

# COMPUTER-MEDIATED COMMUNICATION AND LANGUAGE EDUCATION: FOCUS ON WRITTEN COMMUNICATION

By

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## ABSTRACT

*It is apparent that the internet-based and computer-mediated tools can be considered as the most recent step in the development of communication technologies. This paper aims at investigating the type of impact computer-mediated communication (CMC) tools' use has on Moroccan EFL university students' writing skills and performance. Two research instruments were used to collect the needed data, a questionnaire and a writing task. The findings reveal that the use of CMC tools has a positive impact on students' writing skills and performance. Yet, the results obtained from the writing task show that the use of CMC tools has a detrimental impact on students' academic written productions because most students failed to confine to the standards of academic writing in terms of layout, organization, style, level of formality, grammar, content, mechanics and tone.*

*Keywords: Computer-Mediated Communication, English Language Teaching and Learning, FtF Communication, Writing.*

## INTRODUCTION

The development of the computer along with the widespread and excessive use of the internet worldwide has rapidly given birth to computer-mediated communication as a very important medium of interaction between people all over the world. This wide and effective use of this channel has a noticeable impact on all aspects of education in (Nguyen, 2008). Computer-mediated communication has in fact proved to be a feasible and preferable alternative to Face-to-Face (FtF) communication since it provides an ideal environment for English to be used in purely communicative situations. Therefore, the present research seeks to answer the following two questions:

1. What are the benefits as well as the limitations of computer-mediated communication in English language teaching and learning?
2. What type of impact does the use of computer-mediated communication tools have on Moroccan EFL

university students' writing skills and performance?

## 1. Review of the Literature

### 1.1 Face-to-Face Communication vs. Computer-Mediated Communication

Face-to-face communication is defined as "a form of interpersonal communication (being part of human communication) that takes place between two or more persons who establish a communicative relationship" (Berko, Wolvin & Wolvin, 2007). This means that this communication type involves two or more people engaging in a conversation characterized by the possibility of giving and receiving immediate feedback which is not always the case with computer-mediated communication. As for computer-mediated communication, Lee (2002) claims that there is a large repertoire of terms which can be used to refer to this type of communication. This includes virtual communication, online communication, electronic communication, cyber communication, or even cyber conversation, etc. Various definitions have been offered to

this concept from a diversity of perspectives. It is defined by December (1996) as "the process by which people create, exchange, and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages" in (Jonassen & Kwon, 2001, p. 398).

The second definition is the one suggested by Herring (1996, p.1) who claimed that computer-mediated communication refers to "communication that takes place between humans via the instrumentality of computers." Another definition by December (1997) states that computer-mediated communication is "a process of human communication via computers, involving people, situated in particular contexts, engaging in process to shape media for a variety of purposes" in (Bubas, 2001, p.2). For Luppicini (2007, p.142), computer-mediated communication can be defined as "communications, mediated by interconnected computers, between individuals or groups separated in space and/or time" in (Nguyen, 2008, p.23).

The four definitions mentioned above maintain the idea that computer-mediated communication involves the exchange of information between two or more people in textual, audio, and/or video formats that are transmitted and controlled using computer and telecommunication technology, namely the Internet.

## **1.2 Computer-Mediated Communication in Language Education**

The integration of computer-mediated communication (CMC) into EFL teaching and learning is more likely to increase both input (exposure) and output (use) of the target language that is needed to help learners develop their communicative competence. This section will address some of the benefits of CMC in language education.

### *1.2.1 The Pedagogical Benefits of Computer-Mediated Communication*

Since its first application in the educational environment, computer-mediated communication has been believed to offer a number of pedagogical benefits, Nguyen (2008) has compiled some of them.

#### 1.2.1.1 Increasing Motivation

Research in this field has proved that learners' motivation is more likely to be enhanced in the computer-mediated communication context than in FtF interaction (Beauvois, 1997). This interactive nature makes it possible for learners to communicate with a real, often international, audience in the target language. This helps them to boost the linguistic as well as the social quality of online negotiation of meaning and motivation (Lee, 2001). In the same vein, a study conducted by Sotillo (2000) has found that learners' motivation and attitudes towards learning is promoted during a CMC task thanks to the communicative nature of the activity. This, in turn, contributes to shyness and anxiety reduction about computer and language use.

#### 1.2.1.2 Supporting Active Learning

The use of CMC in the classroom gives learners enough chance to explore and manipulate information. It is stated in the literature that learning takes place when learners are engaged actively in the learning process (Egbert, 2001; Lee, 2001; Warschauer, 1996).

#### 1.2.1.3 Promoting Reflective Learning

According to Warschauer (2007), learners are allowed more time to reflect on each other's work in CMC context since feedback is delayed unlike in FtF conversations which require immediate feedback. Besides, the asynchronous nature of some online tools allows learners to prepare their messages carefully using, for instance, the word processor, and to invite quiet learners to have a say because their reflective learning styles are easily accommodated.

#### 1.2.1.4 Enhancing Learner Autonomy

Advances in CMC technologies are encouraging the development and promotion of autonomy in language learning. With CMC technologies, individual learners are given the opportunity to move out of their individual comfort zones to participate productively and effectively in the learning process (Hoven, 2006).

#### 1.2.1.5 Fostering Collaborative Learning

CMC provides learners with a valuable dimension to collaborative learning as it enables them to ensure an equally distributed turn-taking during the process of

interaction. It also helps learners to compose a well-thought written output. Harasim (2007) claims in this respect that technology allows both teachers and learners to try new ways of interaction. The latter contribute to the inculcation of the value of collaboration between teachers and learners and among learners themselves.

Larsari (2011) adds other pedagogical benefits of computer-mediated communication to the list suggested by Nguyen (2008).

### 1.2.1.6 Increasing Interactive Communication and Exposure to the Target Language

Proponents of CMC suggest that teachers can stimulate a great amount of interactions by incorporating CMC tools into their language teaching enterprise both inside and outside of the classroom (Blake, 2000; Warschauer, 1997). Learners are also given enough opportunities to communicate and learn collaboratively with learners worldwide (Weininger, & Shield, 2004). Besides, technology engages language learners in authentic social interactions which expose them to the TL and enable them to practice what they have learned in the classroom (Blake, 2000).

### 1.2.1.7 Creating Opportunities to Participate in the Target Sociocultural Context

CMC allows language learners the chance to take part in the target social and cultural context and to learn the pragmatic knowledge they need to function well using the target language for communicative purposes. For instance, learners could share information in different formats (photos, audio and video attachments) related to their families, countries and culture with their e-pals through e-mails.

### 1.2.1.8 Promoting Social Equality and Identity

Research in this area has proved that online communication is less stressful and much more face-saving than FtF communication. It is also found that learners have more time to plan and check their language output in CMC communications learners have. This means that every member in the class is more likely to enjoy equal chances to practice the target language. Furthermore, learners are given enough room to express their identity freely.

To recap, the different computer-mediated communication tools add some flavor to the language teaching/learning process as they give their users the opportunity to connect, to communicate, and to collaborate online by having access to interactive and multimodal platforms. Figure 1 summarizes the main pedagogical benefits of computer-mediated communication in language teaching and learning.

### 1.3 The Benefits of CMC in Language Development

Many studies have been devoted to the use of CMC in language education. They report that CMC is a student-centered tool in language learning as it facilitates interaction, discussion, and collaboration among learners from a variety of backgrounds. CMC has a lot to offer to language development (Nguyen, 2008; Larsari, 2011).

#### 1.3.1 Metalinguistic aspects

Different researchers have tried to explore the relationship between CMC and the various metalinguistic aspects of language development (the negotiation of meaning and the sociolinguistic and intercultural competence). Almost all of them have concluded that CMC, both APMC (Kitade, 2006) and especially SCMC (Blake, 2000; O'connor, 2005; Pelletier, 2000; Sotillo, 2000; Hata, 2003), facilitates interaction and negotiation of meaning. It also provides learners with a rich environment where they could develop their sociolinguistic competence by making them engage actively in real communication with the native speakers of

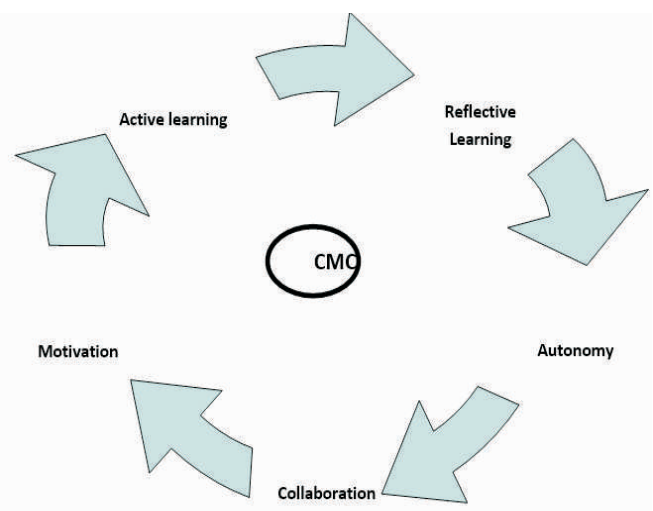


Figure 1. CMC Pedagogical Circle

the target language (Kitade, 2000). In this way, learners show less anxiety and a high degree of self-esteem during online communication than when they are engaged in face-to-face interaction. This motivates reluctant learners to take part in oral discussions. A study by Kitade (2000) reveals that CMC helps learners hold positive attitudes towards language learning. Kramsch and Thorne (2002, p.100) argue in this regard that CMC tools provide "convenient, authentic, direct and speed access to native speakers and their cultures." This enhances learners intercultural and communicative competence.

### 1.3.2 Language Areas and Components

Some of the studies conducted on the relationship between CMC and language areas and components suggest an increase in linguistic competence, both quality and quantity, among language learners. Abrams (2003) argues that students produce better language skills in CMC environments, especially the SCMS, than in face-to-face interaction. CMC also fosters the improvement in linguistic and grammatical development. The nature of CMC application promoted written accuracy and sentence complexity.

With reference to some previous studies, CMC environments have a positive effect on the improvement and development of so many language areas and components.

### 1.3.3 Language Skills

Research has proved that the use of CMC tools has a positive impact on both the spoken and written language skills. Authentic CMC, especially APMC, is reported to boost language learners' writing skill since various forms of text-based CMC resemble written language. This allows learners more time, more autonomy, and more opportunity to brainstorm and discuss the topic among groups in comparison with in-class teacher-fronted writing classes in Nguyen (2008).

Many researchers have agreed on the positive effect of CMC on the development of the learners' language proficiency. Pennington (2004) finds that electronic writing tools, the word processor as an example, are efficient in enabling learners to easily compose and revise texts and to

check spelling, and grammar. This can promote their confidence in their ability to write better and generate more writing products. Hubbard (2004) asserts that CMC tools such as audio and video conferencing can be used to enhance learners' speaking proficiency (Larsari, 2011).

To conclude, not only does CMC enhances learners' attention to linguistic forms, but it also encourages them to come up with more substantial written texts of the target language along with creating a less stressful and more equitable environment for discussion (Blake, 2000; Nguyen, 2008).

### 1.4 Limitations of CMC Tools

The different limitations which are related to the use of the computer and the incorporation of CMC tools into the teaching/learning process of English as a second/foreign language are listed as follows:

- Providing an effective online connection necessitates the availability and reliability of equipment which is often costly.
- Teachers are required to find online partners for their learners to ensure interaction with intercultural partners. However, finding a class which matches their learners' needs in terms of language level, topical interest and objectives is not easy.
- International time discrepancy and difference in academic schedules and calendars may at certain times make it hard for teachers to arrange real-time or delayed chat activities.
- Differences in background, language, and experience are another constraint which may hinder the effective use of CMC tools in a class environment.
- Implementing CMC applications in the classroom seems to be problematic given their current cost and connection problems.
- Increasing the effectiveness and efficiency of CMC tools in language teaching and learning requires teachers to plan their activities well and to carry them out within the framework of the course syllabus which is not an easy deal.
- Having said all that, it sounds legitimate to contend

that the implementation of CMC in the language classroom offers both teachers and learners lots of benefits. Yet, research has proven that CMC tools in language teaching and learning has also so many limitations which stand as building blocks in front of its effective use in the class environment.

## 2. The Study

### 2.1 Research Design

The main objective of the study has been to investigate the impact of CMC has on Moroccan EFL university students' writing skills and performance. Given its exploratory nature, a mixed-method approach was used by adopting both qualitative and quantitative diagnostic research design.

### 2.2 The Sample

286 subjects participated in the study. They were split into two groups. Group one comprised 246 students belonging to the English language department at the School of Arts and Humanities, Moulay Ismail University in Meknes, Morocco. The second group consisted of 20 EFL university teachers belonging to eight institutions.

### 2.3 Data Collection Instruments

Data was collected during the first semester of the academic year 2013/2014 making use of two elicitation techniques, namely a five-Likert scale questionnaire and a writing task. The questionnaire used in this study is the closed one. Some of the questionnaire items were adapted from a previous study on EFL learners' use of blogging for developing writing skills and enhancing their attitudes towards English learning by Fageeh (2011).

#### 2.3.1 The Students' Questionnaire

The questionnaire addressed to students comprises three main parts. Part one includes ice-breaking items which sought to gather demographic information about the participant students (age, gender, the CMC tools they use a lot, and the reason(s) for using it/them). Part two includes four items which target identifying the kind of impact CMC tools' use has on their academic writing skills. The last part comprises six items which try to find out the type of impact CMC tools' use has on their academic writing performance.

#### 2.3.2 The Teachers' Questionnaire

The questionnaire addressed to teachers is divided into two parts. Part one includes four items which aimed to gather personal information about them (gender, institution, teaching experience, and the method they prefer to use when teaching writing). Part two comprises seven items which sought to determine the kind of impact CMC tools' use has on students' academic writing skills and performance. As for the writing task, the participants were asked to develop one of the suggested topic statement into an essay. Data was analyzed using descriptive statistics, frequency distribution and percentages, and content analysis.

## 3. Findings and Discussion

### 3.1 The Questionnaire

Most participants believe that the use of computer-mediated communication tools is more likely to improve Moroccan EFL university students' writing skills. The two figures below illustrate this:

The results in Figure 2 reveal that 60.22% of the participating students think that active participation in computer-mediated communication is more likely to improve their academic writing skills. They claim that using computer-mediated communication makes them think and interact with the potential reader(s) of their texts, makes them carefully revise the way they present their ideas, encourages them to move through the different processes involved in writing, and instructs them to give much more value to the sub-skills involved in writing at the expense of

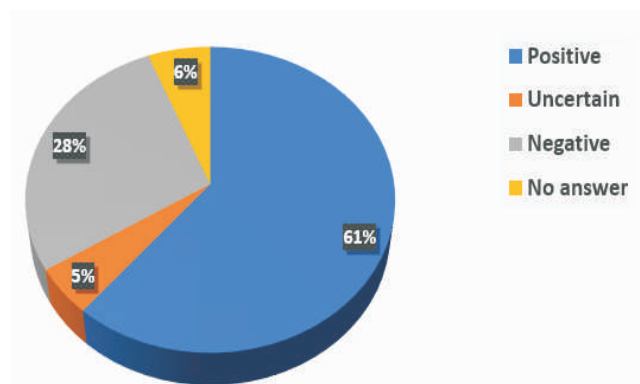


Figure 2. The Type of Impact Computer-mediated Tools' use has on Students' Writing Skills According to Students themselves



the final product.

The results in Figure 3 show that most teachers (61.01%) believe that the use of computer-mediated communication tools is more likely to enhance Moroccan EFL university students' writing skills. They argue that CMC allows students to learn how to write in an inductive way, it makes them enjoy writing and talking better than they do orally or in draft, and it provides them with more handy tools to sharpen their writing skills.

### 3.2 The Writing Task

The writing task was meant to have clear insights into the effect of using computer-mediated communication tools has on Moroccan EFL university students' academic writing performance, in terms of quality. It attempted to detect instances of net-speak, if there are any, in students' academic written productions. The content analysis of the essays written by sixty students revealed that most of them failed to produce cohesive, coherent and well-organized pieces of writing. This can be attributed to the existence of so many features of net-speak in their essays. In what follows some of the aspects of net-speak in their written productions:

Figure 4 demonstrates that seven features of net-speak (net-lingo) were present in students' essays. This means that the big majority of them did not manage to confine themselves to the agreed upon conventions of academic writing in terms of layout, grammar, vocabulary, level of formality and objectivity, length, lexicon, purpose and

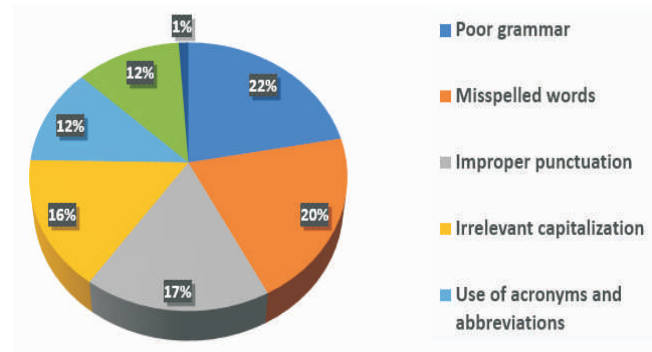


Figure 4. The Distribution of Instances of Net-speak in Students' Essays

rhetoric. This puts the quality of their written productions at stake.

In sum, it is worth claiming that the use of computer-mediated communication tools in language education in general and in the teaching of the writing skill seems to yield positive results given their interactive nature. This offers foreign language learners lots of opportunities to practice their writing skill. However, the content analysis of the sixty essays written by students revealed that most of them failed to produce texts that are worth reading and responding in terms of quality.

### 3.3 Pedagogical Implications

The current study provides several significant implications on the use of CMC tools in English language teaching and learning in general, and in the teaching/learning process of writing, in particular. First, teachers should consider the various benefits they might get from integrating technology into the ongoing course work as a requirement for completing the assignment. Such integration should not simply be a way to present an old content in a new package, or to attract students' attention temporarily. Rather, it should help construct new English learning contexts for students where they can find learning appealing, meaningful, engaging and enjoyable. In addition, teachers should be responsible for monitoring their students' performance on the tasks and making sure that the tasks are completed in a way that their goals and objectives are met. What's more, teachers and students should work collaboratively to handle the problems that may arise in their endeavor to incorporate computer-

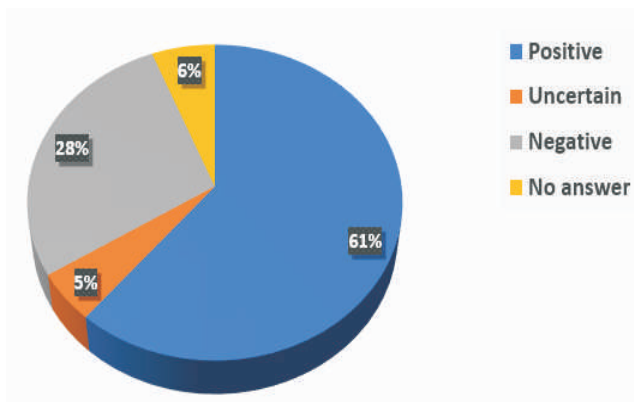


Figure 3. The Type of Impact Computer-mediated Tools' use has on Students' Writing Skills According to Teachers

mediated communication tools into their teaching and learning practices inside and outside the classroom.

Above all, teachers need to embrace the idea that technology has become an important resource which supports learning. Therefore, they are required to allow their students to successfully find and select relevant information and access subject knowledge in different formats using the different modern forms of information and communication technologies. Finally, ELT practitioners need to be more concerned with the outcome of the use of technology in the process of second/foreign language teaching and learning. Oskoz and Elola (2014) assert in this regard that "for our learners to become 21<sup>st</sup> century writers, they need to use 21<sup>st</sup>-century tools in an effective and pedagogically sound manner" (p.196).

## Conclusion

In a nutshell, an attempt has been made in the present paper to address the issue of CMC in relation to language teaching and learning. It has been divided into two parts. Part one has been allocated to the literature review. Special focus, in this part, has been given to its major pedagogical benefits and the positive impact it has on the metalinguistic aspects of the language as well as the language areas (grammar and vocabulary) and components or skills (speaking and writing). Part two has been dedicated to the presentation and discussion of the findings of the study which addressed the type of impact CMC tools have on Moroccan EFL university students' academic writing skills and performance. Further studies are needed to shed more light on the use of computer-mediated communication to develop EFL learners' communicative competence bearing in mind that the main reason for which a second/foreign language is taught and learnt is to help learners use it to communicate their thoughts and ideas to a specific audience in an efficient and effective way.

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