

# Patterns of Interactions in a Synchronous Computer Mediated Communication (CMC) Collaborative Activity in the Saudi EFL

## Context

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Received: April 22, 2017

Accepted: May 3, 2017

Online Published: May 17, 2017

doi:10.22158/selt.v5n2p307

URL: <http://dx.doi.org/10.22158/selt.v5n2p307>

### **Abstract**

*This study explored patterns of interaction in a synchronous Computer Mediated Communication (CMC) collaborative activity in an English as a Foreign Language (EFL) setting in the Saudi Arabian context. The study focused on the use of synchronous Chat in teaching and learning. Collaborative learning is considered to lead to a deeper level of learning, enhanced critical thinking, shared understanding and long-term recognition of the learned material. A qualitative approach was used in the data collection process. Participants were 20 high school students, native speakers of Arabic, in Jeddah, Saudi Arabia. The study examined participants' English usage in conversation, a quiz, and a discussion, all of which took place online, in a CMC format. There was also a paired work presentation of 25 minutes' duration. Results revealed that CMC enabled learners to further their understanding of instructional content and to better apply what they had learned when they were placed in a group. The results from the online discussion showed that participants' linguistic performance improved, including better utilization of words. Although grammatical usages lack certain accuracy, the use of CMC to a larger extent contributed to enhanced communication skills and autonomy. Based on the findings some suggestions and recommendations were provided as to aid teachers as well as students in implementing the Internet technology in EFL classrooms.*

### **Keywords**

*Qualitative research, CALL, computer mediated communication, the internet, second language acquisition, second language pedagogy, LMS (Learner Management System), EFL (English as a Foreign Language), CLT (Communicative Language Teaching), Asynchronous CMC, Synchronous CMC*

## 1. Introduction

This research is a case study of interaction between students in a computer-mediated (CMC) setting. In interaction-based learning environment, classroom opportunities to interact, understand, and eventually internalize L2 words, forms and structures are considered to be most noticeable during activities in which learners can exchange information and communicate ideas. This is supported by the theory in which language is best taught and learned through interaction. Such activities are organized so that learners need to talk as a mean of sharing ideas and opinions collaborating toward a single goal, or competing to achieve individual goals (Nunan, 1987; Rivers, 1987). Therefore, it is believed that “classroom and research activities must be structured to provide a context whereby learners not only talk to their interlocutors but negotiate meaning with them as well” (Pica, Kanagy, & Falodun, 1993, p. 11) to engage learners in these kinds of interactions.

### *1.1 Background of the Study*

With information technology becoming more available in educational settings, there has been a shift in the traditional learning process, bringing in the idea of “multi-literacies”, which enables people of different cultures to become connected, thus changing the concept of learning (Ching, 2012, p. 13). Educators today are more interested in CMC because the process is a key motivational factor in encouraging EFL learners to acquire better learning practices.

In most cases, EFL learners will comprise groups that are interested in studying the language; hence, having to communicate over a computer platform becomes encouraging for them. Computer settings provide a safe environment where opportunities are greater and more tangible for the students. This is most relevant for education today since computers now constitute such a vital part of our lives (Rezaee & Ahmadzadeh, 2012, p. 346). The role of computers in both language teaching and language learning has grown significantly. Therefore, computers are now widely used in every school by teachers as well as students.

For a long time, EFL has presented challenges for teachers as well as students. These challenges emerged with educators’ ambition to generate peer-to-peer dialogue that would also manifest outside the classrooms. According to Swain (2000), peer-to-peer interpersonal communication, whereby peers collaborate in groups, is a vital factor for students learning a second language. An environment where students are allowed to work together to solve problems when learning a language allows for a stronger learning outcome.

### *1.2 Aim of the Study*

This study investigates whether text-based synchronous nature of online discussion can increase collaboration among peers and it also inspects how CMC can enhance Saudi learners’ opportunities in EFL learning.

### *1.3 Research Question*

The study attempts to answer the following question: What patterns of interaction emerge in a synchronous CMC activity, specifically, written chat, in a Saudi EFL context?

## 2. Literature Review

### 2.1 Overview

In this study, the researcher attempts to inspect the learning outcomes of a group of EFL students after employing collaborative asynchronous and synchronous communications activity in an independent study to cultivate English speaking ability. To have a clear perspective on the study key concepts need to be discussed in the literature review. The researcher will start with CALL the umbrella for CMC and theories that supports both fields. Then, it will be investigated in the Saudi context.

### 2.2 History of Computer-Assisted Language Learning

The definition of Computer-Assisted Language Learning (CALL) is the application of computerized technology in language study (Levy, 1997). Relating it to computers, according to Beatty (2003), various computer software programs are applied to assist language studies, such as databases, grammar checkers, Internet resources, and games. These functions provided by software are effective tools to promote language study and meaningful learning.

Historically, so far Computer-Assisted Language Learning (CALL) has undergone three phases. The first was the behaviorist period starting in the 1960s and continuing into the 1970s. The communicative period began in the late 1970s and lasted until the early 1980s. The third period or integrative phase began at the end of the 1980s and continued to the present (Levy, 1997; Szendeffy, 2005). Computer-assisted language teaching is characterized by three roles: structural, cognitive, and socio-cognitive. In the role of structure, CALL helps learners to construct their vocabulary and syntax and revise their errors. The role of cognition is to enhance learners' thinking-aloud skills in an online setting. The socio-cognition role promotes learner interaction with a variety of people. These perspectives show the underlying development of computers as used in assisting language teaching (Kern & Warschauer, 2000).

### 2.3 Theories Supporting Computer-Supported Collaborative Learning (CSCL)

Several theories and perspectives contribute to computer-supported collaborative learning, such as cognitive theory, constructivism theory, and sociocultural theory. From the perceptive of cognitive theory, CSCL can support the development of knowledge building ability and problem-solving skills. Further, it facilitates the process of cognitive apprenticeship, meaning that higher performing group members can become masters to guide other learners towards the learning goals (Hsiao, 1996). This concept resonates with sociocultural theory that announced the basic way to develop cognition is through social interaction. People acquire information and facts continually and then reconstruct their own knowledge through interpersonal interaction. In addition, the gains implied by Vygotsky's concept of "one of proximal development" can be produced while learners are doing computer-supported collaborative work. The zone of proximal development is the critical element in cognitive development (Vygotsky, 1978). According to Bandura's (1977) proposed social learning theory, learners obtain knowledge from others' attitudes and behaviours via the processes of observation and modeling, thus promoting the formation of their own performance and guidelines. Shunk (2000) claimed that social

learning theory has similarities with Vygotsky's social development theory in that learning is seen as the result of reciprocal experiences from others who have higher knowledge.

In the aspects of social constructivism, context and culture play a significant role in driving and sustaining learners' construction of knowledge. In an interactive community, both contextual and cultural factors are involved in communicative processes (Derry, 1999). Learning is a form of social process through interaction and reflection in which learners create meaningful learning via exploration and discussion of topics in social activities. In this kind of learning, knowledge is constructed actively; therefore, students learn how to learn while they engage in group activities in a specific environment. Subsequently, learners recognize how to create their own artifact and do a presentation. Learning is a kind of making rather than simply derived from the cognitive process and potential (Harel & Papert, 1991).

In the process of Computer-Supported Collaborative Learning (CSCL), Spiro, Feltovich, Jacobson and Coulson (1992) found that the computer system plays a significant role and is a tool to support cognitive flexibility. The support system and The internet can offer nonlinear and multidimensional materials to stimulate interest, unlike traditional books with their monotonous drills and isolated learning setting. In addition, learners can team together to share work and solve problems through the support system during group activities. Furthermore, CSCL creates a virtual learning environment in which learners can process a purpose or goal. Through meaningful context, it also provides a setting in which to pursue individual reflection.

Another feature of Computer-Supported Collaborative Learning (CSCL) is its ability to assist learners to connect with prior knowledge in a multi-perspective and authentic environment. In other words, CSCL acts as scaffolding that offers abundant resources and support for individual cognitive development and growth. Consequently, CSCL has the potential to provide learners a beneficial way to cultivate cognitive flexibility in acquiring knowledge. CSCL can be an innovative teaching approach to enhance learning performance of students (Spiro, Feltovich, Jacobson, & Coulson, 1992).

#### *2.4 Computer Mediated Communication*

CMC, briefly, is a system used to facilitate through a teacher-student approach or a student-student approach. Herring (1996) defines CMC as "a communication process taking place between individuals that involves the use of a computer" (p. 1). Herring (1996) further notes that CMC, together with the utilization of the Internet, is vital in ensuring that the language taught to learners is communicated quickly to other parties globally. Herring's observations concern the use of systems that allow different users to log in and chat synchronously facilitated by a computer with rapid response time. The potential benefits of such an innovative system have motivated researchers to undertake studies of CMC. These have increased the perceived importance of CMC in the learning environment.

CMC is divided into two general modes (Nguyen, 2008): synchronous and asynchronous (Levy & Stockwell, 2006). It can also be multi-dimensional communication including one alone, one-to-one, one-to-many, and many-to-many (Nguyen, 2008). The synchronous form of communication involves

parties talking to each other simultaneously using video conferencing, chat rooms or instant messaging services (Nguyen, 2008). It involves different parties taking part in CMC, exchanging their different opinions by typing messages in a computer interface that allows any member of the group to review messages written by others, by scrolling back and forth. This type of learning setting helps students to exchange ideas, as well as to discuss a group project given to them. According to Levy and Stockwell (2006), CMC will normally be carried out using a platform that requires the parties to log into the system simultaneously, in order for the system to function. This, to some, may be regarded as a disadvantage, especially if group members are from different geographical regions.

### *2.5 EFL in Saudi Arabia*

There has been a recent push in KSA to reform both school and university curriculums. The Tatweer reforms have been instituted in High Schools while the AAFAQ (Horizon) policy relates to higher education (Elyas & Picard, 2012). EFL in Saudi Arabia is a subject that received a fair share of renovating ideas and the implementation of different series of textbook. It is compulsory in secondary school, and all students are expected to take it. In college or university, the subject becomes the primary means of communication. EFL teachers in Saudi Arabia face myriad challenges, mainly stemming from difficulties in effective communication of school tasks, as well as obstacles to building a meaningful communication system with their students (Al-Yousef, 2007). There is an immediate need for the creation of a learning system that allows for a greater opportunity for learners to get more involved in the EFL subject matter by talking with other learners and their teachers. CMC is thought to offer the best possibility of attaining this goal (Maslamani, 2013, p. 73). Even with the increased resources available to EFL in the country, achievement levels remain below what is expected. There is little research on why this is so.

The field of CALL, blended learning and CMC are not peculiar to the educational scene in Saudi Arabia, especially in EFL. English language teachers were pioneers. They adapted technology from the start. Therefore, many researches' have been conducted to study educational technology. Researchers in Saudi Arabia have looked at CMC in EFL from various angles. It appears that a majority of the researchers were interested in learners' attitude and reaction to CMC. Alahmadi (2011), in his study, investigated the Saudi students' reactions to Computer Assisted Class Discussion CACD as a facilitator of communicative interaction. He concluded his study by stating that participants have found the experience useful, valid and enjoyable. In fact, they favoured it over F2F classrooms. Also Alshumaimeri (2008) presented an analysis of the perceptions and attitudes held regarding the use of (CALL) in English classrooms. The results of his analysis indicated a positive attitude towards the use of IT approaches to learning in a Saudi classroom.

In general, students' attitudes were positive and participants exhibited a desire to incorporate CMC in EFL classes. However, the study of attitudes was not restricted to learners. In a more recent study in 2014, Al Mukhallafi studied the attitudes of English language teachers of intermediate level schools in the Al Madina region with respect to the effectiveness of CALL in teaching and learning English.

The results of the research are compatible with the researcher's experience as an EFL teacher because teachers were feeling that Saudi Arabia was not technologically advanced in teaching English. Although most of the EFL teachers had knowledge about using computers and the Internet in teaching which would welcome the implementation of computers in their schools, overall they felt that more training and information was needed. Al-Furaydi (2013) attempted to investigate the main barriers that EFL teachers have to overcome while incorporating e-Learning into their teaching. The findings revealed that EFL teachers had two important issues when they adopt e-Learning in their teaching: lack of reliability of the software and lack of time. That led to an avoidable angle when talking about CMC or the use of technology in general. The problems encountered when teachers use technology in the classroom (Alqurashi, 2009). Addressed some of the challenges such as the lack of equipment, increasing workload and time-consuming process. Teachers as a mean of solving these issues made use of CMC but beyond the classroom setting and through the use of social media. In 2013, Fardoun, Zafar and Ciprés tried to make use of Facebook as a Learning Management System (LMS). They claim that "Facebook" offers collaborative services and competes with other applications, like the Google Apps Education. Other than Facebook researchers examined patterns of CMC in BBM and WhatsApp, e.g., Alabdulqader, Alshehri, Almurshad, Alothman and Alhakbani (n.d.) studied that in the context of youth in Arabic-speaking populations, specifically in Saudi Arabia.

Saleh Mahdi (2014) reviewed the literature on the implementation of CMC in language learning. His aim was to present different studies that have dealt with the CMC environments used for language learning. Its benefits and current CMC environments used for language learning such as emails, wikis, You Tube, Facebook.

Patterns of interaction was the fourth aspect investigated in Saudi research regarding CMC. Alahmadi (2007), in his study attempts to explore the following points;

- 1) Whether CACD can promote communicative interaction;
- 2) Whether CACD can be implemented to generate meaning negotiation;
- 3) What interactional modifications are employed while using CACD.

Alahmadi's finding concluded that CACD provides participants with multiple opportunities to produce modified L2 output and receive comprehensible L2 input as a verified feedback. Participants also employed a variety of interactional moves such as clarification requests and giving feedback. Previous studies have one thing in common, and that is that the methods were mostly quantitative or mixed. Even with the use of qualitative methods, they were mostly restricted to interviews and written feedbacks. So the aim of this paper is to contribute to existing research in the area of computer-mediated communication as well as to enrich it with the use of Conversation Analysis as a method.

### 3. Methodology

Qualitative research methods are increasingly being used to study learning in the mediated context, especially the CMC context. Online data proved to be of great value to researchers because it is easily obtained from any website and as a result easily analyzed. This is a small-scale study that aims to identify patterns of interaction and Saudi learner's engagement in negotiations of meaning for SLA through the use of a chat tool, to analyze the ways in which learners interact, and to examine students' attitudes towards CMC. Case study is a method used to narrow down a very broad field of research into one easily researchable topic and it has been especially used in social science, psychology, anthropology and ecology (Shuttleworth, 2008).

The emic inductive approach is used in this research. As Lett (1990) explains, from an anthropological perspective, "Emic constructs are accounts, descriptions, and analyzes expressed in terms of the conceptual schemes and categories regarded as meaningful and appropriate by the native members of the culture whose beliefs and behaviors are being studied" (p. 130). It begins with observing distinct patterns of interaction that emerge from the data. General patterns will be contextualized from these observations, to support a conclusion that will, it is hoped, add to the existing field of knowledge.

This study employed observations as an important source for data collection. Hopkins (1993; cited in McDonough, 1997) describes observation as "pivotal activity with a crucial role to play in classroom research" (p. 101). It is related to the "research in the interests of increasing knowledge and understanding a phenomenon" (McDonough, 1997, p. 104). Observation is considered the best approach to collect required information when the researcher is more interested in the behavior than in the perceptions of the individual (Kumar, 1996).

#### 3.1 The Setting

The place used for this study was a high school in Jeddah, Saudi Arabia. Saudi students study in secondary schools for three years. English is a required subject and is taught for four 45-minute classes a week. They complete six levels of English language courses. Students' ages range from fifteen or seventeen years. Classes usually consist of 38 to 40 students, who vary in their English proficiency. In this study, students who have access to the internet and own a personal laptop participated.

#### 3.2 Participants

The teacher: A female Saudi teacher is working at a secondary school in Jeddah, with more than fourteen years of teaching experience. She teaches English four times a week, in lessons of forty-five minutes, each.

The students: Twenty female students at the first secondary school grade. All participants are native speakers of Arabic in their fifth year of learning English as a foreign language and receive four 45 minute classes of English instruction weekly. Most of them are at a pre-intermediate level of English proficiency. Their ages range from 15 to 16 years. They volunteered to participate in this research project. They were selected on the premise of their familiarity with using chat programs and their English competence. Ten of them were students whose English proficiency level is relatively higher

than the others. Therefore, they were paired accordingly which led to 10 dyads. Each pair has two students with a high and relatively lower level of proficiency.

The majority of the students participating in this study have used the Internet prior to this study. Participants are not to be exposed to unnecessary distress or harm. The data will be used only for this Master's thesis to meet local ethics requirements, a Parental Consent Form translated into Arabic, was given to all participants and their parents. To ensure that all participants would feel comfortable using computers, practice sessions were conducted before data collection began. They were allowed to use pseudonyms in order to free them from the anxiety of making mistakes in their performance, and guaranteeing their anonymity.

### *3.3 Procedures*

Two types of CMC tools were used in the study: a chat tool (synchronous CMC) and a bulletin board tool (asynchronous CMC). The website used is WebEx (URL), a full suite of cloud-based tools designed to get access to digital learning in minutes. It is available for public use. It allows for real-time, synchronous Computer Mediated Communication in Internet chat rooms and embedded content from YouTube, Google Docs, Maps, and Skype. Students can chat using only text, as in other chat programs. This chat program was used because it can record all of the written transactions entered in a chat window, which provides researchers with an immediate transcript of all user exchanges, and all the written transcripts can conveniently be printed. Instructions were explained at the beginning, to help ensure clarity of task directions. Additionally, students were asked to use only English in their chats. All written instructions entered in the chat window were recorded, and all the written transcripts were printed for data analysis. Observations were carried out while they performed those tasks to describe the ways in which they engaged in such performances.

### *3.4 Communicative Output Activity*

A collaborative task was developed for the purpose of this study. It was adopted from the website Bright Hub Education. According to Pica, Kanagy and Falodun's (1993) typology, a task that promotes the greatest opportunities for learners to experience comprehension of input, feedback on production and interlanguage modification is one that meets these four conditions: 1) Each interactant holds a different portion of information, which must be exchanged and manipulated in order to reach the outcome; 2) Both interactants are required to request and supply this information to each other; 3) Interactants have the same or convergent goals; 4) Only one acceptable outcome is possible from their attempts to meet this goal (Cheon, 2003).

Accordingly, collaborative tasks are regarded as being favorable for activating negotiation of meaning. This is because they comply with the four conditions outlined.

#### *3.4.1 Objectives of the Activity*

The activities general aim is to improve students' skills speaking. By attending the online sessions for five days, they are expected to have learned the following:

- 1) Students will know how to make an invitation both formally and informally;

- 2) Students will know certain words that usually are used in an invitation;
- 3) Students are able to accept or refuse an invitation from other people.

The researcher asked students to complete a 45-minute activity given in the following order for a week.

- 1) Warm-Up. 5 minutes;
- 2) A conversation and a quiz (hypertext links). 10 minutes (online chat);
- 3) Pair work Presentation. 25 minutes;
- 4) Wrap-Up. 5 minutes.

### *3.5 Instrument*

#### *3.5.1 Conversation Analysis*

Conversation Analysis is an approach within the social sciences that aims to describe, analyze, and understand talk as a basic and constitutive feature of human social interaction (Sidnell, 2010). Simply put, conversation analysis is a technique used for working with audio and video recordings of talk and social interaction. CA can help an analyst discover how participants understand each other's opinion, and what tactics they use to respond to others in their turns at interactional talk, along with a focus on sequencing and frequency of the actions being generated. CA analyzes natural conversation, whether it is between friends and family or in a more professional environment like workplace and classrooms.

Various techniques are involved in performing conversational analysis which can be used to derive various facts about the activities performed in pure CA.

#### **•Turn taking**

Turn taking organizes the distribution and flow of speech balanced on both sides, keeping the speech between the participants continuous. The time gap between one participant stopping and the other person responding is very small. However, the coordination is achieved with some rapidity and turn are organized in a sequenced fashion. Overlaps can also occur, but they constitute a small portion of the overall conversational activities taking place among the individuals.

#### **•Repair**

Repair is the conversational mechanism which includes the set of practices followed by a co-participant to interrupt the on-going course of action when there is a probability of conflict or understanding trouble. Repair is used to ensure that the interaction does not freeze in case of a deadlock in conversation (Kitzinger, 2012).

#### **•Topic Management**

Topic refers to what is talked about in an on-going conversation. Topic management includes the strategies implemented by the participants to manage how the topic is talked about across different turns. A gap between turns usually signals the end of the topic. CA keeps on stressing that using recorded data is the main determinant in recovering the in-depth detail of an interactional organization, and types of the non-recorded data—ranging from the memorized observations to all other forms of on-spot coding—are inappropriate and inadequate alternatives.

#### 4. Findings and Discussion

In this chapter, the outcomes from the study set in Jeddah which looked at a teacher and her twenty students engaged in an EFL learning exercise will be presented in qualitative terms.

The transcripts derived from the sessions showed that although, for the students, English was not their first language, they strive to communicate as best as they could. The results were divided in relation to conversational aspects and the use of computers as medium for learning.

##### 4.1 Conversational Aspects

Research on spoken conversational interaction shows that turn-taking, repairs and negotiating are permanent features. In CMC, these features are also present but slightly adjusted to the new medium in terms of length and frequency of turns. The chat in the website made use of a “two-way” transmission of a message which means the messages are sent when the sender of the message presses “send” or “return”. As the activity involved 20 students and a teacher, turn adjacency were interrupted due to the fact that messages are posted in the order received by the system, not of what the students are responding to Herring (1999).

##### 4.1.1 Turn Taking

**Table 1. Excerpt Analyzed for Turn Taking Mechanism**

| Extract   | Description  |
|---|--|
| <i>Taifalmari: What about you?</i>  | Asala’s communication with Taif was interrupted by an unrelated message from another student Loran;  |
| <i>Asala: I’m fine. It’s been a long time I heard that you moved to our neighborhood it will be great if we meet.</i> | Spoken conversation displays a higher degree of turn adjacency; that is, relevant responses tend to occur temporally adjacent to initiating turns (Herring, 1999).   |
| <i>Loran: Sorry miss my network not good, am trying to fix it.</i>  | In spoken conversation Turn-taking occur with no (or minimal) gap, and rare occasions of overlap between speakers. CMC, in contrast, shows various violations of both the “no gap, no overlap” principle . |
| <i>Taifalmari: I’m afraid i cannot.</i>   |  |
| <i>Teacher: its ok.</i>   |  |

##### 4.1.2 Wait Time

**Table 2. Excerpt Analyzed for Wait Time**

| Extract   | Description   |
|---|---|
| <i>Dalia: Can you come to attend the lunch?</i> | It is very essential to have a pause to give other people the chance to complete their sentences. Wait for the turn of each person is crucial to complete the conversation and comprehend the message conveyed. |
| <i>Loran: I’d love to!</i>                      |   |
| <i>Taifalmari: I’m afraid I can’t.</i>          |   |
| <i>Sara: oh where is it?</i>                    |   |

*Dalia: In pizza hut.*

*Sara: oh I love pizza.*

CMC environment is subjected to outer factors that are not directly related to the classroom that could leave no room for waiting time.

In this excerpt, a group of students are replying to an invitation to meet at a restaurant. Their initiated response needs a follow up by the student who issued the invitation but wait time is required to give her a chance to address them.

#### 4.1.3 Repair

**Table 3. Excerpt Analyzed for Repair Frequency**

| Extract  | Description  |
|--|--|
| <i>Teacher: was it difficult?</i>                        | Though it was wrongly answered but nonetheless Asala was able to express herself, and that was the teacher's aim of the interaction. The extract shows as the social interaction takes place, the repair structure becomes ineffective. Some spelling errors are observed, and sentence casing is neglected. In order to cover up the nonverbal cues, other steps were noted as important. |
| <i>Asala: no need. no I did not found any difficult.</i> |  |

#### 4.1.4 Topic Management and Negotiation of Meaning

**Table 4. Excerpt Analyzed for Topics Management and Negotiation of Meaning**

| Extract  | Description  |
|--|--|
| <i>Taif: I'll chose do homework together. Hi Loran.</i>  | This discussion reveals that students studying the language will tend to increase their linguistic skills by increasing the number of sentences.   |
| <i>How are you?</i>  |  |
| <i>Loran: Hi taif I'm fine thank you.</i>  | The indication as noted by Hiltz, Turoff and Harasim (2007) that collaboration through CMC mediates the way for better interaction among learners and their instructors, resulting in efficient and practical learning.  |
| <i>What about you?</i>   |  |
| <i>Taif: I good thank you, Do you want to come to my house and do homework together? that will be interesting.</i> | This resulted in a very complex pattern of interaction even though it was a relatively short sample of discourse. An active multi-participant CMC can be compared to a chaotic classroom in which students shout out random answers. Where overlap and incomplete exchanges occur. |
| <i>Loran: I will tell my parents and I will tell you to choose a day.</i>  |  |
| <i>Taif: That's so great How about tomorrow?...</i>  |  |

#### 4.2 *The Use of Computers as a Medium for Learning*

In this study, a group of students were asked to participate in a synchronous, two-way CMC collaborative task. As a result, the following key observations were noted.

##### 4.2.1 CMC Foster Collaborative Learning

Collaboration is an important activity in the classroom because it encourages both social skills and thinking skills, and reflects the way in which learners often need to work in a speculative locale (Beatty, 2004, p. 109). The outcome reveals that as the discussion goes on, the number of sentences increases at some point,

##### 4.2.2 CMC Increase Motivation

The collaborative nature of some of the exercises which varied between pair and group work acted as a motivation tool which allowed the students to engage, reflect as well as gave them the autonomy in completing their tasks.

##### 4.2.3 CMC Enhance Learner Autonomy

The level of autonomy given to the students was visible from the way the entire exercise was structured. *“I want you both to say something to each other”*.

The teacher set the tone from the beginning that learners are free to participate. This aspect allowed the student to negotiate about the process to try and figure out what they could say to each other.

### 5. Conclusion

Computer-Assisted Language Learning (CALL) has been a trend for more than four decades. Starting in the 1960s, it has changed as computer technology has advanced. Through online interactive communication, L2 learners have endless opportunities to nurture their language proficiency through the assistance of foreign friends, peers, or other learners. The climate of collaboration benefits and fosters the progress of language learning.

This study asked what patterns of interaction emerge in a written chat synchronous CMC activity in a Saudi EFL context. The collaborative nature of the task acted as a motivation tool that allowed the students to engage, reflect as well as gave them the autonomy in completing their tasks. The patterns that were uncovered from the CMC was found out to consist of certain elements starting with the aspect of a lack of planning, the aspect of sharing an atmosphere of interactivity. From the beginning of the exercise, what was revealed is that students at first experienced a difficult time when communicating orally, however, as a result of increased communication this aspect changed. It seems that when learners feel at ease in revealing themselves in CMC, their willingness to communicate in ... increases, as if they have learnt how to be open toward others (thus be more sociable) and this enhances their opportunity of learning the language, a fact supported by interactionists, constructivists, and advocates of Vygotsky's ZPD (Seyyedrezaei & Ziafar, 2014).

The following conclusions could be obtained from this study:

- 1) CMC collaborative activities could greatly support EFL learning;

- 2) CMC offers different tools such as text, microphones, audio, video and computer screens;
- 3) CMC fosters learning autonomy and enables the individual to advance according to his preferred learning pace;
- 4) The use of CMC applications in the classroom is extremely motivating for language learning.

Nonetheless, the study has commented upon the level of grammatical inaccuracy of students' output in CMC, and the high maintenance requires to supply schools with tools to implement computers as a medium of learning and communicating. Finally, according to the researcher's experience as a teacher and what is stated in related literature as well, the researcher might be allowed to suggest that the use of CMC is a supplement for other tools in teachings but to have a complete course online is not preferable. And for the implementation of this valuable tool, teachers and students should be provided with a necessary training and support to make use of what the technology has to offer. Moreover, the Ministry of Education in Saudi Arabia ought to fund schools and institutions to grant them with the best equipment.

#### *5.1 Recommendations for Future Research*

- 1) Further research into the use of CMC is strongly recommended with the use of different methods of data collection and analysis;
- 2) Designing ESP training courses for teachers and students for the implementation of CMC;
- 3) Extend the studies to other forms that offer interactive content, e.g., mobile phones and tablets.
- 4) Presenting various software programs that curriculum designers could make use of;
- 5) Offer support and cultural awareness for students regarding the appropriate use of CMC in keeping with religious and cultural values.

#### *5.2 Limitations*

This is a small-scale study, and the assessment methods are exclusively qualitative. Therefore, findings are not conclusive, and they should be approached with an open mind. However, they seem congruent with previous research on CMC and EFL thus it is better to view it in that light as well.

### **Acknowledgements**

We want to thank Dr. Michael Burgess who, despite the difficulties, supported us all the way. Our sincere gratitude goes to the teachers and students in the 89th school in Jeddah for participating in the study.

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