

## **Students' Digital Writing and its Impact on Academic Language**

### **Abstract**

This study seeks to investigate the type of language associated with Computer Mediated Communication applications and its impact on standard written language. Thus, the present research will contribute to the controversial debate regarding whether the frequent use of the digital language will have a beneficial or a harmful impact on the academic language that students are required to use in university classrooms. In the data collection process, mixed method research was followed: quantitative questionnaire for students together with the qualitative content analysis. The latter consists of a sample of students' electronic language and another sample of their written classroom assignments. Mixed methods methodology is chosen in order to have an in-depth understanding, and to overcome the shortcomings of each method when used alone. The results of the questionnaire and the findings of the content analysis of the electronic and the handwritten corpus show that the electronic discourse is characterized by having a set of specific linguistic features which typify it as a new discourse type. These features are of a hybrid nature, displaying a mixture of spoken and written traits. Finally, since the students' written assignments do not show a significant evidence of the presence of the features that are used when writing on computer screens, it is concluded that there is no negative impact of netspeak on the traditional written language. Our sample students proved that they have not lost their ability to adjust language according to situation; they are still context-conscious users of the language.

## **General Introduction**

### **1. Statement of the Problem**

The widespread use of internet has paved the way for a more prevailing use of online communication among students. That situation has resulted in the emergence of an entirely new type of language that has recently revolutionized the standard written language by its special linguistic features: informal style, tolerance of errors, and its disregard of the spelling, punctuations, capitalizations, etc. That new linguistic form has been perceived as nonstandard and is posting a serious threat on the standard language.

The students increased use of the internet, Computer Mediated Communication (CMC), and the new technologies have prompted many concerns and debates as to whether or not the new habits and emerging practices associated with CMC language will interfere with the students' conventional forms of written discourse.

### **2. Aims of the Study**

This study is intended to achieve three objectives, namely:

1. To identify the structural characteristics of the type of language used in Computer Mediated Communication medium.
2. To determine the presence or absence of Computer Mediated Communication features in EFL students' writing.
3. To discover whether Computer Mediated Communication has a beneficial or a harmful impact on standard written English.

### **3. Research Questions**

The following questions underlie the main research problem:

1. What are the typical linguistic features of Computer Mediated Communication language?
2. What is the significance of these unique linguistic characteristics?
3. Is the constant use of Computer Mediated Communication beneficial or harmful to the students' academic written English?

### **4. Research Hypotheses**

The present research is based on two hypotheses:

1. Computer Mediated Communication discourse is expected to demonstrate structural linguistic features of its own which differentiate it from standard written language.
2. The frequent use of Computer Mediated Communication would correlate with a significant presence of CMC features in University students' written work.

### **5. Methodology**

The methodology adopted in the present study is a mixed methods methodology. It includes the use of both the qualitative and the quantitative data gathering tools. These research tools include the questionnaire that is used to gather the quantitative data in order to know about the students' exposure to Computer Mediated Communication devices, to identify the linguistic features they use in their language associated with Computer Mediated Communication, and to discover their attitudes and perceptions regarding the impact of Computer Mediated Communication language on the type of formal writing required to be

used in university classes. The results obtained from the questionnaire will be integrated with the findings of the qualitative content analysis. The latter includes two different research tools: (1) the electronic corpus and (2) the handwritten corpus. The electronic corpus is used to collect samples of the students' authentic digital writing they use in the different types of interactive applications of Computer Mediated Communication. It is meant to find out the structural peculiarities of Computer Mediated Communication discourse. The handwritten or the paper-based corpus is used to examine the written assignments performed by the university students in the classroom. Its aim is to determine whether or not there is a diffusion of netspeak elements into students' written assignments and whether students are influenced by their habitual use of Computer Mediated Communication tools, and, to find out whether or not they are aware of the use of each language - Computer Mediated Communication language or academic English- in its accurate situation.

## **6. Significance of the Study**

The present study is significant in terms of its contributions to the field of second language writing. Numerous studies in literature, relevant to the present study, focus on paper-based writing, but only a few focus on Computer Mediated Communication in relation to classroom writing. The present study brings together the analysis of electronic writing on computer screen or text-based Computer Mediated Communication and the paper-based writing. Also, this study may be beneficial for students and teachers who are interested in the correlation between computer technology and EFL writing. It can also be viewed as a help for future research on some study-issues related to this field.

## 7. Literature Review

New digital media researchers employed the umbrella term Computer Mediated Communication (CMC) to refer to all forms of human communication achieved through or with the help of computer technologies (Baron, 1998). The technical-oriented term Computer Mediated Communication (CMC) was first coined and introduced by Hiltz and Turoff (1978) (cited in Murray, 2000). Then, it has been defined differently by different researchers.

According to Herring (1996: 1), CMC is “communication that takes place between human beings via the instrumentality of computers”. Similarly, December (1997) has defined it as “the process by which people create, exchange, and perceive information using networked telecommunication systems that facilitate encoding, transmitting, and decoding messages.” (cited in Thurlow, et al. , 2004: 15). He goes on to say that

Computer-Mediated Communication is a process of human communication via computers, involving people, situated in particular contexts, engaging in processes to shape media for a variety of purposes (December, 1997: 3, cited in Thurlow, et al. , 2004: 15).

For Romiszowski and Mason (1996: 438), CMC is “Communication between different parties separated in space and/or time, mediated by interconnected computers”. Another scholarly definition is given by Baron (2003: 10), CMC is “Any natural language messaging that is transmitted and/or received via a computer connection”. Even mobile technology is counted as a type of CMC. For example, Herring (2007: 1) has argued that “CMC is a predominantly text-based human-human interaction mediated by network computers or mobile telephony”.

Different means of communication can generally be grouped into synchronous and asynchronous modes of communication. Herring (2007) argues that in the mode of synchronous communication the sender and addressee(s) must be logged in at the same time and the 'real-time' chat is the most common forms of synchronous CMC. In other words, synchronous communication is a real time communication. It requires computer users to be connected (online or logged in) in the same time and space for the sake of immediate exchange of messages. While, asynchronous communication is a delayed and postponed communication. There is a delay between the time the message is sent and when it is replied to. This time lag can range from few seconds to days. In other words, it is any means of communication that is capable of storing information to be received and reacted upon at a later time. Examples of asynchronous communication are email messages, blogging and text messages over mobiles. Herring (2007: 13) defines it as those systems that "do not require that users be logged on at the same time in order to send and receive messages; rather, messages are stored at the addressee's site until they can be read".

CMC forms can be classified into various types on the basis of two parameters. One is synchronicity, i.e. whether communicating simultaneously (synchronous), or with a time lag (asynchronous). The other parameter is audience scope, i.e. either one-to-one (involving two people) or one-to-many (involving multiple recipients) interaction (Baron, 2004: 4). The grouping of CMC types according to the two criteria mentioned above are presented in table1.

	<b>Synchronous</b>	<b>Asynchronous</b>
<b>one-to-one</b>	Instant Messaging (IM)	email, texting on mobile phones
<b>one-to-many</b>	Chat, MUDs, MOOs, computer conferencing	listsevs, newsgroups

**Table 1: Types of Computer Mediated Communication Baron (2004:4)**

Since 1990's, CMC researchers have focused on the question of whether to categorize CMC discourse as spoken or written language. Researchers have reached the point that CMC language is of hybrid nature, displaying a mixture of linguistic features between spoken and written language (Biber 1988; Collot and Belmore 1996; Yates 1996; Baron 1998; and Crystal 2001).

CMC as a new form of communication is characterized by its unique language that combines between oral and written language traits. It is considered as:

- A new variety (Collot and Belmore 1996, Ferrara et al. 1991, Crystal 2001);
- A new register (Murray 2000)
- A new style (Werry 1996; Murray 1991; Maynor 1994; Baron 1998).

The different linguistic peculiarities specific to the language of CMC are: abbreviations, acronyms, initialisms, nonstandard capitalization and punctuation, emoticons and smileys, letter/number homophones, nonstandard spelling, and last but not least code alternation.

There is much debate among many researchers as to whether CMC tools are damaging the formal academic written language. There are varied and conflicting opinions based on that issue. Opponents of digital technologies are convinced that the frequent use of netspeak and textspeak is harming, destroying and corrupting the students' mastery of formal and standard written English. The type of language used on the computer and SMS plays a significant role in altering, collapsing and ending writing conventions and standards (Muniandy et al., 2010). It causes learners to attain lower grades and poor academic achievement. Students now seem to have a problem in separating and distinguishing informal netlingo from formal correct writing, and this is attributed to the excessive use of online language. Crystal (2008: 151) has

provided the “doom-laden” prophecies which claim that texting will lead to the end of English language:

- Texting uses a new and nonstandard orthography.
- This will inevitably erode children’s ability to spell, punctuate and capitalize correctly.
- They will inevitably transfer these new habits into the rest of their school work
- They will inevitably give them poorer marks in examinations.
- A new generation of adults will grow up unable to write proper English.
- Eventually the language as a whole will inevitably decline.

Although many people still agree with the above mentioned prophecies, Crystal himself does not; he has claimed that they lack reasonable convincing evidence. He has an optimistic point of view towards the new technologies as that will be outlined in the following section.

On the other side of the debate are those who stand in opposition to the negative claims and arguments mentioned previously. The proponents and advocates of CMC technology see it as something positive and argue that fears and worries about their negative impact are just considered as exaggerations. According to Lee (2002), McCarroll (2005) and O’Connor, (2005), the new technologies are advantageous because they encourage more writing and provide more opportunities for language learners to practise their language. Other supporters of CMC consider language use in the new medium as a pure creativity and innovation, it allows for adoption, manipulation, personal expressions and language play by its users to serve their purposes of saving space, time and effort. According to (Craig, 2003; Lewis and Fabos, 2005) people can engage in “language play” only when they are proficient users of the language and how it works; thus, the “language play” practices entail that the language users have an advanced level of writing skills. In his book “*Txtng: The Gr8 Db8*”, Crystal (2008) has rejected the popular belief that the deviant language practised on the internet and mobile



phones is declining the standards of the correct formal language. To support his point of view, he argued that:

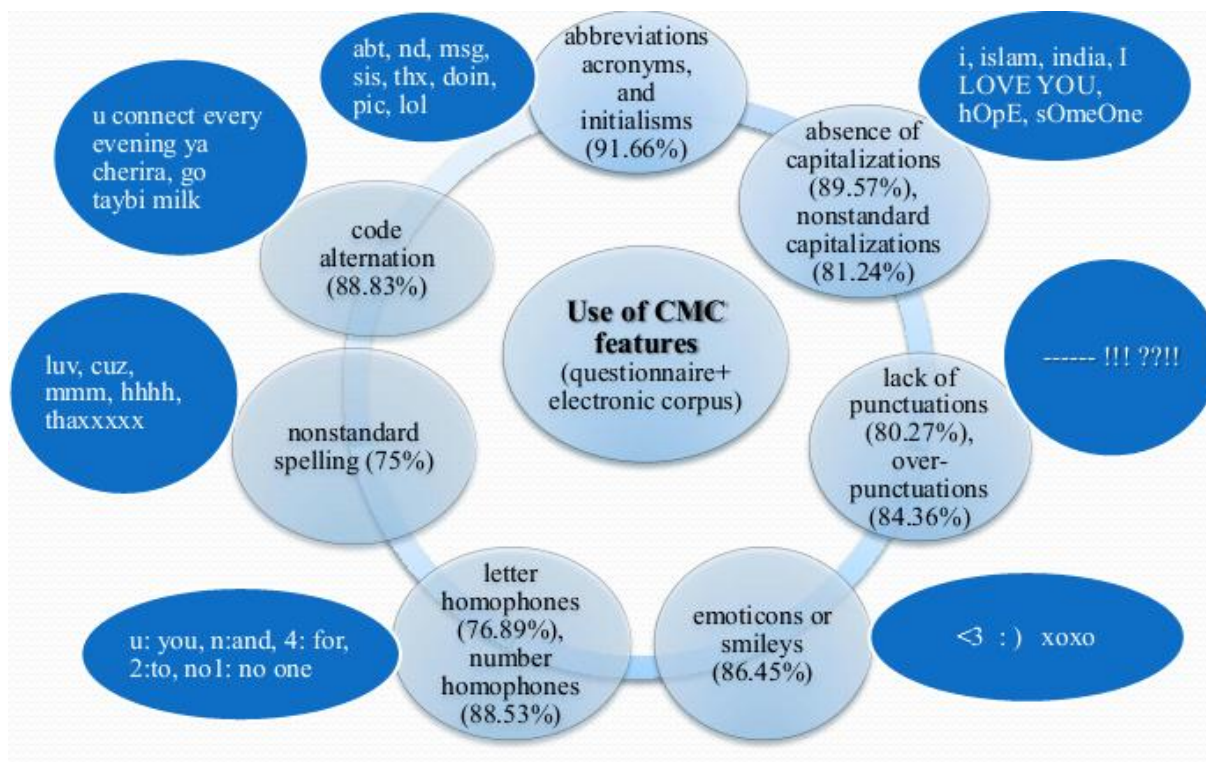
- In a given text message, less than 10% of the words are abbreviated.
- Abbreviations are used since centuries, thus, they are not a new practice associated with written language.
- Both children and adults use text language, the latter being more likely to do so
- Students do not use abbreviations in their academic language as with homework and examinations.
- Texting cannot be the only cause of bad spelling.
- Since texting provides more opportunities for language practice, thus, it can improve the students' writing skills.

## **8. Data Collection**

The methodology adopted in the present study is a mixed methods methodology. It includes the use of different research instruments of a different nature: (1) the quantitative questionnaire (96 participants), (2) the qualitative content analysis i.e. the electronic corpus (15 online messages) and the handwritten corpus (15 written assignments). For the sake of preventing an unethical conduct, it is worth stressing the point that the students' online messages -that consist the electronic data- were voluntarily provided from the participants who were assured about their confidentiality, anonymity and the coding of the messages.

## **9. Data Analysis**

The statistical results of the third section of the questionnaire are integrated with the qualitative analysis of the electronic corpus in order to approach the practical answers of the first two research questions.

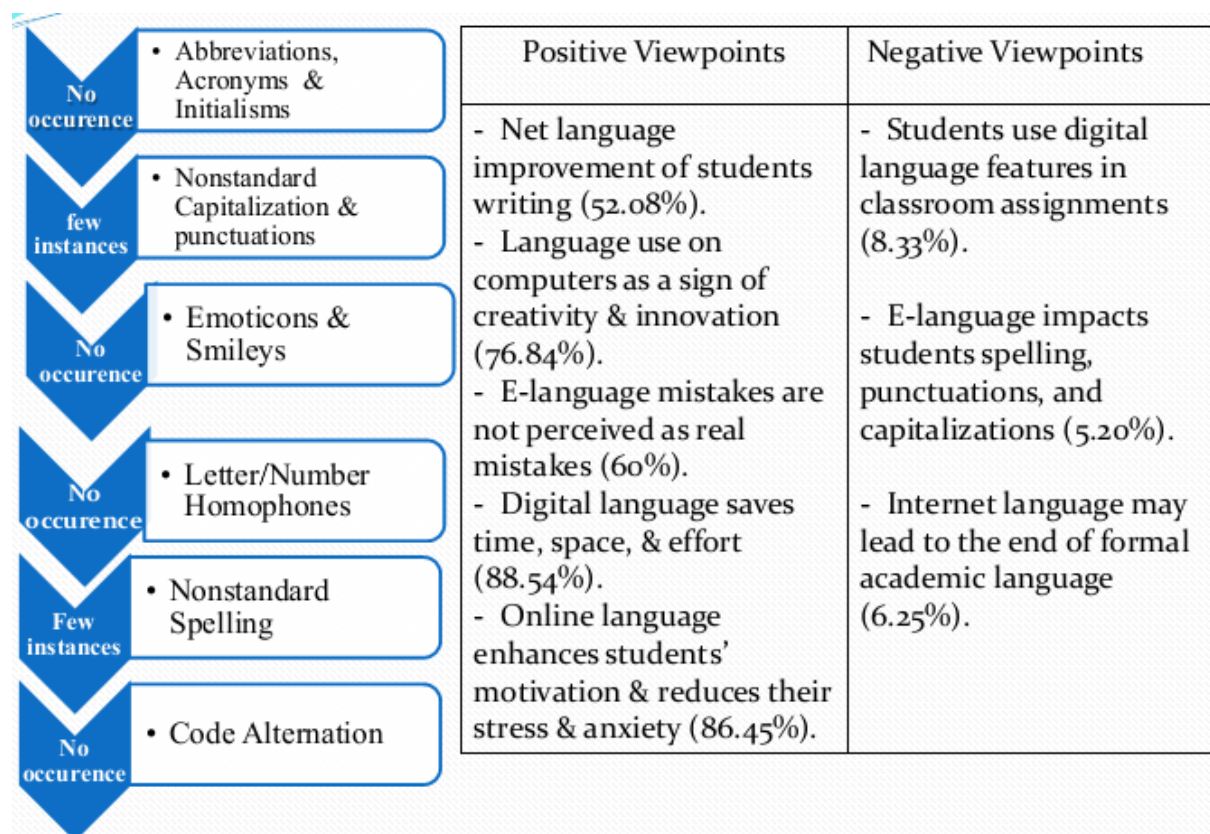


**Figure 1: Results of the Questionnaire (Section 3) and the Electronic Corpus**

On the basis of the results displayed on the previous figure, the researcher has explored that CMC language is characterized by the presence of a number of distinctive features namely: abbreviations, acronyms, and initialisms (91.66%), absence of capitalizations (89.57%), nonstandard capitalizations (81.24%), lack of punctuations (80.27%), over-punctuations (84.36%), emoticons or smileys (86.45%), letter homophones (76.89%), number homophones (88.53%), nonstandard spelling (75%), and code alternation (88.83%). Such linguistic choices take place because of the physical constraints of the medium and their use serves to achieve variant functions: to save time, space, and effort, to mimic the spoken language features, to indicate identity and membership, to show creativity and language play, to express emotions and compensate for the lack of paralinguistic features. According to Herring (2001:5), Strategies such as abbreviations, acronyms, initialisms, clippings, contractions, nonstandard spelling, omission of necessary punctuations and the use of lower

case letters where capitalized letters are required, all are used in an attempt to type faster and consume less time and less effort. Online users also use repeated letters, phonologically-based spelling, over-punctuation, and write words and sentences all in capitals or alternate between languages in order to mimic the spoken language. Emoticons are used to show emotions and to compensate for the lack of paralinguistic nonverbal cues. This can give an obvious picture about how language can be manipulated in a creative way to serve the communicative needs of its users. These informal linguistic features are of a hybrid nature exhibiting spoken-like and written-like properties. They are significant in the emergence of a new type of discourse which can be classified as a new linguistic variety, a new register, and as a new style.

Then and in an attempt to find out the answer of the third research question, the results obtained from section four of the questionnaire are integrated with the findings of the content analysis of the students written assignments (paper-based corpus).



**Figure 2: Results of the Questionnaire (Section4) and the Electronic Corpus**

It is observed that the students' attitudes are attracted towards the positive opinions more than the negative ones. The e-language's positive claims have received the highest percentage rates. This is in accordance with the findings of the students' academic written productions that demonstrate no occurrence of the nonstandard netspeak features (abbreviated forms, all capitals, mix between lowercase and capitals, excessive punctuations, emoticons and smileys, letter/number homophones, code alternation) within the students' assignments except for a few instances of nonstandard spelling (1.48%), absence of some capitalizations (0.74%) and punctuation marks (0.34%) and their use is not as frequent as in the electronic corpus. The latter have been perceived as normal mistakes and their use is unrelated to CMC language because they have appeared even before the invention of the computer and the emergence of its language. Therefore, it is deduced that our sample students are context-conscious users of the language and master the style shifting techniques. Thus, the present study results are in line with the advocates' claims that there is no harmful impact of netspeak on standard written language.

On the basis on what has been reached after integrating both quantitative and qualitative findings, it can be said that the first hypothesis of the current investigative study has been confirmed, while, the second one has been disconfirmed.

The main findings of the present research would be summarized in the following points:

- Our sample students are habitual and constant users of CMC tools.
- The language used on CMC applications differs in many ways from the norms of standard written language.
- CMC language or netspeak is characterized by a taxonomy of typical features namely: abbreviations, acronyms, and initialisms, nonstandard capitalization, nonstandard

punctuations, emoticons or smileys, letter/number homophones, nonstandard spelling, and code alternation.

- CMD displays a new type of discourse that represents a mixture between spoken and written properties.
- The digital language signifies the emergence of a new language variety, a new register, and a new style.
- The students as CMC users tend to show relaxed attitudes and perceptions towards the impact of netspeak on their academic written language.
- There is no need to fear the future of the Standard English because the electronic language does not cause any harm or threat on it since students can still differentiate between contexts where to use nonstandard and standard forms of the language (formal Vs informal writing).
- No significant evidence is found to confirm the claim that the new technological communication deteriorates academic writing. Thus, the assumption that CMC considered as a threat for classroom writing is disconfirmed.
- Language associated with the new medium best shows how language can be used in a creative and innovative way. It also shows how the youth manipulate language in different ways in order to overcome the limitations imposed on them by the electronic medium.
- Language use on the electronic world is a good manifestation of the ongoing process of language change rather than language decline and deterioration.

## 10. Pedagogical Implications

The important fact that emerges from the data analysis conducted in the current study is that the opponents' claim that the digital communication is detrimental to formal writing has been defeated. Rather, the increasing potentials of computer technology should be stressed and emphasized; digital tools allow for authentic written productions in an authentic context and for an authentic audience, through these tools students experiment the target language use and express themselves through their writing, CMC tools maximize the students' engagement and autonomy, as they encourage and motivate them to produce more writing.

The results of the present work together with what has been mentioned above call for the implication of integrating CMC practice into English language classrooms, and incorporating it into the existing curricula, and further developing the learning materials on the basis of the new forms of communications. For that sake here are, what might be called, some directions and guidelines recommended for classroom teachers:

- The students' in-class written productions might be followed up by an out of class electronic written tasks and activities to create new opportunities for extra practice in writing.
- Students can use netspeak features while taking notes in the classroom to get their teachers' explanations on paper in a short time and a quick way.
- When dealing with lessons or engaging in discussions to teach students that writing skills are context-specific, features of the electronic language might be given as illustrations of the non-formal linguistic features.

- Teachers may use a series of emoticons and ask their students to guess the words, phrases, or sentences that they stand for or to connect them to develop a given written story. It would be a good strategy of adding visual dimensions into written teaching materials. The following is an illustrative example:

It was a very long day today. After I woke up, I 🤔. After that, I started to 📖. That is why I am very 😞 now. I enjoyed studying, but I wanted to go to my friend's house because it is her birthday and she is making a 🎂. I was 🤔 when would be the best time to go and see her. The time was passing by and I was still studying, looking more 😞. In the end, I decided to go. Finally, I am 🤔 now. I will buy her 🎁 and go there.

## Conclusion

The focus is not on whether or not to accept CMC, because it is more likely to increase rather than to disappear. Thus, more explorations on how to find new and/or additional ways for the integration of CMC into practical classroom activities is worth doing in order to enhance the EFL teaching/ learning process in general and writing in a foreign language in particular.

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