

# Contributions of Computer-Mediated Communication (CMC) and corpora to Computer Assisted Language Learning (CALL) in Instructed Contexts

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## **Abstract**

The advances in computer technology and digital media have changed the perspective towards the educational contexts, especially in language teaching and learning environments. The present paper provides a brief comparison of how Computer-mediated communication and corpora can contribute to the use of Computer Assisted Language Learning or CALL in teaching and learning contexts. Moreover, a conclusion as well as a personal opinion regarding this issue will be provided at the end of this paper.

**Keywords:** Computer-mediated communication, corpora, CALL

**Título:** Aportaciones de la Comunicación Mediada por Ordenador y el corpus lingüístico en el Aprendizaje de Lenguas Asistido por Ordenador en contextos educativos.

## **Resumen**

Los avances en tecnología computacional y los medios digitales han provocado un cambio de perspectiva dentro de los contextos educativos, en especial en los contextos de enseñanza y aprendizaje de lenguas. El presente documento proporciona una breve comparación sobre cómo la Comunicación Mediada por Ordenador y el corpus lingüístico pueden contribuir en el Aprendizaje de Lenguas Asistido por Ordenador en los contextos educativos.. Además, al final de dicho documento se incluirá una conclusión así como una opinión personal con respecto a este tema.

**Palabras clave:** Comunicación Mediada por Ordenador, corpus lingüístico, Aprendizaje de Lenguas Asistido por Ordenador.

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## 1. Introduction

The advances in computer technology and digital media have changed the perspective towards the educational contexts, especially in language teaching and learning environments. As a consequence, the implementation of CALL, which Levy (1997:1) defines as "the search for and study of applications of the computer in language teaching and learning", computers have begun to play a significant role in language instruction, bringing a wide range of new technologies and programs which can be very useful for development and acquisition of languages. Among these programs, there are two applications which have greatly contributed to the basic principles and practices of CALL: CMC and corpora.

On the one hand, Higgins (1991), quoted by Mahdi (2014), claims that CMC can be broadly defined as "human communication via computer" (Higgins, 1991). On the one hand, corpora (the plural form of corpus) is defined by "Corpus Linguistics" (*n.d.*) as "a large collection of text representative of a language or of a subset or genre of a language" gathered "by teams of researchers who select, categorize, and annotate text. This data is then sorted, parsed, and analyzed with the aid of computer programs-typically concordance programs and statistical packages."

In the following sections, some of the most important contributions of CMC and corpora to CALL in language teaching and learning settings are exposed.

## 2. Contributions of CMC to CALL in instructed contexts

In general, CMC, is a process through that people can interact, exchange, perceive information, culture, thought, ideas, history, knowledge, mores and social issues with each other via computer medium networking by tools e-mails, blogs, wikis, chat rooms, audio and video conferencing without considering various perspectives of CMC studies (Dehghanian, 2011).

There are two modes of CMC tools: **synchronous (SCMC)** or **asynchronous (ACMC) communication**. The former provides immediate feedback, as communication takes place in real time, whereas the latter allows untimed interaction as it does

not need to be simultaneous. Some examples of synchronous communication are instant messaging, audio or video conferences (e.g. *Google Hangouts, Skype*), while writing e-mails (e.g. *MSN*), wikis (e.g. *WikiSpaces*), posting responses to social networks (e.g. *Facebook, Twitter*), forums or blogs (e.g. *Blogger*) are good instances of asynchronous CMC.

According to Mahdi (2014), many studies show that CMC is a powerful tool which provides an ideal environment for language learning, enabling language learners to easily “interact with native speakers of the target language at anytime and anywhere.” Therefore, CMC technologies have the potential “to remove the constraints of time and place that result in its anywhere-anytime flexibility” so that individuals can “engage in public and private exchanges and interactions” (Dehghanian, 2011).

Following Nguyen (2008), research has shown that, from a pedagogical point of view, the use of CMC tools for educational purposes is more likely to increase learners’ motivation towards the target language. Since CMC provides a number of opportunities for language learners to practise and to be exposed to the target language and its culture, emphasizing a more reflective, active and collaborative learning. These kinds of learnings are excellent ways to enhance learner autonomy, so CMC in language education must be considered as a student-centred tool.

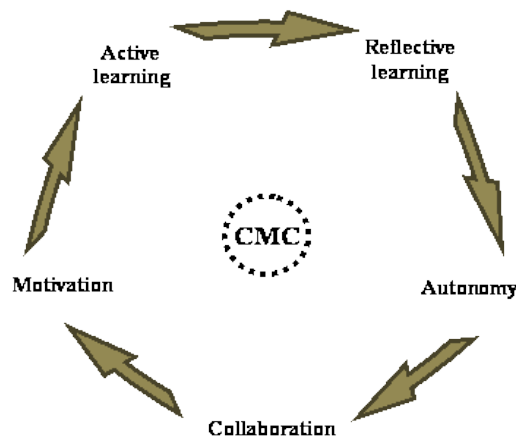


Figure 1. CMC pedagogical circle (Nguyen, 2008).

Regarding the development of language skills, Nguyen (2008) states that CMC tools improve the development of both oral and written skills which can be more easily taught and learnt than in traditional language lessons. In this sense, the use of blogs, forums or chat rooms are very likely to improve learners’ written skills, as these tools enable them to read and write in authentic and real contexts. Moreover, online videoconferences via *Skype* can be quite useful to interact with native speakers since they improve speaking proficiency significantly, while providing meaningful learning contexts and improving intercultural competence.

Another contribution of CMC in instructed contexts is that it promotes the negotiation of meaning, making students feel comfortable when using CMC. CMC also “facilitates interaction between the teacher and students, and also between students themselves” (Mahdi, 2014). In addition, Nguyen (2008) affirms that CMC settings help to enhance the acquisition of a diversity of language components such as grammar, vocabulary and pronunciation.

To sum up, Computer-mediated communication can be said to be really beneficial for increasing both the input and output of the target language, which are essential to enable learners develop their communicative competence. As stated by Boone (2001), quoted by Nguyen (2008), “CMC-based Computer Assisted Language Learning (CMC-CALL) has considerably revolutionized the world of education by offering countless new ways to teach and to learn.”

### 3. Contributions of corpora to CALL in instructed contexts

Research has shown that the use of corpora in language teaching and learning contexts has numerous advantages, so its implementation has been extremely advised by many authors. In fact, following Lee, S. (2011), researchers like Aijmer

(2009), Kaltenbock & Mehlmauer-Larcher (2005), highlight the potential of corpora in CALL contexts and they consider them “as a valuable resource and an innovative teaching tool.” It has also been argued that corpus-based language teaching has the potential to motivate students and promote autonomous learning which are highly valued in education.

For McEnery & Xiao (2011), the use of corpora in language education has gained prominence because corpus analysis provides more accurate descriptions of language use. Consequently, a lot of research has been conducted to examine the effectiveness of using corpus linguistics as a teaching technique to highlight how native speakers of English use certain language forms, vocabulary items, and expressions. As a result, the design of most textbooks and dictionaries are now based corpora, rather than on the intuition of their authors.

Another benefit of introducing corpora into language instruction is that they support authenticity because they contain “realistic examples of language usage that reflect the complexities and nuances of natural language” McEnery & Xiao (2011). Corpus-based resources also give students the opportunity to analyse the target language, making them reflect on its most frequent structures, collocations or patterns. As a consequence, corpora are not only effective tools in teaching vocabulary or grammar structures, but also in enhancing autonomous and independent learning.

Additionally, O’Donnell (2010) states that “Language corpora can be used to enhance the classroom experience in several ways.” Regarding teachers, they can use corpora to improve their understanding of the language learning process itself. For instance, they can compile a corpus of their students’ writings in order to analyse and identify the most common mistakes that the students make and then, focus on those language problems within their lessons. As for students, they can use corpora throughout the whole learning process. For example, to learn a specific structure or the different meanings of a word. This is known as Corpus-aided discovery learning).

Apart from that, teachers can design a variety of curricular materials for their language lessons, select the most suitable contents (e.g. vocabulary, grammar structures...) for their syllabus design or even construct their own learner corpora by collecting their students’ oral or written productions. Unfortunately, McEnery & Xiao (2011) claim that the use of corpora in language pedagogy has been more indirect than direct since the former is restricted by some factors like the students’ level, time constraints or the knowledge of teachers for corpus analysis.

#### 4. Conclusions

As it has been shown in this paper, the integration of CMC tools and corpora into CALL contexts can greatly contribute in many different ways to the acquisition of a foreign language as it promotes the use of authentic language use, fosters student collaboration and a more active, reflective and autonomous learning. For all these reasons, we should take advantage of the potential of these technologies to support the teaching and learning of English and, in turn, the achievement of communicative competence.

As Primary English teachers, we must introduce as many technological tools as possible within our language lessons because they have become an excellent way to enhance pupils’ foreign language competence while raising their motivation for learning.

I am very keen on developing *eTwinning* projects because they allow my pupils to interact with students from other countries by means of blogs, e-mails and videoconferences. Despite the fact that most Primary teachers I have very little experience with corpora, and corpus-based resources are less frequently used in schools, these may be easily introduced by means of language games (i.e. guessing missing words).

All in all, if we want to succeed in use of CMC and corpus-based technologies and introduce them into our classroom effectively, we must first be equipped with a wide knowledge of them, since these tools require specific training skills. Moreover, we must pay attention to our students’ proficiency level and interests when designing and selecting the teaching activities.

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