ,  $\alpha = 0.05$ ). Interpersonal communication / affective responses, i.e.  $p > \alpha$  ( $t(44) =$

-.429,  $p=.670$ ,  $\alpha=0.05$ ). Also, open communication i.e.  $p > \alpha$  ( $t(44) = -1.061$ ,  $p=.294$ ,  $\alpha=0.05$ ) and group cohesion i.e.  $p > \alpha$  ( $t(44) = -.683$ ,  $p=.498$ ,  $\alpha=0.05$ ).

### Independent t-test for the third activity

	Team	N	Mean	Std. Deviation
<b>Affective Responses</b>	A	24	.8900	.98022
	B	22	1.0336	1.28400
<b>Open Communication</b>	A	24	1.3138	1.24148
	B	22	1.8109	1.89462
<b>Group Cohesion</b>	A	24	2.0958	2.76188
	B	22	2.6255	2.47287
<b>Social Presence</b>	A	24	4.2996	4.54779
	B	22	5.4700	4.77108

Table [ 14 ]

	F	Sig	T	df	Sig. (2-tailed)	Mean Difference
<b>Affective Responses</b>	1.457	.234	-.429	44	.670	-.14364
			-.424	39.213	.674	-.14364
<b>Open Communication</b>	9.714	.003	-1.061	44	.294	-.49716
			-1.043	35.730	.304	-.49716
<b>Group Cohesion</b>	.102	.751	-.683	44	.498	-.52962
			-.686	43.980	.496	-.52962
<b>Social Presence</b>	1.607	.212	-.852	44	.399	-1.17042
			-.850	43.192	.400	-1.17042

Table [ 15 ]

## 4.4 Summary of the chapter

This chapter reported the first phase of my study, which was descriptive research findings derived from message analysis. The message analysis throws light on what participants do in the online discussion. I used an adapted version of the community of inquiry framework to determine the

nature and extent of social presence in the learner discussion. The first section of this chapter presented and discussed general statistics that were descriptive of message analysis. The second section reported a social presence density for both teams and compared with previous studies. The results of the independent samples t-test were reported in the third section.

Indeed, I am aware of small numbers of the participants may yield misleading results that do not generalize to the rest of users of the social network system for educational purposes. However, the quantitative data findings show that there is no significant difference between the effects of facilitating discourse and direct instruction ( teaching presence ) in terms of students' social presence level. However, I observe a difference in the level of social presence categories ( interpersonal communication / affective responses, open communication and group cohesion ) across the three activities. I assume that the qualitative data analysis could reveal the rationale for these results.

As mentioned previously, this study has two phases. I used the first phase of the study for planning the second phase and I used the second phase to explain and interpret the findings of the first phase. I used message analysis to develop stimulated recall interview questions for each participant and focus group interviews. The findings of these interviews are presented and discussed in-depth in the next chapter, the qualitative data analysis chapter.

## Chapter 5: Qualitative findings

### ❖ Introduction

This chapter presents the qualitative data results that were obtained through semi-structured interviews and focus group interviews. The qualitative data is used to explain and interpret the results of the quantitative data and explore the participants' perspectives. As indicated in previous chapters, the researcher applied the stimulated recall interview technique in order to understand students' experiences in the social network context and to reveal a much more detailed insight into individual social presence development. Detailed information about the process of qualitative data gathering and analysis was given in the research design and methodology chapter.

It is worth noting that the quantitative data gave some answers to the research questions. However, it raised some issues to be explored in-depth qualitatively in an attempt to address the following research questions;

- Why do participants maintain or change their social presence level during the course?
  
- How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context in the social network environment?

This chapter is organised in the following sequence: firstly, there will be an introduction of the interviews' participants. Secondly, there will be a general impression of the participants' interviews on a social network website, *Dewaniya*. Then, there will be a section giving detailed information about participants' responses to the research questions. These responses are under three topics and several categories and sub-categories. The main topics discuss facilitating discourse versus direct instruction, instructional design and organisation and learner-specific matters.

## **5.1 The interviews' participants**

In order to understand the various ways in which the participants perceive reality, I employed focus groups and semi-structured interviews as techniques. As mentioned in the research design and methodology chapter, the main objectives of the interviews were to understand the students' experiences in a social network context and to reveal a much more detailed insight into individual social presence development. Furthermore, they were used to enrich the message analysis results. As mentioned previously, two focus groups were conducted and involved eight and six participants respectively. In addition, there were 11 stimulated recall interviews. The participants in these 11 particular interviews were members of different groups. All participants who were interviewed participated in the online discussion. The table below introduces the participants. However, all the names mentioned in the chapter are pseudonyms.

Name [Pseudonyms]	Team	Group
Hadi	A	1
Bader	A	2
Jamal	A	2
Amman	A	3
Salem	A	4
Sultan	B	5
Saad	B	5
Ali	B	6
Abdullah	B	7
Ahmad	B	7
Saud	B	8

**Table [ 16 ]** Data of the Interviewees

## **5.2 The general impression from the participants' interviews on social network website [Dewaniya]**

All of the participants have accounts on social network websites, such as Facebook or Twitter. However, this is the first time that students have used the social network system for educational purposes. In general, the students

show an interest in employing social networks in their educational programmes and prefer to generalise this method for all modules. In the beginning, a number of participants faced some difficulties in logging in and working with the *Dewaniya* website, but they could overcome these later by contacting the administrator or through help from their colleagues. The participants have different views regarding the importance of the website in establishing links and dialogue with their fellow students. They think that the most positive aspects of the *Dewaniya* website are the availability of educational materials at any time and in any place and communication with the tutors via email. Nevertheless, they do not believe in the importance of a website for communication with their colleagues. The participants prefer to use mobile phones or meet in public places to communicate with their colleagues. However, the majority of participants refrain from contacting the tutor via mobile phone or text message. Therefore, they prefer to communicate with the tutor by email or by meeting him in office hours or after lectures.

The majority of participants did not use the social networking features offered by the system, such as the wire, message board, blog and e-profile. The vast majority of the participants did not read students' profiles, as they do not believe in the importance of the information contained therein. However, they consider profile pictures as interpersonal communication and self-disclosure. They do believe that a profile image, even if it is not a personal image, reflects the personality of the student.

For instance, the participant Saad justified uploading his personal picture by saying, “I uploaded it so that people could get to know me... the professor... the students”. He indicates the importance of the individual pictures of the students participating in the discussion. He perused the student profiles and got to know his fellow students from their photographs. Therefore, he believes that it should be “mandatory for students to put up a personal picture to facilitate acquaintanceship”.

Bader and Salem did not upload a personal profile picture; instead, Bader used the picture of a poet whose poetry he liked while Salem put up a picture that expressed his view about a political issue. Through profile pictures, Bader discloses that he prefers the musical poet Bader bin Al-Abdmuhsin and “likes to listen to the songs he writes”. Also, Salem declared that he is in favour of the Libyan revolution. Therefore, he uploaded a photo which shows that he is supporting the revolution in Libya.

Most of the participants read all students' contributions on a discussion forum before they participate in discussions. They consider students' contributions to be one of the key elements in understanding a question and an entrance for dialogue between students. However, they believe that the majority of students tend to compliment their colleagues and the guest experts. In order to increase the effectiveness of the system, some students suggested design modifications for the website and activities.



The following section gives detailed information about participants' responses to the research questions under three topics and several categories and sub- categories. The main topics are:

- Facilitating discourse vs. direct instruction.
- Instructional design and organisation.
- Learner-specific matters.

### **5.3 Facilitating Discourse vs. Direct Instruction**

The qualitative data reveals that the participants are not concerned about online tutoring roles, such as whether he / she was a facilitator or director. Indeed, the stimulated recall interview technique exposed the fact that most of the participants cannot distinguish between facilitating discourses and direct instruction and believe that facilitating discourse and direct instruction are the same. For example, Saud did not feel that there is a difference in the style between the phrases of the first activity and the phrases of the second activity. He believes that “they are the usual phrases” and “there is no difference”.

Only one participant out of the 14 participating in two focus group interviews recognised a slight difference between facilitating discourses and direct instruction. He described the online tutor's writing manner in direct instruction by saying: “these expressions are very formal... I can say you were

trying to lead us”. According to the community of inquiry framework indicators, making explicit reference to outside material by providing useful information from a variety of sources such as articles, textbooks or links to external websites are considered under the direct instruction category. [ see Appendix 2 ]. The same participant thinks that the additional website link that I posted in my contributions is a kind of guideline for the learners. He states “you gave them a guiding example...Go to such and such a page...Read it and apply what you learned to the video clip... the activity”. In contrast, he said of the facilitating discourse, “these expressions are 65% informal”. He thinks an informal writing manner encourages students to engage in the discussions and to participate several times. However, he does not think that the online tutor’s writing manner affects the students’ opinion or way of writing.

Also, only two participants out of the 11 participating in the interview recognised the difference between facilitating discourses and direct instruction. However, neither participant saw much importance in the online tutor's writing manner in influencing the students' writing manner. For example, Amman thinks there is a great difference between the styles of the phrases that the researcher used in the first activity ( direct instruction ) and the phrases in the second activity ( facilitating discourse ). Amman described the researcher’s contributions on a discussion forum by saying: “the first activity acts like a key for the activity, which gives you information about the activities, evidence, trying to direct you... but the other activity was an invitation to write... a message for the students to start writing”. Even though

Amman realised the difference between facilitating disclosure and direct instruction, this did not have much impact on the degree of social presence.

Hadi, who has a high social level in the first and the second activities, managed to distinguish facilitating discourse but was unable to distinguish direct instruction. He describes facilitating discourse as a “very convenient” style that makes “student feels comfortable”. He believes that when the instructor used slang and an informal writing manner, he / she is breaking the barriers with students and reflecting that the instructor is “a casual doctor and close to the students”. He thinks that this facilitates the students to interact with the activity with no fear to “write something that may be wrong”. However, Hadi minimised its importance in impacting on the manner of the student's participation. The student believes that, before the end of the specified time to participate in the discussion, the students begin to participate and debate. He states “students are always like this... before the expiration of the debate by one day... they begin to participate and respond to other students”.

The fact that the majority of the participants cannot distinguish between facilitating discourses and direct instruction may illustrate the quantitative results. As declared in the quantitative analysis findings chapter, there is no significant difference between the effects of facilitating discourse and direct instruction in terms of students' social presence level. However, I observed a difference in the level of social presence categories ( interpersonal communication / affective responses, open communication and group cohesion ) across the three activities. Indeed, the participants' responses in

the individual interviews and focus group interviews led the researcher to search for other motives that could promote and affect the development of students' social presence in the higher education context in the social network environment. As indicated in the research design and methodology chapter, the qualitative data analysis based on the thematic analysis of the individual interviews and focus group interviews data obtained from participants. Detailed information about the process of the thematic analysis was given in the section 3.7 qualitative data analysis techniques.

The qualitative data analysis exposes these motives, which are constructed under two main topics and several categories and sub-categories. The main topics are:

- Instructional design and organisation
- Learner-specific matters

Table (17) shows the topics, categories, sub-categories and definitions of each category. All the items in the table emerged from qualitative data, and are relevant in one way or another to the research questions.

( this table continues over six pages )

## 1. Instructional Design and Organisation

Categories	Sub-Categories	Definitions
<b>Web design satisfaction</b>	<ol style="list-style-type: none"> <li>1. The language in the user interface.</li> <li>2. Feeling lost on the website.</li> <li>3. Suggestions for design modifications.</li> <li>4. Criticising the style, the colours and size of the fonts.</li> <li>5. Feeling the website is complex compared to other sites.</li> </ol>	The attitude of a learner as a computer user to the web design and computer system that are employed in the online learning environment.
<b>Network effect</b>	<ol style="list-style-type: none"> <li>1. Generalisation of the system.</li> <li>2. Needing to increase the number of the users.</li> </ol>	A marketing and business expression reflects a phenomenon where the significance of a product, service or trend is dependent on the number of others using it.

**Table [ 17 ]** The topics, categories and definitions of the qualitative data

Categories	Sub-Categories	Definitions
<b>Network effect</b>	3. Needing longer time periods in order to spread the concept of using a social networking website for educational purposes.	
<b>Instructor responsiveness</b>	1. The instructor's quick response. 2. The students' feeling that the instructor is monitoring the website. 3. The instructor should engage in discussion.	The instructor responds to learners' comments, questions and emails without delay.
<b>Nature of the task</b>	1. The nature of the questions and activities. 2. The nature of the technology medium.	Sort characteristics of the online activity and what is required within the task.
<b>Awarding degrees</b>	1. Additional degrees for participation. 2. Additional degrees to persuade students to participate early.	The instructor grants additional degrees to learners who participate in the online activity.

Table [ 17 ] The topics, categories and definitions of the qualitative data

<b>2. Learner-specific matters</b>		
<b>Categories</b>	<b>Sub-Categories</b>	<b>Definitions</b>
<b>Previous experience</b>	<ol style="list-style-type: none"> <li>1. The participants have accounts on social network websites, such as Facebook or Twitter.</li> <li>2. Administration or participation in internet forums in the past.</li> </ol>	Previous knowledge, skills, events, thought, or emotion of a learner in using cyberspace environment.
<b>Peer influence</b>	<ol style="list-style-type: none"> <li>1. Considering students' contributions is one of the key elements of understanding the task.</li> <li>2. The participants acknowledge the other students' contributions and opinions affected their views and style of writing.</li> <li>3. The scaffolding concept.</li> </ol>	The impact from members of one's peer group on a member.

**Table [ 17 ]** The topics, categories and definitions of the qualitative data

Categories	Sub-Categories	Definitions
<b>Friendship</b>	<ol style="list-style-type: none"> <li>1. Preferring a group be made up of friends.</li> <li>2. Friendship has an important role in promoting the desire to participate.</li> <li>3. The participants ask friends' opinions before they post the contributions in the online forum.</li> <li>4. The dialogues and writing manner between friends are different to dialogues and writing manner between classmates.</li> </ol>	<p>A social relationship of mutual affection between two or more learners who are members of the same group.</p>
<b>Attitude</b>	<ol style="list-style-type: none"> <li>1. Feelings of admiration towards e-learning.</li> <li>2. Attitude towards emails and communication with the instructor and classmates.</li> </ol>	<p>A positive or negative evaluation of people, objects, events, activities or ideas.</p>

**Table [ 17 ]** The topics, categories and definitions of the qualitative data



Categories	Sub-Categories	Definitions
<b>Attitude</b>	3. A prior attitude against the social networking websites. 4. Attitude towards using explicit names or using assumed names.	A positive or negative evaluation of people, objects, events, activities or ideas.
<b>Self-esteem and Self-confidence</b>	1. Self-esteem 2. Self-confidence	It reflects positive or negative evaluations of the self, which include attitude, confidence, satisfaction and judgment of oneself towards the self.
<b>The Wave Effect</b>	1. A number of active students within the group encourage others to participate and interact. 2. The participants usually repeat what has been said previously.	The influence of general trends in the online discussion context on a learner's writing manner.

**Table [ 17 ]** The topics, categories and definitions of the qualitative data

Categories	Sub-Categories	Definitions
<p><b>The Wave Effect</b></p>	<p>3.The participants' ideas and writing manner are influenced by previous comments.</p>	<p>The influence of general trends in the online discussion context on a learner's writing manner.</p>

**Table [ 17 ]** The topics, categories and definitions of the qualitative dat

The following paragraphs will discuss and explain these topics and categories in detail in terms of rationale and why and how they can be useful to the study. Also, they will include a summary of the interviewees' voices. This discussion will be supported with excerpts of quotations and examples based on the obtained data.

## **5.4 Instructional design and organisation**

As indicated in previous chapters, instructional design may be defined as the planning and elaborate design of an online course with specific emphasis on aspects of structure, interaction, process and evaluation. As mentioned in the above table, five categories were constructed under this topic. These were: web design satisfaction, network effect, instructor responsiveness, nature of the task and awarding degrees. These categories are presented below.

### **5.4.1 Web design satisfaction**

Web design satisfaction is the attitude of a learner as a computer user to the web design and computer system that are employed in the online learning environment. As mentioned in table [ 17 ], there are five sub-categories under web design satisfaction: the language in the user interface, feeling lost on the website, suggestions for design modifications, criticising the style, the colours and size of the fonts and feeling that the website is complex

compared to other sites. The following paragraphs give detailed information about these sub-categories.

Indeed, qualitative data confirms that web design satisfaction is a key issue and could enhance online interaction between students and social presence level. For instance, a number of interviewees asserted the importance of language in the user interface. In spite of the system only using some English words like titles, profile-groups and tools, while all activities, posts, links, student names and groups were shown in Arabic, some students complained about using the English language in the user interface. A student in the first focus group considered that one of the main disadvantages is that the website is designed in the English language. He argues by saying “not all of us (the participants) are familiar with English...I personally faced this problem.. it would be better if it was in Arabic”. Also, Hadi believes that the lack of support for the Arabic language by the system may represent an obstacle for some students. He states, “I am one of those who does not know the English language well... And I think other students have the same problem”. However, Hadi believes that a simple training course is necessary in order to overcome this problem. Especially as the system used simple and common English words. Furthermore, Saud thinks that the lack of Arabic language support on the *Dewaniya* website hindered his participation in the activities. Although Abdullah did not face difficulty when dealing with the site he would prefer that the application interface be in Arabic.

Feeling lost in cyberspace was an issue raised by Saud, who felt lost on the website. He states, “each time I login to the website, I feel lost”. In order to overcome this obstacle, he provided some technical suggestions to change the design of the website. Such as, adding red notifications features similar to those of Facebook. Also, he would prefer to be able to see the posts of his colleagues in the other groups.

Design modifications were also raised by another student in the first focus group. He also pointed out the style, the type, the colours and size of the fonts need to be changed. In general, he thinks that “the website needs rearrangement”. He clarified his thoughts by saying, “the students’ posts should be displayed on the main page once I log onto the website...I felt tired while searching for them”. Saad believes that if the *Dewaniya* site had a mobile application for Smartphones, the students' approbation would increase. He states “now most people are using iPhones or Galaxy phones. If the *Dewaniya* site had an application for the phone it might be easier and better”.

Salem feels that *Dewaniya* is a complex website compared to other social network sites which offer mobile applications and simple friendly interfaces. To illustrate this, despite Salem's activity on social networking sites, such as Facebook and Twitter, he got low social presence level on his participation in the first activity and didn't participate in the second and third activities. Salem believed that the design of the site was complex compared to other sites, such as Facebook or Twitter. He felt that the *Dewaniya* website

was like “a closed box. It's not open to anyone... unlike Facebook”. Furthermore, Salem attributed the cause of his preference for Twitter to its good, simple design and options for different and competitive applications settings. He argues that Twitter has a great deal of mobile applications that are readily available on Play and App Stores. Hence, if the user is unsatisfied with a particular application, he / she can easily get another application.

It seems that the most participants deem web design satisfaction to be a priority issue. As a general rule, a good design requires a good understanding of the users' needs. Moreover, the website system needs to match a user's level of ability for different levels of interaction. This involves technical, functional and organisational dimensions. Regarding the study's investigation, it seems that a good quality website design facilitates learners' interaction and sharing of ideas. It encourages learners to participate effectively in online debates and the learning social network environment. This may promote the development of students' social presence levels.

#### **5.4.2 Network effect**

Network effect is a marketing and business term. It is a phenomenon where the significance of a product, service or trend is dependent on the number of others using it. In other words, a service or product becomes more valuable when more people use it. Telephones, fax machines and emails are good examples of the network effect. Most participants consider that the

effectiveness of the social network system would be promoted if the system was generalised on all modules.

As mentioned in table [ 17 ], there are three sub-categories under network effect, generalisation of the system, the need to increase the number of the users and the need for a longer time period in order to spread the concept of using a social networking website for educational purposes. The following paragraphs give detailed information about these sub-categories.

Generalisation of the system aspect is raised by two participants in the first focus group interview. They argue that one of the negative sides of the *Dewaniya* website is that it is dedicated to one module only. They believe that it would be better if the website was utilised by other modules. One of the participants declares that, “the website should be generalised to all the students in the faculty of education... in this way, the website usage will increase”. He emphasises spreading “the idea of using a social networking website for educational purposes”.

Also Jamal, Ali and Abdullah believe that generalisation of other modules would increase the usage and effectiveness of the system. Jamal suggests generalising the system for the whole faculty. He supposes that this may facilitate the communication between the students and instructors. Ali and Abdullah have the same viewpoint. Besides this, Ali puts emphasis on the need to increase the number of users while Abdullah stresses the need for longer time periods in order to spread the concept of using a social

networking website for educational purposes. Ali argues that one of the dilemmas is that the number of participants is few. Thus, he calls on involving whole college students in using the *Dewaniya* website. Abdullah thought that had the course been longer, or had the site been used for more than one module, the impact of use would have been greater and easier.

The participants in the second focus group interview pointed out examples of network effects from web.2 technology and mobile applications. The first student believed that teaching all of the college studying modules through the *Dewaniya* website will increase students' interest and involvement in online activities. He argues that the students will get familiar with this method in the same way as with Facebook. He states: "at the beginning I was not familiar with Facebook, after I entered it and started using its functions. I added friends, saw the photos and began to write comments. Ultimately, you will find that it has become part of your daily life". The second student agreed with his colleague's viewpoint about generalisation of the system in all modules. He believes the generalisation led to an increase in students' connections and involvement in activities and sharing their opinions with others. He likens the case to the growth of the use of the WhatsApp application. He said: "It will be like the WhatsApp application. There are even other free messenger apps for Smartphone; I use WhatsApp because all of the people I know, they are using it".

Salem considers himself an expert on the Internet and with regards to social networking. He has Facebook and Twitter accounts, a blog and a



personal website, and is active in online forums. He also participates in a number of groups that offer mobile social networking services. This is the first time that he has used social networking for educational purposes. Salem attributed the cause of his preference for Twitter to the fact that the majority of people are using it now. He state: “Firstly, because everyone is on it! Everyone I know has a Twitter account !”.

Indeed, I am aware that part of the previous ideas are hypotheses and may need to be tested. However, the participants reflect their thoughts and experiences of using a social networking website for educational purposes for the first time. They connect their new experience with their previous experiences. They presented reasonable views, which are supported by examples from reality, such as Facebook, Twitter and WhatsApp. In addition, the network effect concept is well-known and commonly used in marketing and business fields. Since this study used a product [ the Elgg system ], it is sensible to use phrases and theories from business fields.

### **5.4.3. Instructor responsiveness**

I define this category as the instructor responding to learners' comments, questions and emails without delay. Indeed, the qualitative data analysis reveals that the participants are interested in the instructor's comments. They appreciate the promptness with which the instructor responds to emails or reacts to students' posts on the forum, which reflects the instructor's interest in the website and in his students. Moreover, the

participants emphasise the importance of the students' feelings that the instructor is monitoring the website, reading and commenting on students' postings regularly, as well as constantly searching for ways of supporting the development of the online learning community.

As mentioned previously, there are three sub-categories under instructor responsiveness, the instructor's quick response, the students' feeling that the instructor is monitoring the website and the fact that the instructor should engage in discussion. The following paragraphs give detailed information about these sub-categories:

A student in the first focus group said: "when I participate in any discussion or ask any questions, I want to get a quick response". He considered the instructor's quick response as an indicator that the instructor follows up the website. He appreciated the fact that the researcher replied immediately to students' questions and comments. He deems the instructor's quick response as a catalyst for participation. He said: "this [ the quick response ] encourages us to participate".

Sultan emphasises the importance of the students' feeling that the instructor is monitoring the website. He argues "every student is concerned that the Doctor monitors what he posts on the website". Sultan believes that the aim of students' participation in the online activities is just "to tell the Doctor: see us.. we have fulfilled our duty!!". Also, Saad has the same opinion. It is important for Saad that the instructor follows the website and

reads the students' contributions. He considers this as the instructor showing his concern about his students' efforts. He knows that the instructor is monitoring the website through the instructor's responses to the students and his participation and comments on the website as well as through his discussion in the class. In the words of Saad: "when he [ the instructor ] comments on what I've said and specifically mentions my name I know that he is following my work".

Hadi agrees with above perspectives. He published blogs. The topics were about Google and multiple communications. However, nobody responded to his contribution. The researcher asked him if he felt frustrated. He downplayed the importance of the students' responses to his contribution. Hadi states: "what's important for me was that you and Dr. Khalid would read it". Hadi thinks a quick response is essential and shows that the instructor is interested in the website and the learners. He knows that the instructors read his contribution through their comments and that they follow-up the website. The participant noticed that the researcher always monitored the website through the researcher's quick responses. Hadi stated "If a student sends you an email or a question on the forum you always respond to it quickly... I mean...You are monitoring what's going on on the website...this is important... it means that you read the students' contributions".

In addition Bader insisted on the importance of the students' feelings, whereby the instructor is interested in the material and follows the students' participation on the site. Bader believed that the instructor should engage in

discussion and respond to participation in the online debate or in the class. Bader claims that the module tutor Dr. Khalid was not interested basically in the idea of the online activities. Given that he did not participate in any online discussion. Bader alleges "At least he [ Dr. Khalid ] tells us during the lecture what he saw and read on the site. He could discuss comments and tie them into the lectures during class". Bader assumes that if the module tutor had urged participation through involvement in the online discussion or in the class, the students may care more about the participation. Saad corresponds with Bader in the instructor's involvement in the discussion issue. He thinks "this method would have increased competition and participation among the students".

In all these respects, it seems that the instructor's online behaviour and responsiveness have a significant influence on students' online interaction. Students expect quick meaningful feedback from instructors and involvement in the discussions. This could inspire students to the online participation, which may lead to facilitating the development of students' social presence levels.

#### **5.4.4 Nature of the task**

There are two sub-categories under the nature of the task category, the nature of the questions and activities and the nature of the technology medium. The nature of the task means the kind and characteristics of the online activity and what is required within the task. As indicated previously,

most of the participants did not find a difference in the approach of the online instructor in the first, second and third activities and could not distinguish between facilitating discourse and direct instruction. When the researcher enquired about the reason why some participants changed their writing style during the second or third activities in comparison with their style in the first activity, by providing a number of examples of this change, they attributed this to the different nature of the question or the activity. For example, a student in the second focus group believes that the first activity differs from the second one. He argues, “in the first activity, you express your opinion on its contents, but in the second one you try to highlight the mistakes and positive and negative aspects, so the activity is different”. Also, in the second focus group most of the students declared that they completed the discussion during and after the lectures. However, one of the participants stated that “It depends on the nature of the activities and the questions raised... for example, in the second and third activities we discussed the positive and negative aspects, but we did not discuss the first activity”.

Hadi attributed the change in his writing manner to the different levels between activities by saying “questions or activities have various levels”. He continued to illuminate his viewpoint, “In the first activity the focus was on the communication method... in the second, the focus was on the characteristics of the sender or the rules the sender must adhere to; for the third activity, I did not understand it very well. So, I did not participate”.

In addition, Salem brought up the issue of the nature of the technology medium. He distinguished between social networking sites such as Twitter and Facebook, and other sites such as forums and chat sites. He insisted that social networking sites reveal many aspects of the personality of the user. He argues that constantly following and remaining in contact with a person on Twitter may reveal many aspects of his personality, ideas, concerns, and perspectives. Indeed, all of this personal information was not easy to obtain previously. Salem justifies that by saying “maybe because Twitter is fast and it makes the person post what he’s thinking at that moment.” Therefore, according to Salem, in order to avoid embarrassment, some people use assumed names or pictures.

As indicated in the research design and methodology chapter, I used message analysis and content analysis approaches to describe and shed light on the online learning process and what participants do in the online discussion. These approaches were used to analyse the participants’ contributions, which may provide evidence of participants’ social relationships and reflect the participants’ attitudes, thoughts and the level of social presence in an online community. According to the result of qualitative data, it seems that the nature of the question and the type of technology medium play an important role in the participants’ responses and participants’ writing manner, which in turn reflects the social presence level of it in an online community.

### 5.4.5 Awarding degrees

Some participants state that their motive for participation is that they are interested in the Internet and advanced technology. However, the vast majority of the participants recognise that the main motive for participation is the awarding of degrees that are granted by the instructor to learners who participate in the online activity. As mentioned in table [ 17 ], there are two sub-categories under awarding degrees category, additional degrees for participation and additional degrees to persuade students to participate early. The following paragraphs give detailed information about these sub-categories:

Indeed, several participants admit that if there were no additional degrees for participation, they would not be interested in participating in online activities. Saud, Hadi and Bader are just some examples through which the students acknowledged that additional academic degrees are the main motive for participation. Saud states “additional degrees... and I am interested in such discussions... I mean participation. I am used to these kinds of activities”. Hadi said, “I did not encounter any difficulties in the activities... so I said to myself that it wouldn't be right not to take advantage of additional points”. Bader thinks that the primary reason for the participation of the rest of the students on the site was to improve their grades. He assumes no one would participate if it wasn't for extra grades. Bader said “I think that people participate only to get better grades”. Then he continued to say, “I don't think anyone would participate... Maybe no one would even read it”.

Furthermore, in the focus groups, most participants have the same view.

These are some examples:

**Student 1:** “I would say that 100% or a great percentage of students wouldn’t participate if there were no additional degrees for participation... you saw that the majority of students just do their tasks, no more”.

**Student 2:** “Frankly speaking... if there were no additional degrees for participating... I do not think that I would participate.”

Ali believes one of the disadvantages is that students' participation is not very serious. They get involved in discussions on the last day. In order to solve this problem, he suggests additional degrees to persuade students to participate early. Ali said “I suggested that a rating score be established to reward those who take the initiative to participate... and the distribution of the points should be based on the time it takes a student to respond.... I mean, for example, those who participate on the first and the second day will be awarded a rating of five points... those who participate on the third day will be awarded four points... and so on; this way the number of awarded points decreases gradually, depending on how quickly a student responds to the posts”.

In fact, the initial step in establishing the community of inquiry is inducing the learners to take part in the online discussion. The interviewees’



responses reveal that additional awarding of degrees encourages learners to take the first step and engage in the online discussion.

## **5.5 Learner - specific matters**

Six categories were constructed under this topic. These were: previous experience, peer influence, friendship, attitude, self-esteem and self-confidence and the wave effect. These categories are presented below:

### **5.5.1 Previous experience**

Previous experience implies learners' previous knowledge, skills, events, thoughts, or emotions of a learner in using the cyberspace environment. There are two sub-categories under previous experience; the participants have accounts on social network websites, such as Facebook or Twitter and administration or participation in Internet forums in the past.

As mentioned previously, this is the first time that students have used the social network system for educational purposes. However, all of the participants have accounts on social network websites, such as Facebook or Twitter. Some of the participants consider that this previous experience on social network websites has encouraged them to participate actively in the *Dewaniya* website, and encouraged them also to disclose their personal details and photographs. For example, a student in the first focus group gave

the reasons that he shared his personal details and photo on the *Dewaniya* website by saying: “I have a forum on the internet...I was the administrator...so it is usual for me to add my personal photo and publish some of my personal details”. The student also has a Facebook account on which he usually shares his personal photos and life details with his Facebook friends.

Hadi is very active on Facebook and Internet forums. He believes that his past experience with Facebook helped him to participate effectively, without any problems in disclosing some personal information and adding his personal photo. Hadi stated, “I am used to accessing similar websites... such as Facebook and Twitter.... that's not difficult”. Hadi claimed that there are several reasons why students are reluctant to upload their personal photos. He believes that the Facebook experience also encouraged him to disclose his personal details and photo. Hadi states that there are “ a lot of people who are afraid to post their photos...maybe it's the first time they have dealt with such websites... but as I told you, whoever has used Facebook and Twitter will find it normal... I post my photo and photos of my friends on Facebook... the majority of Facebook users publish their photos”. Hadi argues that if a student participant is familiar with social network websites, such as Facebook and Twitter, it becomes normal for him / her to upload personal photos and reveal some personal information. In addition, Hadi thinks that the lack of Arabic language support on the *Dewaniya* website may hinder students' participation in the activities. However, he overcame this obstacle later on account of previous experience on the social network websites. He states

that, “what helped me was my past experience with websites like this one... It's true that the first time I did not know how... but then I learned, and everything became easy”.

Jamal, Sultan and Ahmad are using social networks for educational purposes for the first time and they like this teaching method. They agree with Hadi about the Facebook experience. Therefore, since the beginning, they used the website comfortably. For example Jamal said that “from the first lecture.... I went home and accessed the website easily... maybe because I am used to Facebook”. Also, Sultan believes that the *Dewaniya* website is like Facebook. Thus, he became familiar with the website and learned quickly how to use it. Ahmad agrees with Sultan. He thinks, “the website is similar to Facebook, so it's easy to deal with it”.

In addition, Ahmad has been active on online forums for years. He logs onto the *Dewaniya* website several times a day. He discusses and comments on the posts of other students and on those of the teacher, and maintains that his previous experience in the world of online forums has helped him in this respect. Ahmad states that, “I log in more than once... my laptop is on 24 hours a day... I mean I log in to see if there are any updates... and to see who replied to my posts and I respond to him... This is my nature even in forums”.

However, not all previous experiences lead to positive participation. For instance, Bader got low social presence in all his participation in the activities. Although Bader has an account on Facebook and Twitter, he is not very

active with social networking, and uses it only rarely because he doesn't need it and doesn't feel it is important in his life. Bader said “nothing about Facebook interests me... I didn't feel that I needed Facebook to connect with people... Maybe because I am in Kuwait... I live and study in Kuwait, with my family... and most of my friends are around me”. In order to communicate with his relatives and friends, he uses his mobile phone, WhatsApp application or email, if he wants to send or receive files. Bader believes that there is a lack of participation and interaction with the *Dewaniya* site by students because they are not used to this way of education. He argues, “maybe because they aren't used to using it yet. It's possible that they aren't receptive to the idea... They are accustomed to traditional education... The student comes to the lecture and the professor gives the lecture, and that's it”.

As mentioned previously, social presence of the community of inquiry framework consists of categories and indicators to define the presence and to guide the coding of transcripts. These indicators include presenting details of learners' lives outside of class and sharing information unrelated to the course. Also, according to the community of inquiry framework, developing a social presence level requires conversational skills and personal technical abilities. It seems learners' previous experience in social network websites facilitates them when it comes to using the *Dewaniya* website comfortably and developing learners' social presence levels.

### 5.5.2 Peer influence

A peer is a person who belongs to the same age group or social class status. Peer influence refers to the impact from members of one's peer group on a member. As mentioned previously, there are three sub-categories under peer influence, giving consideration to students' contributions is one of the key elements of understanding the task, the participants acknowledge that the other students' contributions and opinions affected their views and style of writing and the scaffolding concept. The following paragraphs give detailed information about these sub-categories:

However, most of the participants read all the students' contributions on a discussion forum before they participate in the discussion. They consider students' contributions as one of the key elements for understanding the questions and are an entrance for dialogue between the students. After the participants comment, most of them come back to see the other students' comments on their posts. For example, Ali, Amman and Hadi deem the other students' contributions to be one of the key elements that help them to understand the task. In order to familiarise himself with the task activity, Ali reads students' comments and takes a look at the students' opinions. Amman said, "as for the third activity, I could not understand it very well, so I read the contributions of other students in order to understand". In the third activity, Hadi was late to participate in the debate, and he justified this by saying "I had no idea about the third activity. I read the third activity but did not understand it... I waited for the students' reactions... I said to myself 'let's wait for one,

two, or three reactions so I can respond to them”. Two participants in the second focus group agree with the above perspectives. The first student said, “I read all of the contributions to help me understand the question before making any comment”. According to the words of the second student, “I read the comments... and see what the points of view are... and their comments on the question... The comments help me to understand the subject”.

In addition, there are acknowledgements that the other students' contributions and opinions affect the participants' views and styles of writing. A participant in the second focus group was very clear about the influence of reading the other students' contributions. He acknowledges that the other students' contributions and opinions affected his views and style of writing. He states that, “there were some views and questions that have changed my way of thinking. For instance, when you find an argument or a question that matches your view, you will think of it again and again. This might lead to something new”. Moreover, Amman admits that he was influenced by other students' contributions in the first activity. He was afraid of peer influence in other activities. So, he did not read the other comments and wrote his comments directly. He said that, “I was afraid that some of their ideas would stick in my mind... and that would make me agree with them. I thought that it would be better to watch the video first, and then comment”.

Saud and a student in the first focus group had almost the same experience as Amman. Saud prepared what he would write. But he read a student's contribution who had the same ideas and mentioned all that he

wanted to say. Saud claims his colleague's posts were well-structured and included both the advantages and disadvantages. Saud did not want to post a long contribution and repeat the same words, so he just agreed with his colleague. With regards to the student in the first focus group, he usually read all of the students' comments. He acknowledges that he was influenced by one of his colleagues by saying, "certainly, I have taken some useful points from Mosa, but not very many. Similarly, I benefited from him more than I did from watching the video". However, the students differ about the best method of distributing students into groups. Jamal prefers random distribution to facilitate having new relationships with people. He believes through these new connections and relationships that a learning experience will take place. According to Jamal, "If it [ random distribution ] happens that I have to deal with a new person, I will benefit from his views. Certainly I will gain from their thoughts. I will learn from them and they also learn from me".

In addition, a student in the second focus group highlighted the importance of peers' written style. Indeed, he was not interested in knowing other colleagues in the group. The centre of his interest was the participants' methods and written styles in the discussion. He clarified his viewpoint by saying "I mean the way and approach in which they write... how they write... how they discussed the question and what their answers were and how they concluded such answers".

In addition, peer influence could appear in different ways. It could appear through the scaffolding concept. At the beginning of the course a

student in the first focus group faced some trouble when logging onto the website, but he overcame this later through help from his colleague. Then, when some students faced trouble using the website, they referred to him for assistance, and he answered their enquiries and provided them with the necessary help. Furthermore, Bader would have liked to be in one of his colleagues' groups, in order to benefit from his expert discussion and contribution. He states that, "I thought they [ the other group ] were more concerned with the activities and the discussion....Especially Abdullah ... He has expertise with the educational material. I wanted to benefit from his expertise."

It looks like peers influence the learners' understanding of tasks, thoughts and writing style. All of these will be reflected in the learners' participation in online discussions. In turn, learners' social presence level in online learning community will be influenced.

### **5.5.3 Friendship**

Friendship in this study refers to a social relationship of mutual affection between two or more learners who are members of the same group. The majority of participants think that friendship has a significant role in the desire to take part in discussions. Often, the groups have the highest social presence level, and the members of these groups are often friends in real life. Usually, they continue the discussion and dialogue in the classroom or outside the university. In order to facilitate communication and dialogue



between groups members, some students prefer groups which are composed of friends. Therefore, they prefer to distribute themselves into groups rather than the instructors deciding the groups. This facilitates communication between team members, whether via phone or meeting outside the university. In addition, the majority of the participants admit the writing manner between friends will be different to the writing manner between classmates. As mentioned previously, there are four sub-categories under friendship: preferring a group be made up of friends, friendship has an important role in promoting the desire to participate, the participants ask friends' opinions before they post the contributions in the online forum and the dialogues and writing manner between friends are different to the dialogues and writing manner between classmates. The following paragraphs give detailed information about these sub-categories.

According to the interview data, most of the participants prefer a group to be made up of friends. In fact, they have plentiful reasons, such as avoiding some of the social and psychological problems like shyness and fear of public criticism. For example, a student in the first focus group prefers to choose his group by himself in order to consist of a group of his friends. He justified his viewpoint by saying, "because we already know each other...we are close to each other...so we will not be embarrassed by criticism...you know... as some people deal with this issue as personal". Ahmad justifies his preference for groups by saying, "some students are shy... they can't participate in discussions, if they are not with a friend they fear writing something and the others not liking it or maybe misunderstanding". A student in the second focus

group agrees with Ahmad. He believes that there are some students who are hesitant to participate in the discussion because they are afraid to share ideas without their friends. He argues, “they may get perplexed and say if I write this word, they may not be happy with it...I am afraid that they may misunderstand me”. Moreover, Sultan prefers that the members of the team be of his own choice, which makes the participants more comfortable in the debate. Sultan did not know any of the members of his team, so he was reticent in the debate. Sultan acknowledges that, “I did not know anyone in my group, that's why I was a little reserved to discuss with and talk to them”. Amman did not add any friends. He justified this by saying that he does not feel that this is important. His colleagues in the group are not his friends in reality, and he did not know them before. There were not any discussions between the group members about the activities inside the classroom. He prefers to have his friends in the group. Therefore, he also believes that “it is better for the student to choose the group that is suitable for him”. He justified this perspective by saying that, “I think it is better to discuss things with a person you know”. Moreover, Saud's colleagues in the groups are not his friends, and he did not know them before. He preferred the group to consist of his friends. He vindicates this by saying, “I feel it is better to discuss with someone you are familiar with”.

Hadi does not like mixing with strangers. The majority of Hadi's friends on Facebook he knows personally. Although Hadi describes himself as someone who is not outgoing and does not like to socialise and get to know new people, he obtained a high social presence level in the first and the

second activities. Hadi describes his group as “good on the whole”. Most of the group members are Hadi’s friends in real life, and he meets them outside the university. He also believes that this friendship has an important role in promoting the desire to participate, and they often finish their chat and their discussion in the classroom or outside the university. All of this will not happen if he is a member of a group composed of unfamiliar members. That is why he prefers that the group be made up of his friends so that he can discuss and communicate with them easily, either by phone or by meeting them outside the university. Hadi continued to clarify his viewpoint by saying “these are my friends.... we always discuss academic subjects, whether in the classroom or outside... I know them well... I mean, if I write and comment on them they will not be upset.... and vice-versa”. Most of the team members are not Abdullah’s friends in real life. Also, he would prefer to be part of a group consisting of his friends, or at least acquaintances. He claims that there will be different reactions if a group is composed of friends. He agrees with Hadi that friendship may promote the students’ desire to participate. Abdullah said that, “If they had been my friends we would have kept in contact with each other. I would have called them on the phone or met with them somewhere or discussed the activities with them and encouraged them to participate”. Saud claims that if he was a member in a group that consisted of his friends, he would be able to motivate the group members to participate effectively since he could easily call them and urge them to come and participate if they were late.

In addition, some participants ask friends' opinions before they post the contributions on the online forum. Saud did not discuss the activities inside the classroom with his group members. But he discussed the activities with his close friends, Fahed and Nayef, inside and outside the classroom. He professed that, "In the third activity, before I published my post, I discussed it with my friends and we had different opinions... We were discussing it for about half an hour". Furthermore, a student in the second focus group discussed his contribution with a friend before he published it on the online forum. He said: "In the third activity, my friend and my colleague in the group Yosef was beside me. After we'd finished writing our posts, each one of us read the post of the other, then we discussed and published them". Another student stated "Of course when the discussion takes place between friends...it will be easier... and we may discuss it in the classroom before we post our opinions on the Internet". Indeed, the friendly meetings may encourage learners to participate in the online activities while the discussion may impact upon the participants' opinions or writing manner.

In addition, the participants, such as Saud, Salem, Sultan, Abdullah, Ahmad and Hadi, believe that dialogues and writing manner between friends are different to dialogues and writing manner between classmates. Saud clarified his point of view by saying "I would concentrate more on the post if it was by someone I knew.... I think that they also will do the same". He believes that the agreement and disagreement with his friends would be more flexible since they all are friends and know each other well. In fact, it is complicated to criticise your friends at university in front of the professor and

classmates. For instance, in the second activity, the task was criticism and evaluation of former students' projects. Salem felt hesitant to criticise the former students since they are friends. However, he had changed his mind and criticised the project because the former student has graduated now. He continued to say that "but if the student had been my friend and he had not graduated, I would not have criticised him and pointed out his errors. I would have been worried that the doctor would lower his grade and my friend would be upset with me". Sultan feels that, "It's difficult to criticise people you do not know". In contrast, Abdullah feels embarrassed about criticising others' views, especially if they are not his friends. He states, "I feel embarrassed when I give critical commentary on others' comments... Especially when I don't know them well... when they aren't my friends". Ahmad justifies his writing manner with Abdullah by saying "We are friends and usually I meet him outside university, so it doesn't matter if I criticise his ideas". In general, the majority of the participants agreed that the writing manner between friends would be different to the writing manner between classmates. Hadi is surprised at his friends' style in writing, discussions and debates, which do not reflect the friends' true personalities. He noticed that, when addressing him, they tend to use a formal language. Hadi said "I am surprised at them [ his friends ] and at the way they write... I mean, for example, they'd say 'Dear brother Hadi'... instead of, say 'Hi buddy' [Laughter]". He continued to say: "We laugh with each other... Why do they write like that ?!! We normally do not have these formalities between us [ laughs ]". Salem thinks that the style of conversation and discussion among friends differs from conversation and discussion with colleagues. He argues that the nature of social relationships determines the

style of discussion. Salem stated, “When discussing things among friends I will be honest... I’ll give my view openly... My directness might lead the discussion into other dimensions... Among friends I feel at ease in the discussion, but among strangers the discussion has limits”.

In reality, a few participants stated that friendship was not important on online discussions. A student in the second focus group thinks that the social network system for educational purposes does not help in establishing real friendships. He said: “There is no real friendship, because the contact remains within the website. There is always a need to have a social side in relations with students, but there is no actual meeting... I only know one person from class”.

It appears that friendship is a meaningful ingredient to encourage learners to join in the online discussions. Also, the nature of the social relationships between group members determines the style of discussion and writing manner. Taking into consideration the discussion and reviewing the learner’s participation by a friend before posting it on the forum could influence the learner’s opinion or writing manner. In all these respects, friendship sense may promote the development of learners’ social presence level.

#### 5.5.4 Attitude

An attitude could be defined as a positive or negative evaluation of people, objects, events, activities or ideas. However, some participants have a previous attitude towards social networks or some of their features. This attitude may influence their social presence level either positively or negatively. As indicated previously, the majority of the participants did not use the social networking features offered by the system, such as the wire, message board, blog and e-profile. Nevertheless, they do not believe in the importance of the *Dewaniya* website for communication with their colleagues. The participants prefer to use mobile phones, SMS, BlackBerry messenger, WhatsApp messenger or meet in public places to communicate with their colleagues. However, they feel embarrassed about calling or texting the instructor on his private mobile, so they prefer to communicate with him by email or talk to him personally during office hours or after the lecture.

As mentioned previously, there are four sub-categories under attitude: feelings of admiration towards e-learning, attitude towards emails and communication with the instructor and classmates, a prior attitude against the social networking websites and attitude towards using explicit names or using assumed names. The following paragraphs give detailed information about these sub-categories:

In reality, feelings of admiration towards e-learning play a role in participation and social presence level. As for the primary reason for Abdullah

and Ali's participation on the site, it is that they love e-learning. Abdullah said "I like this method... I like the idea of electronic learning". He prefers an instructor who uses online learning methods than an instructor who uses the traditional learning method. Ali stated, "I like technology a lot... The idea of the site was appealing to me... I am interested in the idea".

However, students have a different attitude towards emails and communication with the instructor and classmates. They prefer to use mobile phones or meet in public places instead of using emails to communicate with their colleagues. In contrast, they prefer to communicate with the tutor by email or by meeting him in office hours or after lectures. For example, a student in the first focus group considers that, "the email is tiresome". He believes that it would be easier to have mobile phone contact with his colleagues. In terms of communication with the instructor, the same student believes that calling the instructor is inappropriate. So, he sends emails to the instructor. He justifies this by saying, "the instructor is busy and I am afraid that I may disturb him. He can answer me whenever he has time... so he can take his time in responding to my request". Another student in the first focus group prefers to meet the instructor personally, and ask and discuss with him any study issues as he usually need a quick and clear response from the instructor.

Also, Abdullah, Salem and Saad did not use any features of the *Dewaniya* site to communicate with colleagues. To justify not needing these features and services, they preferred to use their mobile phone or WhatsApp



Messenger application. Abdullah and Saad do not need email. Abdullah wonders “why should I turn on the computer and get on a site and use email? It takes too long. I use the mobile phone, it's better and faster”. Saad said “I didn't need to send an email to either the students or the professor. If I needed any explanation I just asked one of my friends”. Salem has a very negative attitude towards emails. He stated that “my personal email is Hotmail... Now I do not use it... I only use it for official things such as communication with companies such as Aramex or Amazon, but with friends I use WhatsApp or Twitter to communicate. MSN Messenger is dead... I do not remember the last time I used it”. [ NB: The interview took place before MSN Messenger was officially closed ]

Some participants have in advance negative attitudes towards social networking websites. For example, Saud describes himself as being social. He is keen to visit Dewaniya (the place) to meet with relatives and friends. He had a prior attitude against social networking websites like Twitter and Facebook. When I asked him if he had a Twitter account, he responded firmly and seriously “I am against Twitter”. He justified his position by saying “Twitter is mostly used for political purposes...and this is my issue with Twitter”. Saud's hobby is poetry, and he uses poetical forums to publish his poems using his real name. However recently, according to his friends' recommendation, Saud has started to use Facebook to publish his poems, but he has not posted any personal photos of himself. The student thinks that, unlike Western people, Arabs and Kuwaiti people specifically do not need the social networking websites to socialise with others, as there are Dewaniya

(the place) and cafes to meet and socialise with others. He stated that, “from my point of view, Facebook and Twitter are not meant for our communities [ he means Arab communities ]..especially in Kuwait. These websites are for the Western community”. Saud believes that the people in the Western communities are busy with work and they do not have time for social gatherings and meeting their relatives and friends. Therefore, they use greeting cards and social networking websites such as Twitter and Facebook to socialise with each other. In contrast, in Kuwait according to Saud, there are *Dewaniya* ( the place ) where people meet regularly and all these social gatherings between relatives and friends happen naturally and normally. Saud insists “we are not like the West...I mean, they use them [ social networking websites ] for mere social purposes, but we use these websites for politics, as we can see in the Arabic Spring revolution”. He argues that communities adapt by using social networking websites to compensate for what they are missing. The Western communities lack real social relationships so they use social networking websites to stay connected with family members and friends. On the other hand, Arabs lack political freedom, so they use social networking websites for political purposes. He goes further to explain his ideas by saying, “I mean, Arabs consider the use of social networking websites to socialise with others as a secondary issue, whereas the West considers it as essential”. In addition, one of the participants has a negative attitude towards educational social networking websites. He drew a distinction between regular educational websites and social networking websites and he called for not combining them. He wondered “Is *Dewaniya* website a social networking or an online educational website? We need to distinguish between

them". He continued to illuminate his attitude by saying "I prefer that the trend be educational rather than social networking... this is an educational website and not for social networking and chatting". He thinks this combination may cause disarray. Students may mingle between tutor's contributions, which are required in assessment, and students' contributions. He describes students' posts by saying, "these irrelevant posts cause disruption and divert the discussion away from studying and exams". An additional example was that Amman emphasises that the writing style in social networking websites like Facebook and Twitter is different from that on an educational website. He objects to the use of words like (LoL-kaak) as he thinks they are inappropriate for an educational website. He stated "No...No...that is not acceptable at all..that is inappropriate (laughing ); these are non-academic terms (laughing) [means LoL and Kaak words]; the smiley face is considered usual as it is used everywhere".

Indeed, some participants have an attitude towards using explicit names or using assumed names. Salem brought up the issue of concealment by using assumed names. He argues that some people in the cyberspace world intended to not use their real names or upload real personal pictures. They prefer to remain anonymous. According to Salem, they "like to hide behind a mask". So, none of their acquaintances will know them. In this way they express their opinions easily. However, one of the students in the first focus group supposes that participation using the real name and in an academic institution makes the student more careful about participating in an appropriate way. He said, "what I like on the website is that your real name is

disclosed... that makes you more careful... I mean if I tell you something, you will be known to all... that makes you more careful when you post and discuss". In contrast, another student disagrees with his colleague. He thinks that posting using his real name and the continuous follow-up of his posts by the instructor will impose some kind of constraint. He stated that, "I will feel more free if I know that the Doctor does not follow-up our posts on the forum". He expressed his concern by saying, "We participate using our real names and not nicknames... I wrote some subjects on my blog and on Twitter...but could not post them in the *Dewaniya* website because the instructor will definitely read them and may not find them suitable for the website. Hadi agrees with the second perspective. Since 2006 Hadi has used a nickname on Internet forums and never changed it. He believes that participation when using one's real name may impose some sort of restrictions on the students' participation compared with using nicknames on internet forums and social network websites. He argues that "a nickname gives me more freedom... I am more comfortable and confident to speak freely and without restriction... On the *Dewaniya* website I used my real name... there are some restrictions".

However, I would argue such as clearly positive or negative attitudes towards ordinary or educational social networking websites or generally e-learning system features may influence the students' desire to take part in discussions. Furthermore, these attitudes may influence the majority of social presence indicators, which definitely will influence students' social presence levels. In fact, it is crucial that the learners feel that they are in a safe trusting environment. Also, it is essential that the learners use comfortably the website

features comfortably and have a positive attitude towards educational social networking, which facilitates the development of learners' social presence levels.

In addition, writing manner could also reflect a student's attitude. Saud and Ali used in their posts verses from the Holy Quran and religious phrases, such as 'in the name of God, the Compassionate, the Merciful. They justified this by saying that this was a habit in their life and they believed these phrases would make people feel at ease and attract the reader. Saud represented this wondering, "I always start my writings with (In the name of God, the merciful)". He justified this writing manner by saying that "I am used to this habit in my life...even with my participation on poetry forums.. I must start with "In the name of God, the merciful" then "Peace be upon" and I conclude with thanking" .In terms of Ali, He said, "because when I read them [ religious phrases ], I feel good... after all, don't these expressions charm you? Personally, they charm me... when I read "In the name of God, the Compassionate, the Merciful".

As mentioned previously, affective responses category comprises several indicators to guide the coding of transcripts and to reflect learners' social presence level. One of these indicators is expressing value, which is defined as learners expressing personal values, identity, beliefs and attitudes. The researcher could extrapolate these indicators through analysing learners' writing manner.

### 5.5.5 Self-esteem and self-confidence

Actually, a confidence and satisfaction in oneself or in other words, self-esteem plays a role in the development of students' social presence level. Self-esteem is an attitude and a judgment of oneself towards the self. It reflects positive or negative evaluations of the self. For example, Amman has an active Facebook account. He shares his photos with his friends and posts video links and comments on their posts, but his account on the *Dewaniya* website is not as active as his Facebook account. When asked about the reason for this, it seems that Amman felt less self-confidence to become a very active user on the *Dewaniya* website. The student answered: "because it is an educational subject...and I do not have experience in this field...but on Facebook, I write proverbs and maxims, I post sport or funny videos, and so on". Moreover, Sultan never indulged in a conversation or discussion with anyone; he only expressed his point of view, thinking that the other students would not respond to or interact with him because they never access the website again once they have participated. Also, he was concerned about feeling embarrassed if no one responded to him. He said, "because I'm sure if I talk to them, they will not respond to me". I argued with Sultan saying, the participants may respond to you if you mention their names for example (Jassim, I disagree or agree with you) or ask him a direct question. But Sultan insisted on his opinion, saying: "No, I do not think they will respond to me... I will feel embarrassed... because once Jassim participates, he will not access the website again until the next activity; only then will he see my comment on his input, and the time allowed for commenting will have ended".

In fact, some students are reserved about sharing personal information details. However, Jamal disclosed a lot of his personal information, including his home address, his hobbies (soccer and swordplay), he is a fan of Barcelona, he plays in Alsalmeya club and he is a professional in Al-Bahrain team for swordplay. In reality, Jamal feels self-confident and proud of his achievements. Therefore, he justifies disclosing and sharing all this personal information with his colleague by saying, "It is normal, I am writing stuff about myself... why should I be ashamed ?! This is not wrong, it is normal, I talk about myself. On the contrary, I feel proud".

Really, a learner's self-esteem and self-confidence could promote interpersonal communication / affective responses indicators, such as expressing emotions, expressing value, self-disclosure and use of humour. Furthermore, a learner's self-esteem and self-confidence could facilitate open communication between learners, which may foster several indicators such as, asking questions, offering advice and suggestions to classmates and expressing agreement or disagreement. All these may influence the development of learners' social presence levels in an online learning environment.

### **5.5.6 The Wave Effect**

The Collins dictionary defines the 'Mexican wave' as the rippling effect produced when the spectators in successive sections of a sports stadium stand up while raising their arms and then sit down. It starts when a few

dozen fans leap up with their arms raised and then sit down as spectators in the next section jump to their feet to repeat and propagate the motion. Usually a spectator is unconsciously influenced by a large crowd. He looks to his right and sees the wave approaching, accompanied by a crescendo. When it hits him, he takes part in the wave. He jumps up and throws his hands in the air, making whatever noise he feels appropriate. The exact origin of the wave is disputed. However, it was given that name when the phenomenon came to a mass audience during the football World Cup held in Mexico in 1986.

Indeed, we could see a kind of wave phenomenon in online discussion. I argue that learners' social presence levels may be influenced by general trends in the online discussion context. In reality, the wave effect could be related to the 'wisdom of crowds' concept (Surowiecki, 2005), which will be illustrated and discussed more later in the discussion chapter. These are some examples that may support my argument.

As mentioned previously, there are three sub-categories under the wave effect, a number of active students within the group encourage others to participate and interact, the participants usually repeat what has been said previously and the participants' ideas and writing manner are influenced by previous comments. The following paragraphs give detailed information about these sub-categories:

Hadi believes that a number of active students within the group encourage others to participate and interact. He states that, "If a discussion



starts between two students...I am encouraged to participate". Hadi assumes that if every week a few students post new subjects or comments on the *Dewaniya* website, the website will become active and the other students will start getting involved in participating. Then, according to Hadi, "this will become a habit... and the website will become just like the notorious websites, such as Facebook". Also Sultan believes that the participation of a certain number of students in the debate will incite others to participate in the debate. He thinks that there was a distinct lack of active students in his group. He supposes that, "if only 5 or 7 students participate in the debate, it will make the other students access the site and participate". A student in the first focus group agrees with Hadi. At the beginning, he felt enthusiastic and wanted to participate. However, the low number of participations by group members discouraged him from participating. The student argues that, "the majority do not participate... among the basic things in any place... and any website... if there were no active participants, then this would reduce the time spent by anyone surfing this website... and this will reduce the interaction of people with the website". Although Saud logs into the website as soon as a new activity is posted, he was usually late in participating in the discussion. Indeed, he is keen to read his colleagues' posts before he participates in the discussion, as their posts encourage him to join the discussion. He said that, "I become encouraged to participate when I see other students' posts".

Two students published some materials on their blog, but then stopped suddenly. They justified this decline by saying that there is no inducement and encouragement and other students have not interacted. The first student

stated, “I did not see any interaction or responses from the students”. The second said, “there is no encouragement... Other students have not interacted with me”. He gave two examples, the first, that one of the students asked a question about the exam but nobody answered him. The second, a student published a picture of the new iPhone and asked a question, but also no one had replied to him even after 20 days.

A student in the second focus group realised that the volume of the involvement and contributions increases just before the end of the allocated time. Indeed, there are the different reasons that maybe justify this increase. However, the student believes the increase in the volume of the involvement and contributions encouraged him to take part in the discussion. He was impressed by a writing manner of one group member, who usually started the discussion and posted the first comment. The student stated that, “Hassan has many comments and contributions. He always encourages me to take part in the discussion. He usually starts first, I read his contributions, I look at his style and what he thinks, after I see the video... and then put forward my contribution”. Another student supported this argument. He does not get involved in the discussions at the beginning. He just read the comments of other students and watched the video. After that, he gets involved. In the first focus group, the participants discussed the role of the additional degrees in enhancing participation in online discussions. However, one of the students links his engagement in discussions with the rest of his colleagues. If they become active, he will become active. He said that, “this depends on the majority of those who are present... I mean, if they log in and participate...

Okay... I will participate regardless of the additional degrees... but if there were only a few participants, then I do not think that I would participate.”

Bader didn't participate in any discussions with the members of his group. He justifies this by saying that the members of his group didn't pose new or interesting ideas. The participants usually repeat what has been said previously. According to Bader, “there was no discussion, despite the fact that I quoted one of the students and commented on it”. He continued to clarify his viewpoint by saying “If you noticed, I am the first one to write... After two or three days... I see that someone has commented... Usually they support the previous students... Truthfully I didn't see anything new... He reads and rereads and writes the same thing as before”. Likewise Abdullah would usually be the first to participate in the online discussion. However, he didn't enter into discussions with any of his fellow students. He vindicated this behaviour by claiming that the participants repeat his opinions. According to Abdullah, “I didn't find anyone to talk with! And whoever participated after me agreed with me and repeated what I said... So I asked myself: why bother?! [ Laughs ]”.

The wave effect also influenced ideas and writing manner. One of the students, who is a member of a group where the majority have got low social presence levels, did not comment on the participations of his colleagues, and he just posted his opinions. He justified this by saying: “I saw that those who posted before me did not comment and nobody commented on their posts also, so I wrote my opinions and logged out!!”. Two students in the second

focus group highlighted the large volume of praising, flattering and compliments amongst the students. Flattery replaces an objective critique of the discussion. The first student argues that it is supposed to be the critical side that dominates the discussion. However, he realised that “there was no positive critique and much of the dialogue and discussion contained more praising than just critical assessment”. Another student supports the views of his fellow student. He believes that the most of participants extol the guest expert, the producer. The student said “It is true... many of the youth, for example, said to the producer: your action is great, you are a great man. Why?!..His job is not an extraordinary one... but, they were just praising and flattering him... What did he do?!”.

According to the interviewees’ responses, it seems the learners’ ideas and writing manner are influenced by previous comments. Moreover, it appears that an irresolute learner in participating could be encouraged to participate, if a number of students started engaging in participation and discussion. Essentially, one of the initial steps to create the community of inquiry is that the learners take part in the online discussion. Also, it seems that the active learners need encouragement from the other learners to continue his vitality. So, it is like the Mexican wave. A few people start it, and then gradually it escalates. The learners encourage each other and are influenced by general trends in the online discussion context.

## 5.5 Summary of the chapter

In this chapter, the qualitative data obtained from the semi-structured interviews and focus group interviews were presented and discussed under three topics and several categories and sub-categories. The main topics are: facilitating discourse vs. direct instruction, instructional design and organisation and learner-specific matters. This chapter highlighted the importance of qualitative research in exploring in-depth participant perspectives to give detailed information about students' experiences in the social network context and to reveal many specific insights into the development of individual social presence.

The interview responses reveal that most of the participants cannot distinguish between facilitating discourse and direct instruction and believe that facilitating discourse and direct instruction are the same. This result could explain and interpret the results of message analysis (quantitative data). As indicated in previous chapter, the t-test failed to reveal a statistically significant difference between the two teams in terms of social presence, affective responses, open communication and group cohesion.

This chapter explored the various reasons why participants maintain or change their social presence level during the course. The learners highlight the role of the instructional design and organisation category, which may have the most substantial role in the development of students' social presence in the online learning environment. This category embraces Web design

satisfaction, network effect, instructor responsiveness, nature of the task and awarding degrees. It seems that the nature of the task has the greatest impact on whether or not learners maintain or change their social presence level during the course. Furthermore, the learners appreciate the instructor's online behaviours, such as responding to learners' comments, questions and emails without delay, which could help to keep the discussion organised and on track towards a resolution. In addition, the qualitative findings emphasise the role of the learner in the online learning environment. The interview responses reveal that a diverse set of motives are related to the to learner-specific matters that could promote the development of students' social presence in the higher education context in the social network environment, such as previous experience, peer influence, friendship, attitude, self-esteem and self-confidence. Indeed, the participants acknowledge the influence of other learners whether they are friends or colleagues. It seems that peer influence and friendship have a considerable role in the development of students' social presence. In addition, learners' social presence level could be affected by general trends in the online discussion context, which I refer to as the Wave Effect phenomenon.

In addition, the qualitative findings show that using an informal writing manner by the instructor in online learning environment may facilitate online discourse between learners. Also, it seems that learners value a profile picture and they used it to express personal values, beliefs and identity.

The study findings are discussed in-depth in the next chapters.

## Chapter 6: The Discussion

### ❖ Introduction

The community of inquiry framework is a widely used descriptive model for understanding higher education in online learning context. The concepts of social presence, cognitive presence, and teaching presence are developed within this framework. This study intends to provide a more comprehensive picture of developing learners' social presence. As pointed out previously, the propose of this study is to understand the influence of diverse types of teaching presence on students' development of social presence. Chapter three presented the research design and methodology that guide the whole research process and includes formulating clear research questions, choosing appropriate methods for data collection and analysis. Also, the implementation of the main study was clarified. In chapters four and five the quantitative and qualitative findings of the current study were presented in an attempt to address the following research questions:

1- How does a students' sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?

a. Does a students' sense of social presence (affective responses, open communication and group cohesion) change as a result of a different teaching

presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?

b. Why do participants maintain or change their social presence level during the course?

2- How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context in the social network environment?

In the current chapter, the research findings will be discussed and related to the previous literature and the context of the study. This chapter is organised in the following sequence: firstly, there will be discussion of the development of the community of inquiry coding scheme. Secondly, there will be discussion about the stability of teaching presence categories, followed by a section discussing the development of social presence. Then, the key findings of the study and the answers of the research questions will be presented.

## **6.1 The development of the community of inquiry coding schemes**

As described in the research and design methodology chapter, I was influenced by the coding manual for qualitative research by Johnny Saldana



(Saldana, 2009). I analysed and coded learners' contributions during the first and second cycles. I used procedural methods / protocol coding method in the first cycle and an elaborative coding method in the second cycle. The elaborative coding method is based on previous coding scheme studies and aims to support, improve, strengthen, modify or disconfirm these previous studies. Referring back to the literature review, the community of inquiry indicators are open to refinement and development (Garrison et al., 2006). However, at the beginning I was concerned with the original community of inquiry indicators and coding schemes that were introduced by Garrison and Anderson's team. Then, I merged these coding schemes with Shea's et al. coding scheme. However, I also found that these merging coding schemes are limited and require refining in order to study the Kuwaiti Arab cultural context, the Arabic language and the social networking environment.

In terms of the teaching presence coding scheme, I added '**being conversational and informal**' as an indicator in facilitating the discourse category. As was clarified in the literature review chapter, and confirmed by the qualitative findings, I think the instructor who used slang and an informal writing manner could encourage and facilitate online dialogue between learner participants.

With regards to the social presence coding scheme, I consider uploading a photo profile picture, even if was not a personal picture, as a self-disclosure indicator under the interpersonal communication / affective responses category. According to Garrison (2011), a self-disclosure indicator

includes personal biographies and details of personal life outside the class. Qualitative findings show that the participants deem a profile picture, even if not a personal picture, as interpersonal communication reflecting the personality and the identity of the participant. In fact, the participants used profile pictures to express their political viewpoints and their preferences for sports clubs, arts and cars etc.

Moreover, I added a **'use of religious references and expressions'** indicator under the interpersonal communication / affective responses category. The message analysis and the qualitative findings revealed that the learner participants used religious phrases and verses from the Holy Quran to reflect their attitudes, identity and personal belief. Sometimes they use these religious expressions in debates without rational reasons. The qualitative findings revealed that this is the participants' habit in their personal lives and they believed that these phrases would make other people feel at ease and attract the reader. In point of fact, maybe this is a private matter in the Middle East, because it is rare to quote verses from the Holy books or to use religious phrases at the beginning or the end of online discussions or to support ideas in debates in secular Western universities.

In terms of the open communication category, the indicator of continuing a thread was eliminated because the participants used the same message in answer to different group members. Indeed, the website design required the participants to use the reply feature in that way. Therefore, the reply feature was not an indication of the participants addressing their

message to one specific person. In addition, I observed that when a participant suggests a new idea or new perspective the other participants start to comment and the discussion continues further. For this reason, I added a **'suggestion'** indicator as a new indicator within the open communication category.

In connection with the group cohesion category, a new indicator is derived from the vocatives indicator, which is **'addressing a participant by a nickname or adjective'** such as my best friends, my dear group or Abu Ali and Abu Mohammed etc. The last two examples are also maybe a particular habit in Arab culture. In Arabic language, Abu means father and Ali and Mohammed are just ordinary names reflecting the name of the eldest son. Sometimes these epithets are used to name a person even if he does not have a son. This behaviour reflects an informal, respectable and intimate relationship.

Furthermore, in order to more closely capture the concept of group cohesion, I expanded the group cohesion code by adding three new indicators. First, a **'gratitude'** indicator, which includes expressing thanks or gratitude to another participant. Second, a **'hopes and wishes'** indicator, defined as expressing good wishes and hopes to another participant, such as I wish you success in your life. Third, **'apology and forgiveness'**, defined as a statement expressing regret for an offence or fault to another participant.

## **6.2 The stability of teaching presence categories**

Certainly, it is essential to understand the construct of teaching presence in order to implement the community of inquiry framework. I argue that a clear understanding of the structure of teaching presence could help in understanding the development of social and cognitive presences. Referring back to the literature review, there are arguments and questions regarding the stability of the community of inquiry framework, in particular teaching presences categories. Shea et al. (2006) argued that there are only two dimensions to teaching presence, namely the directed facilitation dimension and the instructional design and organisation dimension. Ice et al. (2007) claim that learners' conflated the instructional design and organisation category and the direct instruction category. Nevertheless, Arbaugh and Hwang (2006) and Garrison and Arbaugh (2007) validated the original three dimensions of teaching presences.

However, quantitative and qualitative findings for this empirical research reveal that there is no significant difference between the effects of facilitating discourse and direct instruction in terms of students' social presence level. The qualitative data disclose that the majority of participants cannot distinguish between facilitating discourse and direct instruction. The participants believe that facilitating discourse and direct instruction are similar. In addition, the qualitative findings emphasise the role of the instructional design and organisation category in the development of students' social presence in the higher education context. This result may tend to support

Shea's et al. (2006) viewpoint. However, this does not indicate that the three dimensions of the teaching presence do not exist. As mentioned previously, this study only investigates social and teaching presences from the learners' perspective. It could reach a different conclusion if the same data and methodology were used to investigate cognitive presence for example.

The study, consequently, may raise interesting questions about why most participants determine only two dimensions of the teaching presences. In fact, the online learning environment is a totally new experience for the participants. In spite of that all of the participants have accounts on social network websites; however, this is the first time that the participants have used the social network system for educational purposes. Indeed, it is difficult for participants to disregard the influence of decades of the traditional teaching system. Within the traditional teaching system the instructional design and organisation is usually clear for the learners; such as the curriculum, methods, goals, assessments, tasks and the instructor's role. Therefore, the participants justified their perspectives and online writing style according to what they are familiar with, such as the nature of tasks, awarding degrees, the web design, the instructor responsiveness and the generalisation of the system. All these elements are constructed under the instructional design and organisation category.

### **6.3 The development of social presence**

As mentioned previously, this study involves two phases. I used the first phase of the study for planning the second phase and I used the second phase to explain and interpret the findings of the first phase. In spite of the difference in the participants' level of social presence categories across the three activities, the SPSS tests failed to reveal a statistically significant difference between the two teams by category interaction in the same activity. The quantitative data findings, in the first phase, indicated that there is no significant difference between the effects of facilitating discourse and direct instruction in terms of participants' social presence level. The qualitative data analysis, in the second phase, explored the participants' perspectives and revealed the rationale for these results. In fact, the qualitative findings exposed that the participants are not concerned about the role of the online instructor, for example if he / she is a facilitator or a director. The majority of the participants cannot distinguish between facilitating discourses and direct instruction and consider that facilitating discourse and direct instruction are the same. The study findings suggest that there are several elements that could influence and promote the development of students' social presence in the higher education context in the social network environment besides facilitating discourse and direct instruction. Indeed, some of these elements are mentioned in the literature. I systematise these elements under two domains, namely the instructional design and organisation aspect and the learner-specific matters aspect.

### **6.3.1 Instructional design and organisation aspect**

The study results show that instructional design and organisation presence play the most significant role in the development of students' social presence in the higher education context in the social network environment. This aspect includes teaching strategy, selecting technology media, and regulation of online activities. In reality, the importance of instructional design and organisation presence is also highlighted by Swan and Shih (2005), Tallent-Runnels et al. (2006), Ke (2010) and Oskoz (2013). As mentioned in the chapter on qualitative findings, there are five elements within this aspect, web design satisfaction, network effect, instructor responsiveness, nature of the task and awarding degrees.

In spite of the fact that the network effect, or in other words the popularisation of the technology tool in all educational modules, may be the responsibility of the college administration and not the instructor, it is considered as part of the instructional design and organisation presence. However, the results of this study and previous work, such as that by Gunawardena, (2004), Gunawardena et al. (2006) and Ke (2010), suggest that great care needs to be applied in the website interface design. The user interface design should make the user's interaction as simple and efficient as possible. The website functions should enable collaborative group work, personal communication, shared user identity, clear navigation and should use of a variety of presentation styles.

Additionally, the online tasks need to be designed to promote learners' interaction. Indeed, the study findings totally agreed with studies by Arnold, Ducate, Lomicka and Lord (2005), Swann and Shih (2005) and Oskoz (2013) in that the design of discussion questions and tasks may influence the development of social presence. Also, the current study disagrees with the hypothesis that social presence progresses from open communication to cohesion and to interpersonal communication / affective responses (Garrison and Arbaugh, 2007). The study findings reveal that there is no particular order for the progression of social presence. The participants' responses usually depend on the nature of the task and what is required within the activity. For instance, the most frequent social category for both teams in the first activity was interpersonal communication / affective responses followed by the group cohesion and open communication categories. In the first activity the participants were asked to watch four speech video clips and then use group discussion to discuss, evaluate and critique these speeches. In one of these speeches the speaker was Muammar Al-Qaddafi, the former ruler of Libya. The participants laughed at the speech. Therefore, the use of humour and the use of unconventional expressions to express emotion indicators were the most frequent. This leads to an increase in the interpersonal communication / affective responses category. In the third activity, there were open online discussions between all participants, the guest expert the TV producer. The most common social presence category occurring in the data for both teams was group cohesion, followed by open communication and interpersonal communication / affective responses. In this activity, the participants tended to offer greetings, show gratitude and compliment the guest expert. This manner



of discussion leads to an increase in the group cohesion category. Indeed, the nature of the task may justify Oskoz's (2013) study results. She carries out four identical activities where the participants take part in four online discussions about certain cultural topics. In these four activities, the most frequent social category found in the data was open communication, followed by the group cohesion and the affective categories (Oskoz, 2013).

The findings of the current study support previous findings on the importance of an instructor's online behaviours, such as the instructor's immediate reply and presence in an online learning environment (Weiss, 2000; Burnett, 2003; Blignaut & Trollip, 2003; Swan and Shih, 2005; Arbaugh & Hwang, 2006; Gunawardena et al., 2006; Bliss & Lawrence, 2009; Baker, 2010; Torras & Mayordomo, 2011). The instructor's online behaviours could help to keep the discussion organised and on track to a resolution. The online instructor must monitor the website, read comments on students' postings regularly as well as constantly search for ways to sustain the development of the online learning community. He / she is responsible for promoting learners' engagement in interactive discussions and ensuring that they do not feel alienated. Certainly, the online instructor must have a number of attributes such as technical skills, online communication skills, good leadership skills and content expertise.

### **6.3.2 Learner-specific matters aspect**

As indicated in the chapter on qualitative findings, there are six elements within this aspect - previous experience, peer influence, friendship, attitude and the wave effect. Indeed, the learner-specific matters aspect could be related to the learner-centred approach concept and Shea and Bidjerano (2010) and Cleveland-Innes and Campbell's (2012) ideas. Referring back to the literature review chapter, in the learner-centred approach, learners are highly dependent on each other for learning success. They construct knowledge through engagement in activities that involve skills of inquiry, gathering and synthesising information, communication skills, critical thinking and problem solving. However, Shea and Bidjerano (2010) introduced the learner presence, the fourth element of the community of inquiry framework. The learner presence is identified as a combination of self-regulated learning and self-efficacy. It is characterised by learners' previous experiences, metacognition, motivation and behaviour in the learning process. Also, it includes the development of the interpretation of psychological and emotional states for learners. Cleveland-Innes and Campbell (2012) emphasise learners' emotions and they consider emotion as an independent presence in the community of inquiry framework.

Referring back to the literature review chapter, the role of the learner in the online learning process is critical (Gunawardena et al., 2006; Garrison, 2011; Cleveland-Innes, 2012). The study results support Cleveland-Innes (2012) and Oskoz's (2013) viewpoint and highlight the importance of peer

influence in the development of the social presence. Most of the participants deem students' contributions to be one of the key elements in understanding what is required in the tasks. Hence, they are concerned to read all the students' contributions on a discussion forum before they participate in the discussion. In addition, I observed several cases where the expert learners in social network environment voluntarily provided help for the novice learners.

With regards to friendship, most participants acknowledge that the writing manner between friends is different to the writing manner between classmates. The interview responses revealed that the majority of participants preferred the group to consist of their friends. The study findings suggest that friendship has a considerable role in influencing the desire to take part in discussions and then the development of students' social presence. Often, the groups have the highest social presence level, and the members of these groups are often friends in real life, so they continue the discussion in the classroom or outside the university. These results may be linked to Ke's (2010) observations that a group of friends may dominate online discussions, thus intimidating others who are newcomers.

In addition, I witnessed the manner of the wave phenomenon in an online discussion. Learners' social presence level could be affected by general trends in the online discussion context. As mentioned previously, the wave effect could be connected to the wisdom of crowds' concept. According to Surowiecki (2005) a large group of people are smarter than any single member or an elite few, no matter how brilliant. He claims that a group with

varied knowledge and skills will almost always make a better decision than one or two experts. However, not all crowds are wise. There are four conditions for wise crowds and rational resolutions: diversity of ideas, independent thought, decentralisation and aggregation. Surowiecki (2005) argues that it is difficult to maintain independent thought in a context where learning is a social process. There are three reasons that drive people to imitate crowds.

- a. Social proof: people tend to suppose that if many people are doing something, there must be a reason why.
- b. Herding: people join with the crowd because they assume it is less risky than doing something radical that could seriously fail.
- c. Information cascades: people with different information and skills construct knowledge and make decisions in a sequence since they believe that they are learning something from the example of others. However, after a certain point, the situation arises where people stop paying attention to their own knowledge and start looking instead at the thoughts and actions of other people who came before them and start to imitate them.

As mentioned in the fifth chapter, the Wave Effect phenomenon is characterised by three manifestations, a number of active students within the group encourage others to participate and interact; the participants usually

repeat what has been said previously and the participants' ideas and writing manner are influenced by previous comments. I argue that when a learner links their engagement in discussions with colleagues and believes that a number of active students within the group encourage them to participate and interact, they may be looking for social proof and joining the crowd because they believe that it is less dangerous than doing something different that could fail. In addition, due to living in an interactive social context, it is challenging for any person to take any perspective without being influenced by others. I claim that learners' ideas and writing manners may be influenced by that of their colleagues. Therefore, I assume that there is a connection between the wisdom of crowds' concept (Surowiecki, 2005) and the Wave Effect phenomenon. Indeed, this phenomenon may influence the majority of social presence indicators, which will definitely influence students' social presence levels.

## **6.4 The study key findings**

The previous analysis and discussion led me to narrow down the issues and discuss the major findings of this study in light of the conceptual framework; this was in order to respond to my main research questions. Research concerns are restated in this section and detailed accounts of the answers to research questions will be investigated further:

**1- How does a students' sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?**

**a. Does a students' sense of social presence (affective responses, open communication and group cohesion) change as a result of a different teaching presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?**

As indicated in the research design and methodology chapter, the first phase of this study intended to answer this research question. The research method was explained and discussed in more detail in the research design and methodology chapter, in particular in sections 3.3 and 3.6.1. The fourth chapter addressed and presented quantitative findings from the message analysis. The quantitative data show that there is no significant difference between the effects of facilitating discourse and direct instruction ( teaching presence ) in terms of students' social presence level in the social network environment in a Kuwaiti higher education context. However, the students interact differently in each activity. In fact, there is a difference in the level of social presence categories ( interpersonal communication / affective responses, open communication and group cohesion ) across the three activities.

**b. Why do participants maintain or change their social presence level during the course?**

As mentioned previously, the second phase of the study was used to investigate this question. A combination of individual interviews and focus group interviews were applied to explain and interpret the results of the first phase. The justification of research methodology and methods are explained and discussed in the research design and methodology chapter, while the fifth chapter examines and presents the qualitative findings in more detail. The qualitative findings reveal a diverse number of reasons to explain why participants maintain or change their social presence level during the course. Some of these reasons are related to the instructional design and organisation aspects, while others are related to learner-specific matters. One of the main reasons categorised under the first aspect is the nature of the task. The learners' responses usually depend on the nature of the task and what is required from the task. Furthermore, the instructor's online behaviours, such as instructor responsiveness and instructor presence in an online learning environment, have a major influence on students' social presence level. With regard to learner-specific matters, these are comprised of previous experience, peer influence, friendships, learner attitudes, self-esteem and self-confidence. Also, learners' social presence levels may be influenced by general trends in the online discussion context, which was referred to here as the Wave Effect phenomenon.

## **2- How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context in the social network environment?**

As indicated previously, the categories of teaching presence include instructional design and organisation, facilitating discourse and direct instruction. As stated in the qualitative analysis findings chapter, the majority of students cannot distinguish between the two teaching presence categories of facilitating discourse and direct instruction. The qualitative findings actually indicated that most of the students were not concerned about the role of the online instructor, for example if they were a facilitator or director. However, the majority of students stressed the importance of the instructor's online behaviours and responsiveness, such as the instructor's quick response, monitoring the website and engaging in online discussions. In addition, the qualitative findings emphasise the function of the instructional design and organisation category in the development of students' social presence level. The study findings suggest that several elements could be embedded under the instructional design and organisation category, which may influence and promote the development of students' social presence level in the higher education context in the social network environment. These elements are web design satisfaction, network effect, instructor responsiveness, nature of the task and awarding degrees. In addition, when students are divided into groups in online collaborative activities, the instructor should consider the influence of learner-specific matters, such as previous experience, peer influence and friendships.



## 6.5 Summary of the chapter

In this chapter the main findings of the study were combined and further discussion was presented to provide richer answers to the research questions, relating the findings to the previous literatures. The chapter highlights how the community of inquiry coding scheme was developed by the researcher. The teaching presence and social presence coding schemes were improved and modified with a view to studying the Kuwaiti Arab cultural context, the Arabic language and the social networking environment. Also, the stability of teaching presence categories was discussed. The majority of participants identified only two dimensions of the teaching presences. The data reveals that the participants in this study could not distinguish between facilitating discourse and direct instruction while they emphasise the role of the instructional design and organisation category. Then, the development of social presence was discussed under two themes, the instructional design and organisation aspect and the learner-specific matters aspect. Finally, the study key findings and the answers of the research questions were presented. The study suggests that there are two factors that could impact the development of students' social presence. First, instructional design and organisation, such as web design satisfaction, network effect, instructor responsiveness, the nature of the task and awarding degrees. Second, learner-specific matters, such as previous experience, peer influence, friendship, attitude self-esteem and self-confidence, and something I refer to as the Wave Effect.

The thesis concludes with my self-reflection on the implementation of the study. Recommendations and suggestions for further research, which could be helpful in developing the community of inquiry model in general, and social presence in particular, are discussed in the next chapter.

## **Chapter 7: Conclusion**

### **❖ Introduction**

This is the last chapter and it summarizes the research reported in this thesis. The study yielded several findings about the development of students' social presence in the learning environment of social networks. Drawing on my first experience as researcher and the findings of the study, it presents some reflections on the implementation of the study.

This chapter is organized in the following sequence. Firstly, there will be a brief summary of all the thesis chapters. Secondly, there will be my general impression and self-reflection on the implementation of the study. Then, the contribution to the knowledge base will be clarified. This will be followed by a section discussing the limitations of the study. Finally, some ideas for further research in this field are suggested

### **7.1 Summary of the thesis**

This thesis has described my research journey. As indicated in the first chapter, an introductory chapter, Kuwait policymakers have ambitions to improve outcomes of the education system through the use of advanced technology. Recently, social media, or Web 2.0 technology, has revolutionised

the world and changed the way people think, communicate and interact. There are high aspirations for these technologies in the education field. In reality, great numbers of educational institutions are already using social media and Web 2.0 technologies. Numerous projects and studies are conducted and published that seek to evaluate the projected impact of social networks on learning and analyse its potential for supporting innovation and inclusion within education and training. One of the notable concepts that forms a theoretical framework to study online learning is the community of inquiry framework. It may become one of the leading models in higher education, guiding research into the online learning environment in general and Web 2.0 technology in particular. The community of inquiry framework developed through Garrison and Anderson's teamwork is based on a model of critical thinking and particular inquiry (Dewey 1959; Lipman, 2003). Garrison et al. (2000) posit that learning in an online context could occur through the interaction between students and their instructor. The framework is manifest as three integrated elements, social, teaching and cognitive presences, as well as categories and indicators to define each presence and to guide the coding of transcripts. These categories and indicators emerged from the literature and were modified within the community of inquiry. As clarified previously, teaching presence could be described as the process of planning, designing, facilitating and directing social and cognitive processes for the purpose of realising personally meaningful and worthwhile learning outcomes. The teaching presence consists of three core categories: instructional design and organisation, facilitating discourse and direct instruction. With regard to social presence, it may be defined as the ability of participants to identify with

a specific group, to communicate in a trusting environment and to develop effective personal relationships progressively through projection of their individual personalities. The social presence includes the three core categories: interpersonal communication / affective responses, open communication and group cohesion.

Referring back to the literature review chapter, the previous studies claim that there is a strong relationship between social presence and learning outcomes. The social presence has a significant responsibility in promoting cognitive presence and critical discourse. The literature suggests that cognitive presence is more easily sustained when a considerable degree of social presence has been established. The teaching presence, which is a crucial predictor of learner satisfaction, perceived learning and sense of community, plays an essential role in the development of social presence. In addition, previous studies value learners' role in the learning process. It is considered that the teacher and learners evaluate learning together and the teacher's role is to coach and facilitate. Furthermore, the body of literature highlights the relationship between instructor activities in an online context and student participation rates, the quality and quantity of posts generated by students, and the extent of threading.

However, the study's purpose is to investigate and understand the nature of the community of inquiry presences, specifically, teaching presence and social presence. This study aims to explore the influence of different types of teaching presence on students' development of social presence. This

approach could present a more comprehensive picture of developing students' social presence over changing teaching presence in the social network environment. The study's purpose is investigated by the following research questions:

1. How does a students' sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?

a. Does a students' sense of social presence ( affective responses, open communication and group cohesion ) change as a result of a different teaching presence ( facilitating discourse – direct instruction ) in the social network environment in a Kuwaiti higher education context?

b. Why do participants maintain or change their social presence level during the course?

2. How does the use of teaching presence promote the development of students' social presence in a Kuwaiti higher education context within the social network environment?

As clarified in the third chapter, the research design and methodology chapter, the study was carried out in Kuwait State and involved 46 male students at The College of Basic Education. The research questions were explored in depth by drawing on the equivalent of a mixed methods design.

The sequential explanatory strategy is embedded within an applied quasi-experimental approach. The study had two phases. I used the first phase of the study to plan the second phase and I used the second phase to explain and interpret the findings of the first phase. For further illumination, quantitative data was collected and analysed, which was then followed by the collection and analysis of qualitative data. In the first phase, the quantitative research question examined the relation between students' sense of social presence and different teaching presence. I used a message analysis and a content analysis approach to reveal the level of social presence in an online community and then developed stimulated recall interview questions. In the second phase, the qualitative stage, there was a combination of interviews and focus group interviews. I intended to use multiple data sources to offer complementary findings, since this would be appropriate in addressing different inquiries.

In terms of the quasi-experimental approach, I have adopted the post-test two experimental groups design. In order to strengthen validity and reliability, I reiterated the quasi-experiment three times. The participants are randomly assigned to each of the two main teams: Team A and Team B. Each team consisted of four groups, and each group consisted of five to seven students. They were asked to do three online activities using a social networking system, the *Dewaniya* website. In the first and second activities, the participants were asked to watch a number of speech video clips and use discussion forums to evaluate and criticise the speeches. I was the online facilitator. In the first activity, I increased direct instruction and decreased

facilitating discourse for Team A. In contrast, I increased facilitating discourse and decreased direct instruction for Team B. In the second activity I reversed the order. With regards to the third activity, the participants were asked to watch an interview and reportage about a television series producer ( guest expert ). Then there were open online discussions between all students and the producer. I increased direct instruction and decreased facilitating discourse for Team A. By contrast, I increased facilitating discourse and decreased direct instruction for Team B. The justification of research methodology and methods, the implementation of the main study, ethical issues, validity and reliability are explained and discussed in more details in the research design and methodology chapter.

The fourth chapter addressed the first research questions and presented quantitative findings from the messages analysis. I applied the content analysis approach to detect the level of social presence in an online community, which was beneficial to develop stimulated recall interview questions. The quantitative data was analysed using SPSS. The independent samples t-test reveals that there is no significant difference between the effects of facilitating discourse and direct instruction in terms of students' social presence level. In the same activity, the two teams have a relatively close social presence level and also social presence categories are relatively close. On the other hand, I observed a difference in the level of social presence categories ( interpersonal communication / affective responses, open communication and group cohesion ) across the three activities. The participants' responses to each activity differ.



In the fifth chapter I presented qualitative findings from a combination of semi-structured interviews and focus group interviews. Findings addressed the second research question that seeks to explore participants' perspectives in the educational social network context and to interpret the results of the quantitative phase. This chapter explored a variety of reasons why participants maintain or change their social presence level during the course. Overall the participants are not concerned about the role of the online instructor as a facilitator or a director. The majority of the participants cannot distinguish between facilitating discourses and direct instruction as described in the community of inquiry framework. Indeed, they believe that facilitating discourse and direct instruction are the same. However, they emphasise the role of the instructional design and organisation category. The participants' responses propelled me to investigate for other reasons that could promote the development of students' social presence in the social network environment. The qualitative analysis suggests that there are several elements that could influence and promote the development of students' social presence in the higher education context in the social network environment. I classify these elements under two domains, namely, the instructional design and organisation aspect and the learner-specific matters aspect. The first domain includes web design satisfaction, network effect, instructor responsiveness, nature of the task and awarding degrees. The second aspect includes previous experience, peer influence, friendship, self-esteem and self-confidence, attitude and the Wave Effect.

The sixth chapter is the discussion chapter which addressed the overarching research questions by drawing on research findings and reflecting on how this added to questions raised by the previous literature review. The development of the community of inquiry coding scheme was illustrated. As clarified in the third and the sixth chapter, in order for the coding scheme to become suitable for application in the study context, I analysed and coded learners' contributions throughout two cycles. In the first cycle I used the procedural methods / protocol coding method, while in the second cycle I used the elaborative coding method. Also, the stability of teaching presence categories was discussed. I attempt to justify the reasons that most participants cannot distinguish between facilitating discourse and direct instruction and identified only two out of the three dimensions of teaching presence. In addition, the development of social presence was discussed in connection to the previous literature under two topics, the instructional design and organisation aspect and the learner-specific matters aspect. Moreover, the study key findings and the answers of the research questions were presented.

One of the key findings that the study reveals is that there is no particular order for the development of social presence. The participants' responses usually depend on the nature of the task and what is required within the task. In addition, instructional design and organisation presence play the most crucial role in the development of students' social presence in the higher education context in the social network environment. This includes web design satisfaction, network effect, instructor responsiveness, nature of

the task and awarding degrees. Indeed, the instructor's online behaviours, for instance, instructor responsiveness and instructor presence in an online learning environment, have significant influence on students' social presence level. Furthermore, the research findings acknowledge the fundamental role of learners in the learning process in general and the development of social presence in particular. A successful learning context does not evolve by itself or only through the instructor's effort, but instead both the instructor and learners need to be committed with effort and determination to promoting each other's learning experience and social presence.

## **7.2 General impression and self reflection of the implementation of the study**

This is my first time to conduct a real study. So, I think providing my own reflection about implementation of the study could add another dimension of insight to the findings. Indeed, my interpretations and argumentations of research finding are influenced by my experiences and my extensive reading of literature. However, I noticed several observations may deserve to be recorded. For instance, the level of participation rises when it is reaching the online activity deadline. In addition, in spite of that latest technology has numerous benefits; it also has restrictions and detriments. Influential productively teaching in online environment requires understanding of the benefits and limitations of the technology mediums as a teaching and learning instrument. In fact, exploring how teaching and learning are distributed across

the instructors, learners, technology mediums and educational context allow educators to address various angles of online learning environment. From my first experience as a practical researcher, I consider online learning environment is complex and challenge. It requires careful planning of instructional strategies to achieve educational aims. It requires a considerable amount of time to design, develop, organize and deliver. It requires to rethink on the instructor' and learners' roles and the design of interaction in this recent learning context. Learning is deemed to take place through instructor and learners interactive communication via technology mediums. The challenge in online learning environment, particularly in social networking context, is to facilitate and direct the effective interactive communication with the instructor and other learners and between learners themselves. One of the strength of the community of inquiry framework is its focus on analysis the interaction and the development process of teaching and learning in the online learning environment. Indeed, I used the categories and the indicators of community of inquiry framework as lens to explore these interactions and development process.

With regards to the research design and methodology, by drawing on a mixed method design, the sequential explanatory strategy and a quasi-experimental approach the research questions were explored in depth. I was able to employ the quantitative content analysis approach to analyse students' contributions and to investigate the development of students' social presence. Also, the quantitative content analysis approach was very helpful in determining the interview questions and selecting the interviewees. However,

the stimulated recall interview technique fostered participants' reflections and revealed participants' factual thought processes. As indicated previously, I did not use a typical stimulated recall interview technique that uses videotaped passages or images. Nevertheless, I asked the participants to browse the website and read the tasks and the contributions. Then, I used probing follow-up questions to help the interviewees recall their thoughts and emotions during the online activities. I acknowledge that this is a valuable technique to obtain the perspectives of participants, their interpretation of events and their thinking at a certain point in time. Moreover, the efficiency of the stimulated recall technique appears in checking the message analysis coding process during asking research participants to verify whether the researcher had accurately described their statements.

However, although this study is focused on teaching presence and social presence, I have observed data that directly related to cognitive presence. In reality, as indicated previously, it is difficult to entirely isolated social presence from cognitive presence. They are interdependent and inseparable. Obviously, in order to examine students' social presence or cognitive presence levels, we need first to inspire students to contribute more messages. However, I recognize that longer postings messages do not guarantee discussions of a high quality of critical thinking or reflect a high level of social presence level although the length of postings is crucial in creating an atmosphere of continuing discussion. Indeed, some participants in interviews admit that they did not read long message participations or sometimes they fail to pick up the most crucial points of discussion.

In addition, during the interviews, as an opening for discussion, I asked the students participants about their academic level rating and if they were facing any study problems. I found some participants who have a high critical thinking contributions and interesting argumentations are within C academic level rating. In contrast, the contributions of some students' participants within A academic level rating were without high critical thinking. This notice may raise interesting questions about the system of assessment and evaluation students in Kuwait higher education organizations.

### **7.3 Contribution to the knowledge base**

As mentioned, I began my research with an open mind. The literature I read at the initial stage orientated me to formulate the research aims, questions and methodology. Through my research journey, I have learned about the opportunities and constraints of using research approaches and social network systems for educational purposes. My research findings have confirmed some of the previous literature by providing additional supporting evidence while in contrast the research findings have cast doubt on the results of others. I believe that my research makes an important contribution to the study and understanding of the development of students' social presence in a higher education context within the social network environment. The following paragraphs give detailed information about contribution to the knowledge base.

With regards to the research methods, the research implementation provides evidence that applying a stimulated recall interview technique by browsing the website and reading the tasks and the contributions of an online forum is a valuable technique to obtain data on the participants' perspectives, thoughts and emotions and to verify the message analysis and coding process.

In addition, the majority of previous Community of Inquiry studies, in particular the researches by Anderson and Garrison, have been conducted from the perspective of Western culture, in the English language. This study developed Community of Inquiry coding schemes to become more suitable for the Arabic cultural context. As indicated previously, I added new indicators in social and teaching presences. These coding schemes need further research to validate and improve them. This study could be the initial step toward an Arabic version of the community of inquiry framework.

The study reveals that there is no particular order for the development of social presence. The participants' responses usually depend on the nature of the task and what is required within the task. Therefore, the current study disagrees with Garrison and Arbaugh's (2007) hypothesis that social presence progresses from open communication to cohesion and to interpersonal communication / affective responses.

In addition, the research findings enrich arguments that relate to the stability of teaching presence categories. In order to implement the community

of inquiry framework, it is crucial to understand the construct of teaching presence. A clear understanding of the structure of teaching presence could facilitate in understanding the development of social and cognitive presences that led to improve learners' critical thinking. However, the findings of the study indicate that the majority of participants cannot distinguish between teaching presence categories, the facilitating discourse and the direct instruction. The participants believe that facilitating discourse and direct instruction are similar. Moreover, they are not concerned about the role of the online instructor; for example, if he / she is a facilitator or a director. The study revealed that the instructional design and organisation category is the fundamental factor in the development of students' social presence in the higher education context within the social network environment. The other factor is learner-specific matters. The first factor includes web design satisfaction, network effect, instructor responsiveness, nature of the task and awarding degrees, whereas the second factor includes previous experience, peer influence, friendship, attitude and the Wave Effect.

By looking at the comprehensive picture, the findings of the current study emphasize the importance of an instructor's online behaviours in an online learning environment to develop learners' social presence. Moreover, the current study values the primary role of learners in the learning process in general and the development of social presence in particular.



## 7.4 Limitations of the study

Although the mixed methods and quasi-experiment approaches offered rich insights and varied perspectives, awareness of the limitations and disadvantages of this strategy was raised during the research process. Taking into consideration the fact of the small number and homogeneity of the study participants and the specific local context, this study yielded limited results. Indeed, this study does not intend to generalize the findings to other sample groups, contexts and cultures. However, a major limitation of the research reported in this study is its reliance on the particular website system. In spite of the Elgg system advantages, it may also have design defects that limit the study results. Another limitation relates to the locus of research investigating teaching presence and social presence, which has been limited largely to the discussion forum. The current study was unable to identify and examine instructor teaching presence and learners' social presence outside the online discussion forum, such as e-mails, wall posts and blogs comments. In order to fully investigate and understand the nature of students' development of social presence in an online context, it is necessary to examine entire online course activities. Also the number of participants is small for the statistical analysis, which may yield misleading results that do not generalize.

## **7.5 Suggestions for future research**

The findings of the study lead to suggestions for further research in the following areas. This study explored the influence of diverse types of teaching presence on students' development of social presence. Further study could be conducted to understand the influence of different types of teaching presence on students' development of cognitive presence.

Secondly, this study introduces the developed coding schemes for the social presence that are suitable for the Arabic culture context. Additional researches and studies need to be carried out in an Arabic cultural context to validate, improve and generalize these coding schemes.

Another area of research is associated with the stability and dimensionality of the teaching presence construct. It is vital to define and understand the construct of teaching presence in order to understand and promote the development of social and cognitive presences. Further research is needed to understand why learners identified only two out of the three dimensions of teaching presence and why they cannot distinguish between facilitating discourse and direct instruction.

In addition, the research findings admit the crucial role of learners as instructors in the online learning process. The study recognizes that learners contribute to knowledge construction along with the instructor in the online learning environment, which raises an interesting question about the role of

the online learners in the teaching and learning process. Further researches need to develop a theoretical model that explore and characterize this role.

According to Ice et al. (2007) social presence is achieved largely through the strengthening of the ability of the instructor to build more personal communication links with online students. Therefore, they suggest that the text-based discussion boards should be replaced with asynchronous audio feedback in efforts to strengthen a sense of community among students as well as to enhance teaching presence via personalized communication with students. They argue that asynchronous audio feedback has several advantages. Indeed, the aspect of the influence of audio commenting as a replacement for text-based commenting is worth investigating. A comparative study could be carried out between the text-based discussion boards and asynchronous audio feedback to help in bridging the gap between the different points of views.

## **7.6 In the End**

An online community of inquiry environment is a breathing space where instructors and learners from different cultures, backgrounds and educational levels are afforded an opportunity to associate and learn regardless of time and place. Designing a cyber learning community of inquiry may offer the potential for educators to study and promote deep knowledge and critical thinking skills for learners. Moreover, the implementation of a

community of inquiry framework in the online learning environment could be used to ensure the effectiveness and success of educational progression.

The technological environment, with its unconventional theoretical framework, in which modern education operates, is offering new and superior learning possibilities. Web 2.0 technology and social media are quickly developing into a pivotal means of influencing society as part of the advancement of information and communication technologies. In fact, the method by which people communicate and think has been changed for ever. As this thesis started with a quotation from a journalist on the Times magazine, it concludes with another:

“The new Web is a very different thing. It's a tool for bringing together the small contributions of millions of people and making them matter.”

He goes on to state that

“Web 2.0 harnesses the stupidity of crowds as well as its wisdom.”

(Grossman, 2006).

# Appendices

## Appendix ( 1 )

### Social Presence Categories

#### Interpersonal Communication / Affective Responses

SP categories	Indicators	Definition	Examples
<b>Interpersonal Communication / Affective Responses</b>	Expressing emotions	Conventional expressions of emotion	<p>I am surprised</p> <p>I am eager to see the movie</p> <p>I felt bored , When I was listening to the speech</p>
	Use of humor	Teasing, cajoling, irony, understatements, sarcasm	<p>.The best word that Alqathafi said : Zinga Zinga hahaha</p> <p>this is hilarious haha</p> <p>If you need actor, I'm her haha</p>
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability; includes expressions of likes, dislikes and preferences	<p>I live in ...</p> <p>I have previous experience in Facebook and Twitter</p> <p>This is the first time in my life, I participate in online discussion</p> <p>I am from Philippines</p>

SP categories	Indicators	Definition	Examples
<b>Interpersonal Communication / Affective Responses</b>	Use of unconventional expressions to express emotion	unconventional expressions of emotion includes repetitious punctuation, conspicuous capitalization, emotions	This is very, very, very important  There are maaaaaany reasons !!!!!! :p
	Expressing value	Expressing personal values, beliefs and attitudes	The most important thing for me is morals  In short, You can't give what you don't have  I believe that each message has time period and place  Disagreement doesn't damage amiability
	Use of religious references and expressions*	Use religious phrases to reflect their attitudes, identity and personal belief.	In the name of God, Most Gracious, Most Merciful  May Allah grant peace and honour to the prophet Mohammed  Phrases from Holy Quran

\* emergent

**Table (1)** Interpersonal communication / Affective responses

## Appendix ( 1 )

### Social Presence categories

#### Open communication

SP categories	Indicators	Definition	Examples
<b>Open Communication</b>	Continuing a thread	Using reply feature of software, rather than starting a new thread	This indicator is eliminated because the participants used the same message in answer to different group members. The website design required the participants to use the reply feature in that way
	Quoting from others' Messages	Using software features to quote others' entire message or cut and passing selections of others' messages	Mishaal says "....."
	Referring explicitly to others' messages	Direct references to contents of others' posts	with regard for your comment about ...etc  As pointed out by my friend Mohammed , there are a lot of Linguistic errors
	Asking questions	Students ask questions of other students or the moderator	There is something I didn't understand, could you please to explain to me...etc  What is your opinion on ..etc?



SP categories	Indicators	Definition	Examples
<b>Open Communication</b>	Complimenting Expressing appreciation	Complimenting others or contents of others' messages	I think you made a good point I admire your comment you have pointed out an important factor.
	Expressing agreement	Expressing agreement with others or contents of others messages	Yes , I agree with Husain, the first Video clip was boring
	Expressing disagreement	Expresses disagreement with other or contents of others messages	I disagree with Hadi in the point that he mention
	Personal advice	Offering specific advice to classmates	These websites are important and you should know about it. especially that you are Education Technology student  Your aim should be leaning not just the degree
	Suggestion*		I suggest that we should..etc

\* emergent

**Table ( 2 )** Open Communication

## Appendix ( 1 )

### Social Presence categories

#### Group Cohesion

SP categories	Indicators	Definition	Examples
<b>Group Cohesion</b>	Vocatives	Addressing or referring to the participants by name	Ali – Hadi – Hussain Mohammed
	Addressing a participant in nickname or adjective *	Addressing a participant in nickname or adjective	Abu Khalid Abu Waleed  My dear group My brothers My best friends.
	Addresses or refers to the group using inclusive pronouns	Addresses the group as we., us, our, group	We all watch the video
	Phatics, salutations and Greetings	Communication that serves a purely social function; greetings or closures	Salāmu `Alaykum Peace be upon you.  Hello, everyone Hello my Group
	Social sharing	Sharing information unrelated to the course	The weather is becoming wonderful.  It is only 18 days, and then grace period allowed camping will end

SP categories	Indicators	Definition	Examples
<b>Group Cohesion</b>	Course reflection	Reflection on the course itself	A good example was the CD-ROM we read about.  Follow the elements of the communication skills that we studied in the curriculum book, the negative points in the first video are ..etc
	Gratitude*	Expressing thanks or gratitude to another participant.	Thanks for your help.  I appreciate your help.
	Hopes and wishes*	Expressing good wishes and hopes to another participant	I wish you success in your life
	Apology and forgiveness*	A statement expressing regret for an offence or fault to another participant	Pleas accept my apologies  Forgive me, if I did something wrong  I'm sorry I did not mean to..etc

\* emergent

**Table (3)** Group Cohesion

## Appendix ( 2 )

### Teaching Presence Categories

#### Direct Instruction Indicators

TP categories	Indicators	Definition	Examples
<b>Direct Instruction</b>	Present content / questions	Present content or questions that enhance the discussions	What about Dr. AISuwaidan body language and voice tone?
	RE-Focusing discussion on Specific issues	Helps focus discussion on relevant issues and keeps participants on topic	Tried to identify the positive and negative elements in every speech  Focus on elements of good communication skills for the speaker
	Summarizing discussion	Reviews and summarizes discussion contributions to highlight key concepts and relationships to further facilitate discourse	I understand from your words that the best parts of speech by His Highness speech Sheikh Jaber are the body language and facial expressions of sadness  Khalid said... Mohammad said ....we concluded that ...etc

**Appendix ( 2 )**  
**Teaching Presence Categories**

Direct Instruction indicators

TP categories	Indicators	Definition	Examples
<b>Direct Instruction</b>	Providing valuable analogies	Attempts to rephrase/reformulate course material in ways that highlight similarities between content assumed to be understood and new content with the goal of making the material more comprehensible	Compare between His Highness the Amir tears and this guy tears
	Offering useful illustrations	Attempts to make course content more comprehensible by providing examples that are substantive and advance understanding	One day, I attended a lecture and the lecturer was using interactive whiteboard ..etc
	Conducting supportive demonstrations	Attempts to make course content more comprehensible through the exhibition of processes	For example: watch this video
	Supplying clarifying information	Attempts to reduce confusion or misconceptions about course content by providing additional explanations	You can read about the elements of effective communication skills, on page XXX

**Appendix ( 2 )**  
**Teaching Presence Categories**

Direct Instruction indicators

TP categories	Indicators	Definition	Examples
<b>Direct Instruction</b>	Confirm understanding through assessment and explanatory feedback		You'r close, but you didn't account for... this is important because..
	Making explicit reference to Outside material	Provides useful information from a variety of sources, e.g., articles, textbooks, personal experiences, or links to external web sites.	You can look on this link <a href="http://www....">http:// www....</a>

**Table (4)** Direct Instruction Indicators

**Appendix ( 2 )**  
**Teaching Presence Categories**

Facilitating Discourse Indicators

TP categories	Indicators	Definition	Examples
<b>Facilitating Discourse</b>	Identifying areas of agreement / disagreement	Helps to identify areas of agreement and disagreement on course topics in order to enhance student learning	With regard to the first video, I think the majority agree that..etc  Do you agree with Khalid?
	Seeking to reach consensus / understanding	Assists in guiding class toward agreement about course topics in a way to enhance student learning	Initially ,I think that Ahmad and Emad are saying the same thing.
	Encouraging, acknowledging or reinforcing student contributions	Acknowledges student participation in the course, e.g., replied in a positive encouraging manner to student submissions	Thanks Ahmad for your valuable comments
	Setting climate for learning	Encourages students to explore concepts in the course, e.g., promotes the exploration of new ideas	There are no false or true in this discussion.. this is your opinion and your beliefs
	Drawing in participants, prompting discussion	Helps keep students engaged and participating in productive dialog	The other guys ..(Ali, Fahad, Emad )..come on ..what do you think in this subject?

**Appendix ( 2 )**  
**Teaching Presence Categories**  
 Facilitating Discourse Indicators

TP categories	Indicators	Definition	Examples
<b>Facilitating Discourse</b>	Being Conversational & informal*	Use slang and informal writing manner	Hello everyone :)  Khamooosh  <i>[Khamosh:Kuwaiti word mean silent]</i>  Why is everybody silent in this group? :)

**Table ( 5 )** Facilitating Discourse Indicators



### Appendix (3)

#### Example of interview transcription, translation and coding

No	English Text	Code	Arabic Text
22	<p><b>Researcher:</b> <i>“Have you found a difference between the style of the phrases I wrote in the first activity and the phrases in the second activity?”</i></p> <p>(The student is reading silently and comparing between the phrases)</p> <p>Note: the researcher used DI in the first activity and FD in the second activity.</p>	Facilitating Discourse vs. Direct Instruction	<p>الباحث: هل حسيت بوجود فرق بين اسلوب العبارات التي كتبتها أنا في النشاط الأول عن النشاط الثاني؟</p> <p>(الطالب يقرأ بصمت و يقارن بين العبارات.)</p> <p>ملاحظة: الباحث استخدم DI في النشاط الأول ، أما النشاط الثاني استخدم الباحث FD</p>
23	<b>Student (smiling):</b> <i>“Yes, there is a great difference”</i>		الطالب: [يبتسم] نعم..في فرق كبير
24	<b>Researcher:</b> <i>“What is the difference?”</i>		لباحث: ما هو الفرق؟
25	<b>Student:</b> <i>“The first activity acts like a key for the activity, which gives you information about the activities, evidence, trying to direct you... but the other activity was an invitation for writing... a message for the students to start writing.”</i>		الطالب: يعني الأول..كان مثل مفاتيح للنشاط يعطيك معلومات عن الأنشطة ،أدلة،يحاول يوجهك ..لكن الثاني كانت دعوة للكتابة ..يعني رسالة تنبيه للطلبة كتبوا
26	<b>Researcher:</b> <i>“Ok... in the first activity... you read this (the researcher indicates his personal participation in the students’ discussions during his use of DI) these phrases...did this affect your writing style?”</i>		الباحث:طيب..في النشاط الأول..إنت قرأت هذا [الباحث يشير لمشاركته الشخصية في نقاش الطلبة عندما كان يستخدم DI ] هذه العبارات ..هل أثرت على طريقتك في الكتابة؟
27	<b>Student:</b> <i>“Yes”</i>		الطالب:نعم أثرت
28	<b>Researcher:</b> <i>“How?”</i>		الباحث:كيف أثرت؟

## Example of interview transcription, translation and coding

No	English Text	Code	Arabic Text
29	<b>Student:</b> <i>"on the one hand, I concentrated more on the video...that made me focus on the body movements and reactions.. the voice tone and hand movements."</i>	<b>Facilitating Discourse vs. Direct Instruction</b>	الطالب: من جهة دقتت على الفيديو أكثر.. جعلتني أركز أكثر على حركات الجسم والانفعال.. نبرة الصوت حركات اليد
30	<b>Researcher:</b> <i>"What about the phrases of the second activity"</i> (the researcher indicates his personal participation in the students' discussions during his use of FD).		الباحث: وعبارات النشاط الثاني [الباحث يشير لمشاركته الشخصية في نقاش الطلبة عندما كان يستخدم [ FD ]
31	<b>Student:</b> <i>"They indicated that I should finish writing before the end of participation time."</i>		الطالب: نبهتني إنني أكتب قبل لا ينتهي وقت المشاركة
32	<b>Researcher:</b> <i>"In your view, which method is better?"</i>		الباحث: من وجهة نظرك.. أي الصيغتين أو الإسلوبين أفضل؟
33	<b>Student:</b> <i>"But doctor, the two methods are different... they have different subjects... you cannot compare between them. In my opinion, one of them asks you to write before the time ends and not be afraid to express your opinions. The other gives you information... I cannot compare between them."</i>		الطالب: لكن دكتور الصيغتين يختلفون.. موضوعهم مختلف.. موضوعهم مختلف.. ماتقدر تقارن بينهم برأيي هذا يقولك إكتب، لم يتبقى وقت و لا تخاف تقدر تقول رأيك والثاني يعطيك معلومات.. ما أقدر أقارن بينهم
34	<b>Researcher:</b> <i>"Ok, did these formulas affect your writing style?"</i>		الباحث: طيب هل أثرت هذه الصيغ على إسلوب كتابتك؟
35	<b>Student:</b> <i>"Mmm... I'm not sure... Maybe... the first one did."</i>		الطالب: ممم .. ما أدري مو متأكد .. يمكن لأولى أثرت على كتابتي
36	<b>Researcher:</b> <i>"How?"</i>		الباحث: كيف أثرت؟

## Example of interview transcription, translation and coding

No	English Text	Code	Arabic Text
37	<b>Student:</b> <i>“On the one hand, I concentrated more on the video... that made me focus on the hand movements and voice tone.”</i>	Facilitating Discourse vs. Direct Instruction	الطالب: من جهة دقت على الفيديو أكثر.. وأنا أشاهد الفيديو ركزت أكثر على حركات اليد و نبرة الصوت
38	<b>Researcher:</b> <i>“What about the second one?”</i>		الباحث: والثاني؟
39	<b>Student:</b> <i>“They indicated that I should finish writing before the end of the participation time.”</i>		الطالب: نبهني إنني أكتب قبل لا ينتهي الوقت المحدد للمشاركة
40	<b>Note:</b> Even though Student somewhat realised the difference between facilitating disclosure (FD) and direct instruction (DI), this did not have much impact on the level of social presence.		ملاحظة : على الرغم من إدراك الطالب نوعا ما الفرق بين Facilitating Discourse(FD) و Direct Instruction(DI) و إلا أن ذلك لم يؤثر كثيرا على درجة Social Presence
41	<b>Researcher:</b> Ok..can you explain how do you usually participate? Do you write directly in the website forum? Or do you first prepare an external draft?	How to participate?	الباحث: طيب ..ممكن تشرحي طريقة مشاركتك ؟ هل تكتب على طول في منتدى الموقع؟ أو تكتب مسودة أول شي بورقة خارجية ؟
42	<b>Student:</b> I watch the video...then I comment directly... I do not use drafts...I write what I feel immediately.		الطالب: أشاهد الفيديو ..وأكتب على طول..أنا لا أستخدم مسودات ..إلي أحس فيه أكتبه على طول
43	<b>Researcher:</b> that means ,you do not wait for a period of time after you see the video to comment on it?		الباحث: يعني..ما كنت تشاهد الفيديو، ثم تنتظر فترة من الزمن
44	<b>Student:</b> No.		الطالب: لا

## Example of interview transcription, translation and coding

No	English Text	Code	Arabic Text
45	<b>Researcher:</b> In the first activity, your participation was the first one, then it was followed by the comments of other students. But in the second and third activities your participation was late...you participated in the discussions after almost all the other students have participated. Can you explain this?	Learner -specific matters / Curiosity- Enthusiasm	الباحث:في النشاط الأول ..كانت مشاركتك هي أول مشاركة، ثم تبعك باقي الطلبة في التعليق،بالمقابل في النشاط الثاني والثالث تأخرت كثيرا في المشاركة..شاركت في النقاش بعدما شارك تقريبا جميع الطلبة..تقدر تفسري لماذا؟
46	<b>Student:</b> (Laughing) in the first activity, when I logged in, I found that I was the first one to enter..there is no specific reason for that..you may say that I was enthusiastic...curious...so I was the first participant.. as you know it is a new website and I wanted to visit it for the first time..so I entered and wrote my comments. As for the second and third activities, I did not even know that there were comments before my comment.		الطالب:[يضحك] في النشاط الأول أنا دخلت لقيت نفسي أول واحد..ليس هناك سبب معين..يمكن..تقدر تقول حماس..فضول..خلاني أدخل أول واحد..موقع جديد بتعرف عليه أول مرة..فدخلت وعلفت..النشاط الثاني والثالث لم أكن أعلم أن هناك تعليق
47	<b>Researcher:</b> “Okay, in the first activity you were the first commenter, then you added another comment during that period... have you read the comments written by your colleagues?”	Peer influence/ Student is influenced by the comments of other students	الباحث:طيب في النشاط الأول كنت صاحب أول تعليق، ثم بعد فترة أضفت تعليق ثاني..خلال هذه الفترة..هل قرأت تعليقات زملائك الطلبة؟
48	<b>Student:</b> “Their comments?”		الطالب:تعليقاتهم؟
49	<b>Researcher:</b> “Yes.”		الباحث:نعم
50	<b>Student:</b> “Yes, I’ve read them”		الطالب:نعم كنت أقرأها
51	<b>Researcher:</b> “Did this affect your writing style?”		الباحث:هل أثروا على طريقتك في الكتابة؟
52	<b>Student:</b> “Relatively, yes”		الطالب:تقدر تقول تقريبا
53	<b>Researcher:</b> “What about the second and third activities?”		الباحث:طيب..والنشاط الثاني و الثالث؟

### Example of interview transcription, translation and coding

No	English Text	Code	Arabic Text
54	<b>Student:</b> <i>"I did not read the other comments, I wrote my comment directly."</i>	<b>Peer influence</b>	الطالب: الثاني.. لا ما قرئت.. كتبت على طول
55	<b>Researcher:</b> <i>"Why?"</i>		الباحث: لماذا؟
56	<b>Student:</b> <i>"Frankly..I was afraid that some of their ideas would stick to my mind... and that would make me agree with them. I thought that it would be better to watch the video first, then comment."</i>		الطالب: الصراحة.. خفت تعلق أشياء في ذهني.. وأقول كلامهم صح.. قلت من الأفضل أن أشاهد الفيديو، وبعدين أعلق
57	<b>Researcher:</b> <i>"What about the third activity?"</i>	<b>Peer influence / Considering students' contributions is one of the key elements of understanding the task.</b>	الباحث: والثالث؟
58	<b>Student:</b> <i>"As for the third activity, I could not understand it very well, so I read the participations of other students in order to understand."</i>		الطالب: الثالث.. الصراحة.. ما كنت فاهم النشاط عدل.. فقرئت مشاركات الطلبة من أجل أن أفهم

No	English Text	Code	Arabic Text
58	<p>Student continued talking and smiled as he added:</p> <p><i>"I know that some students are afraid to express their opinions...so they wait to read the opinions and posts of other students in order to base their opinions on others' opinions."</i></p>	<p><b>Peer influence/ Student is influenced by the comments of other students</b></p>	<p>ثم استرسل الطالب بالكلام وهو يبتسم و أضاف : أنا أعلم بعض الطلبة.. يتخوف من إبداء رأيها.. فتتأمل.. تقرأ آراء الطلبة الآخرين ومشاركاتهم، ثم تبني رأيها عليهم.</p>

## Appendix ( 4 )

### Certificate of ethical research approval DISSERTATION/THESIS

Your student no: 580031643

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**Title of your project:**

Promoting Social presence in social networking environment in Kuwait Higher Education context

**Brief description of your research project:**

The study tries to explore and understand the nature of Community of Inquiry (Garrison et al) presences, in particular teaching presence and social presence. The aim of the study is to understand the influence of different teaching presence on students' development of social presence. The study provides a more comprehensive picture of developing students' social presence over changing teaching presence in the social networking environment in a Kuwaiti higher education context. In order to achieve the purpose of this study, the following research questions are explored:

1- How does students' sense of social presence change with a different teaching presence in the social network environment within a Kuwaiti higher education context?

- a. Does students' sense of social presence (affective expression, open communication and group cohesion) change as a result of a different teaching presence (facilitating discourse - direct instruction) in the social network environment in a Kuwaiti higher education context?
- b. Why do participants maintain or change their social presence level during the course?

2- How do the uses of teaching presence promote the development of students' social presence in a Kuwaiti higher education context within the social network environment?

The study is conducted in the second semester 2010/2011 on an education college, within the State of Kuwait. The participants will be asked to do three online activities using the Elgg software system. The Elgg system is an open source social networking engine with an educational focus.

**Give details of the participants in this research (giving ages of any children and/or young people involved):**

The study is carried out on the Educational Communication module in collaboration with the module instructor. The study involves about 45 to 50 male participants. The participants are aged between 20-24.

**Give details (with special reference to any children or those with special needs) regarding the ethical issues of:**

- a) **informed consent**: Where children in schools are involved this includes both head teachers and parents). Copy(ies) of your consent form(s) you will be using must accompany this document. a blank consent form can be downloaded from the GSE student access on-line documents:

I have got official permissions from the education college in Kuwait to conduct the study. I will obtain verbal and written consent from all prospective participants prior to their involvement in research using the consent forms on the GSE ethics website. The participants will also be informed that participation is voluntary, so withdrawal is always their choice at any time during the research period without the need to give a reason for this and no penalty exists for not participating. Also, the participants will be informed that interviews may be voice recorded.

**b) anonymity and confidentiality**

Anonymity, privacy, respect and confidentiality are among the ethical issues born in the researcher's mind to be taken for granted at all the research stages. The researcher will protect the confidentiality and privacy of all people participating in and affected by the research. Respondents in all phases of the study will be assured confidentiality. Data will be treated with strict confidentiality and privacy that no individual information can be disclosed by all means but for research purposes. In addition every reasonable effort will be made to ensure that no output will provide information which might allow any participant or institution to be identified from names, data, contextual information or a combination of these

**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:**

In order to become familiar with the Community of Inquiry (CoI) framework and examine the coding system, I select and examine an old online debate transcripts from the Interpretive Methodologies Module (ERPM001) of the MSc in Educational Research course offered by the Graduate School of Education at the University of Exeter. However, the main study will use the equivalent status mixed methods design to answer research questions. The sequential explanatory strategy is embedded within applied quasi- experimental approach. Quantitative data will be collected and analyzed, then followed by the collection and analysis of qualitative data. The participants will be asked to do three online activities using the Elgg software system. The researcher will use messages analysis and content analysis approach to reveal the level of social presence in an online community and to develop stimulated recall interview questions. Then, there will be a combination of interviews and focus group interviews. The researcher developed Garrison et al social presence coding schemes that would be more suitable in the study context.

The researcher follows the BERA Revised Ethical Guidelines for Educational Research .The researcher informed the education college administration about the aims and procedures of the study. The participant students will be informed about the aims, methods, and procedures of the study and the level of commitment that will be involved. They will be asked whether they wished to participate and they had the right to refuse to take part. In addition, it will be accepted that individual students have the right to withdraw from the sample at any point during the research, without the need to give a reason for this. At the beginning of each individual interview and focus group discussion permission will be obtained by the researcher to digitally record the interview and discussion

The confidentiality of the information given stressed, and the participants will be informed that there will opportunities to ask the researcher any questions regarding the study, in a non-threatening environment. the education college administration will informed that they will not have access to interview data and data interpretation regarding individual participants



**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.):**

Assurances are given that all information will be treated in the strictest confidence, and that all participants will remain anonymous in the presentation of research findings. During the data collection, data analysis and write up, data (audio recordings, interview data and individual data) will be securely stored in a locked cabinet in a secure building. In addition, audio and video data will be downloaded from recording devices at the earliest possible opportunity, and then deleted immediately from those devices. Electronic information will only be accessed by the researcher with their username and password. Electronic information will also be stored on a secure system, within a locked building with recognised virus protection. It will be used only by the researcher and for research purposes only; then destroyed.

**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):**

The participant students will use Educational Communication curriculum, so there should be no special issues.

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*This form should now be printed out, signed by you on the first page 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.*

*N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor*


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**This project has been approved for the period:** 1- 1-2011 **until:** 30- 11-2013

**By** (above mentioned supervisor's signature):  **date:** 11/10/2013

*N.B. To Supervisor: Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.*

**GSE unique approval reference:** D/13/14/6

**Signed:**  **date:** .....  
**Chair of the School's Ethics Committee** *Head of Graduate School of Education*

This form is available from <http://education.exeter.ac.uk/students/>

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Chair of the School's Ethics Committee  
updated: April 2011

## Appendix ( 5 )

### Consent Form



#### GRADUATE SCHOOL OF EDUCATION

#### CONSENT FORM

#### استمارة الموافقة على المشاركة بالدراسة

إطلعت على أهداف الدراسة المعنونة "تعزيز الحضور الاجتماعي في بيئة الشبكات الاجتماعية في التعليم العالي في الكويت". علما بأنه لم يجبرني أحد على المشاركة بالدراسة، وتم إعلامي بأنه سيتم تسجيل المقابلات وأن جميع البيانات التي سأدلي بها ستجمع لأغراض البحث العلمي فقط وسيتم إخفاء إسمي. وأدركت أن لي الحق بالانسحاب من الدراسة بأي وقت ودون إبداء أي سبب. وكذلك أن لي الحق برفض نشر المعلومات المتعلقة بي

I have been fully informed about the aims and purposes of the study with the title:

*Promoting Social Presence in a Social Networking Environment in a Kuwaiti Higher Education Context*

I understand that:

There is no compulsion for me to participate in this research project and, if I do choose to participate, I may at any stage withdraw my participation.

I have the right to refuse permission for the publication of any information about me

The interviews may be voice recorded and any information which I give will be used solely for the purposes of this research project, which may include publications. If applicable, the information, which I give, may be shared between any of the other researcher(s) participating in this project in an anonymised form.

All information I give will be treated as confidential

The researcher will make every effort to preserve my anonymity

.....  
(Signature of participant)

11 - 3 - 2011  
.....  
(Date)

.....  
(Printed name of participant)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher

Contact phone number of researcher: 00965 99718788.

If you have any concerns about the project that you would like to discuss, please contact:

Professor Rupert Wegerif  
Emile: [R.B.Wegerif@exeter.ac.uk](mailto:R.B.Wegerif@exeter.ac.uk)

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

## Translation Consent Form

<p>CONSENT FORM</p>	<p>استمارة الموافقة على المشاركة بالدراسة</p>
<p>I have been fully informed about the aims and purposes of the study with the title:</p> <p>Promoting Social Presence in a Social Networking Environment in a Kuwaiti Higher Education Context</p>	<p>إطلعت على أهداف الدراسة المعنونة "تعزيز الحضور الاجتماعي في بيئة الشبكات الاجتماعية في التعليم العالي في الكويت"</p>
<p>There is no compulsion for me to participate in this research project</p>	<p>علما بأنه لم يجبرني أحد على المشاركة بالدراسة</p>
<p>I informed that the interviews may be voice recorded and any information which I give will be used solely for the purposes of this research project. The researcher will make every effort to preserve my anonymity</p>	<p>وتم إعلامي بأنه سيتم تسجيل المقابلات وأن جميع البيانات التي سأدلي بها ستجمع لأغراض البحث العلمي فقط وسيتم إخفاء إسمي</p>
<p>I understand that I have right at any stage withdraw my participation without giving reasons.</p>	<p>وأدركت أن لي الحق بالانسحاب من الدراسة بأي وقت ودون إبداء أي سبب.</p>
<p>I have the right to refuse permission for the publication of any information about me</p>	<p>وكذلك أن لي الحق برفض نشر المعلومات المتعلقة بي</p>

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