

Are you aware of your errors when writing online? Pre-service EFL primary school teachers' English proficiency tested.

Abstract: Considering the research question: are students aware of their errors when writing online using English as a foreign language? 98 pre-service teachers completed a questionnaire that included simple sentences containing common errors for them to identify. In the second part of the questionnaire, they were asked whether they were conscious of these errors, whilst also being asked about the resources that they usually employed to clarify their doubts. This has allowed us to verify that most students are aware of those errors, but also that they have doubts and resort to different online resources for clarification. Results suggest that we need to provide our students with resources to help them clarify their doubts considering factors such as the influence online environment and sustained attention in e-learning seem to be important when working with the needs of these students.

Keywords: EMI; error analysis; e-learning; CMC; sustained attention; writing online.

1. Introduction

When studying a subject in a foreign language, some doubts emerge no matter your level of proficiency. These doubts varied from simple rules to more complex constructions. Teachers dealing with EMI (English as a Medium of Instruction) subjects need to be aware of the possible linguistic fluctuation among their non-native speaker students. Considering that English is not their natural vehicular language, they must contemplate the possibility of pattern exportation from their L1 (interlinguistic errors) and generalizations (intralinguistic errors) (López Pérez, 2021; Castillo Rodríguez & López Pérez, 2019; Torrado Cespón, 2018; Torrado Cespón & Díaz Lage, 2017; Granger, 2003). As teachers, it is important to know which errors are more frequent and how our students try to solve them or even if they are aware of them. Thus, we will be able to provide them with the suitable tools to work in an autonomous way to improve their linguistic skills.

However, the online medium also plays a great role in the attention paid by the students to their writing process. To this respect, it is very important to take into consideration that the learners usually make use of the computer and the keyboard to typewrite the answers to the exercises, to perform multiple tasks, to write in the forums and chats, and sometimes even to take their exams. As said above, this implies various and different types of errors and mistakes that lecturers must be aware of. On some occasions it becomes difficult to know whether these errors are a result of a low performance in the English language or of Computer-Mediated Communication (CMC) (Torrado Cespón & Díaz Lage, 2017). However, most of the times teachers know that the errors that their students commit are a result of a poor command in English because of how frequent they are, because they are among the most common errors that Spanish students usually make, and because they are easy to identify when the students write compositions or whole sentences in English which contain serious and major flaws.

Considering the relation between online writing and sustained attention, the research question of this study is: are students aware of the errors they commit when writing online?

2. Online teaching and its implications

In 2021, the students who started the academic year belong to the so-called Generation Z, also classified as digital natives. They are also individuals who have spent part of their adolescence in a situation of confinement and social restrictions that have deprived them of the relationships to which the previous generations were accustomed to. In a context of hyperconnectivity via the internet and face-to-face social hypoconnectivity, Generation Z students seem to have the least problems when facing online teaching. However, being born into the digital generation does not mean that you have an innate ability to master Information and Communication Technologies (ICT) or, by extension, for an adequate application of them in an educational context (Gros, García & Escofet, 2012; McGarr & McDonagh, 2021).

On the other hand, online teaching has served so that many active workers can carry out training actions of any kind without giving up their jobs. In this case, both generations Y and X are characterized by being digital immigrants. The contact needs of a member of these generations should therefore be greater than those of Generation Z.

To this we must add the fact that the teachers who now teach online are mostly from generation Y and X, therefore we must talk about a generation gap between student-teacher that implies different ways of dealing with ICT not only due to academic status, but also by generational use. This generation gap is not something new, but in this case, the use of new technologies has sharpened it (Kushnir, Manzhula, Valko, 2013; Lisenbee, 2016; Mouraz, Lopes, Morgado & Torres, 2020; Puspitasari *et al*, 2021). It also implies in some instances the existence of a digital divide regarding both training and access to ICT (Cabanillas García, Luengo González & Torres Carvalho, 2019; Torrado Cespón, 2021).

The role of alienation in the student-subject-teacher triad in online instruction is much more complex than a simple format change. If we consider the target audience, we return to the role of the generational and technological gap. Similarly, the teacher is also influenced by these same factors. However, the subject is a central element. It should be considered that the migration to a digital platform of practical subjects (laboratory practices, professional training in general, teaching practices) nowadays needs direct contact that perhaps a future technological revolution can solve in the future, but that is not found still available. Some of these factors had already been pointed out by Cebreiro, Fernández and Arribi in 2017, specifically talking about the case of distance vocational training in Galicia, but it can be fully extrapolated to other educational contexts.

What is interesting about e-learning is its flexibility. Students can follow a session at home in silence but also with noise, they can switch on the smartphones or tablet and attending that session while commuting, running or any other experience which involves divided attention. Multitasking is encouraged by digital technologies, so shorter formats are convenient to keep sustained attention on (Baron, 2017; Cilliers, 2017; Firth *et al*, 2019; Llorca Abad, 2015). However, Baron (2021) findings show that this also implies a more superficial approach to the material and, consequently, to spelling and grammar mistakes.

2.1. Writing online and sustained attention

The way students face online tasks is related to their level of sustained attention. Sustained attention is deemed as:

a fundamental component of attention characterized by the subject's readiness to detect rarely and unpredictably occurring signals over prolonged periods of time (Sarter, Givens & Bruno, 2001, p. 146)

Therefore, it is worth considering it as relevant in the processing of errors and whether they can be considered unconscious or not. In fact, different studies have shown that learners' sustained attention affects e-learning performance significantly, especially during synchronous instruction that usually takes place in an online setting (Chen & Wang, 2017). As Ko *et al.* (2017) point out, nowadays students need to process large amounts of information and different tasks such as studying and writing usually require a high level of concentration. Boykin and Noguera (2011) explore some aspects related to attention further and they provide different sources of input that must be taken into consideration when dealing with online learning. These refer to behavioural, cognitive, and affective engagement. Behavioural engagement refers to actions and behaviours that students take during learning, which include using and commenting in the chat, asking, and answering questions, searching for and providing help to classmates, and participating and engaging in collaborative discussions or activities. In the case of cognitive engagement, it refers to those efforts addressed to understanding complex material by using different learning strategies although the challenges may present themselves as difficult. Affective engagement deals with students' emotional responses to learning including showing and expressing interest in or curiosity about a task or activity, as well as communicating a positive attitude towards a task or a subject in itself.

All these aspects suggest that attention is very important when dealing with virtual or online learning and should be considered as an essential condition for the functioning of virtual educational realities (De Castell & Jenson, 2004). At the same time, when talking about language acquisition, and specifically the learning of a FL (Foreign Language), sustained attention has shown to be a requirement for language production (Jongman, 2017). Components of attention are said to have a role in language acquisition (Gomes *et al.*, 2000, as cited in Ebert & Kohnert, 2011) and there is also a level of attention which is referred to as "noticing" (Schmidt, 1990), which is crucial for learning grammar forms in L2 (second language). The noticing hypothesis stems from the fact that "what learners notice in input is what becomes intake for learning" (Schmidt, 1995, p. 20). In this sense, noticing must take place through some level of conscious attention since "adults do seem to have lost the still mysterious ability of children to acquire the grammatical forms of language while apparently not paying attention to them" (Schmidt, 1983, p. 172). Therefore, it becomes important that teachers and professors pay attention to those errors that students make in their EFL or EMI lessons and develop strategies, tasks and activities that help students reinforce the learning of their English skills whilst becoming aware of such errors.

2.1.1 Keyboard and handwriting

Nowadays it is not possible to ignore the impact that Information and Communication Technologies (henceforth, ICTs) are having on education and teaching (López Pérez & Benali Taouis, 2022/in press). Our mode of communication, reading and writing is clearly associated with and shaped by the media, tools and technologies (Mangen and Velay, 2014). Among those tools, the digital computer seems to be among the most widely used, and is usually classified as a cognitive technology (Mangen and Velay, 2014; Nickerson, 2005: cited in the previous work) in the sense that amplifies cognition, but also because it is a device used for computing, measuring, inferencing and remembering (Nickerson, 2005). The computer is also a digital writing technology and is mainly used, together with the internet, in online learning and teaching. At Universidad Internacional de La Rioja, the subjects are completely taught in an online environment and all the tasks and activities must be submitted digitally and online, which means that the students make a significant use of the computer and the internet.

However, the computer usually alters the process of written text production (Van Waes and Mangen, 2012) and it is very important that we pay attention to this aspect because multiple errors and mistakes can occur quite frequently. At the same time, the fact that some digital writing devices which are generally associated with the use of computers, cell phones and tablets are replacing handwriting (Kiefer *et al.*, 2015) should not be overlooked. To this respect, it becomes relevant to bear in mind that handwriting and typewriting are different modes of writing involving distinct sensorimotor processes (Van Waes and Mangen, 2012). Whereas handwriting requires a manual movement that allows to shape the letters, typewriting makes use of different keys that must be pressed on a keyboard (Van Waes and Mangen, 2012). At the same time, when typewriting hand movements are usually less precise and discriminating than the ones required in handwriting (Mangen and Velay, 2014).

On the other hand, the differences between handwriting and typewriting are also noticeable when dealing with the writer's visual attention, the spatial location of his/her physical text and the visual feedback provided by such a text. Whereas in handwriting the writer's visual attention is closed to and in alignment with the production of the physical text, in typewriting there is a spatial distance or dissociation between the visual feedback displayed on the monitor and the location of the key that implies the physical movement of typing (Mangen and Velay, 2014). Finally, the differences between these two modes of writing have been explored and dealt with in several studies that attest to a clear impact on basic sensory-motor skills reaching the conclusion that a significant use of typewriting by adults is related to a decrease in producing "precisely controlled arm-hand movements" (Kiefer *et al.*, 2005, p. 136). Therefore, it seems to be clear that when making use of ICT, and more specifically, the computer, the mode of writing is less demanding and much simpler in terms of processing, which usually results in texts where multiple grammar and/or typography mistakes are usually found (Torrado Cespón & Díaz Lage, 2017).

3. Research method

3.1 Research model and procedure

This study is based on qualitative models where a group of university students fulfils an online questionnaire based on frequent online errors committed by other students. The results are analysed statistically and presents as percentages in relation to the number of participants.

3.2 Research context and sample

A group of 94 pre-service EFL primary school teachers from Universidad Internacional de La Rioja (UNIR) participated in this study. They belonged to the academic year 2020-2021, 27.64% males (n= 26) and 73.34% females (n= 68). They were offered the questionnaire in a session to be sent in a week time.

3.3 Instruments and validation

The participants were offered a questionnaire where the participants could read the following:

Experience has told us which are your most common mistakes when using the online forums. Are you really aware of them? This questionnaire is for informative and research purposes only. Your answers will not be considered as part of the assessment of this subject. Please, do not cheat.

This questionnaire included seven of the most frequent mistakes found in online forums of EMI subjects at UNIR: verb plus verb sequences (Benali Taouis & López Pérez, 2019) inversion in indirect questions (Castillo-Rodríguez & Díaz-Lage, 2018), uses of verb to be (Castillo Rodríguez & López Pérez, 2019), collocations (López-Pérez & Benali-Taouis, 2019), uses of definitive article (López-Pérez & Benali-Taouis, 2018), adverbs of frequency (Bobkina & Stefanova, 2018) and capitalisation (Torrado Cespón & Font Paz, 2016). A second part of the questionnaire asked them whether they were conscious of these problematic areas and what resources they usually employed to solve their doubts. The questionnaire was made of simple sentences with these critical items, and they had to identify their misuses.

This questionnaire was validated by eight experts on online teaching and EFL who were part of the project where this study is placed. No modification was suggested.

3.4 Data analysis

The quantitative analysis included these type of questions:

- Multiple choice questions about the mistakes about the sentences, if any: *Mary and i learnt english. Now, we work at the university of Leicester; "I have born in Málaga, a truly beautiful city!" "Oh, yes, I'm agree."; I forgot to do my homework for tomorrow's class; I wonder why is everybody wearing masks; He often reads books; Julia stopped to think about which way she should take, and she chose the left path; We visited USA and Czech Republic.*

- A multiple choice question with check boxes about the difficulty level of the sentences presented
- A multiple choice question about their ways of solving this type of mistakes.

4. Results and discussion

Results show how most students can choose the correct answer in the sample sentences provided (fig. 1), but it is worth signalling that some pose more difficulty than others. However, this does not mean that they are always aware of them (fig. 2).

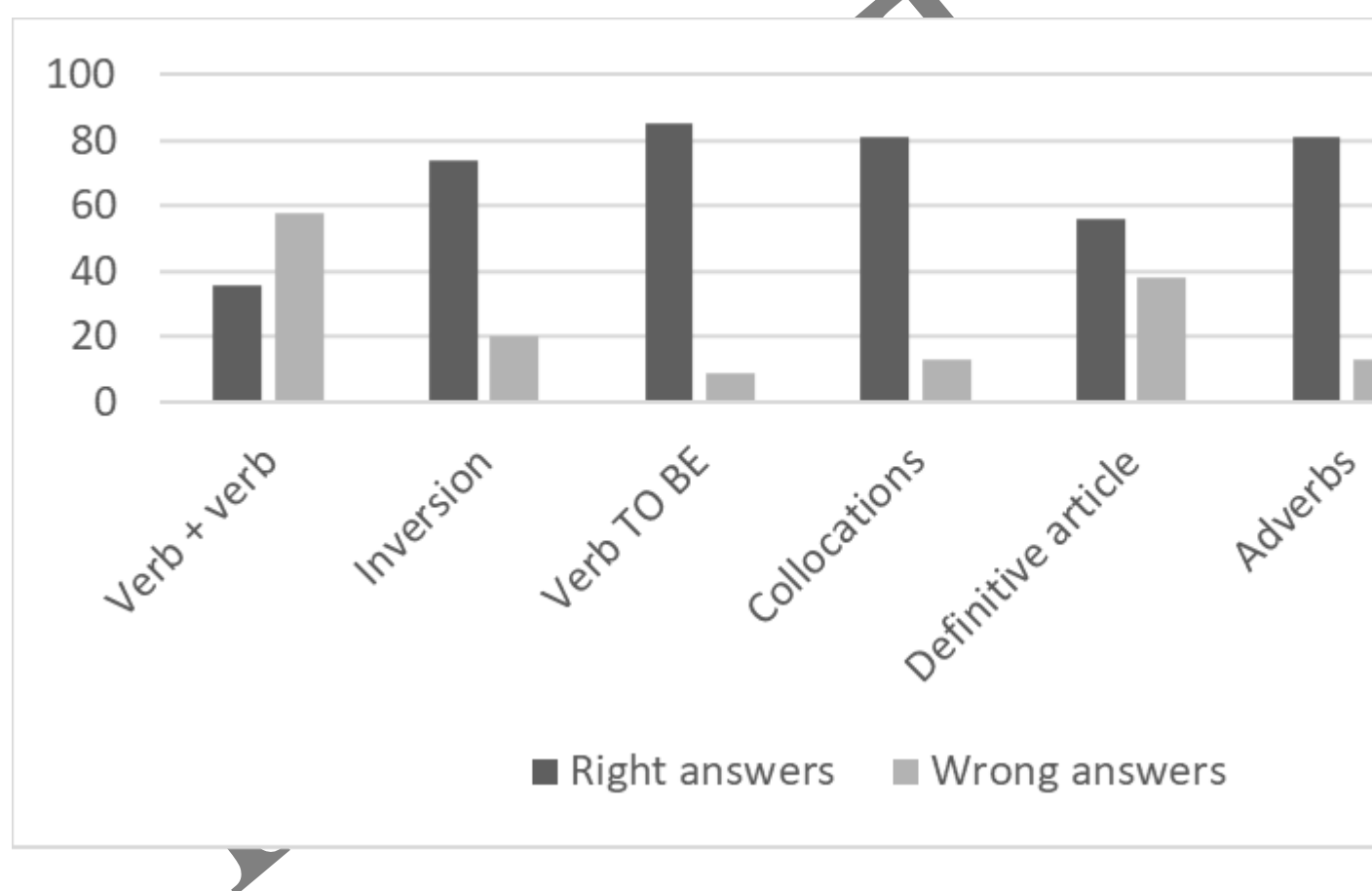


Figure 1. Correct and incorrect answers.

As seen above, the type of error that caused the most difficulties in the students is the one that makes reference to verb + verb, with only a 38.30% (n= 36) of correct answers. More specifically, these constructions consist of verbs followed by gerunds and/or to-infinitives. These verb constructions continue to be problematic for the students and they are usually included among the most complicated areas to deal with by ESL (English as a Second Language) teachers (Petrovitz, 2001). This generally causes a series of errors which can be the result of different factors such as teaching gerund and infinitive constructions in a single unit (Petrovitz, 2001), frequency and language transfer (Kartal & Sarigul, 2017; López Pérez & Benali Taouis, 2019; Schwartz & Causarano, 2007). When analysing those errors, it became clear that most of them were produced in verb + gerund constructions, which is a

pattern that does not really exist in Spanish. At the same time, a low number of errors was found in the use of to-infinitive constructions, which can sometimes be used in Spanish (López Pérez & Benali Taouis, 2019). These results are in line with the theories related to frequency and language transfer proposed by Kartal & Sarigul (2017) and Schwartz & Causarano (2007), but they also suggest that overgeneralisation is included to a certain extent since in most cases the learners choose the to-infinitive form over the gerund structure because it feels more familiar to them (López Pérez & Benali Taouis, 2019).

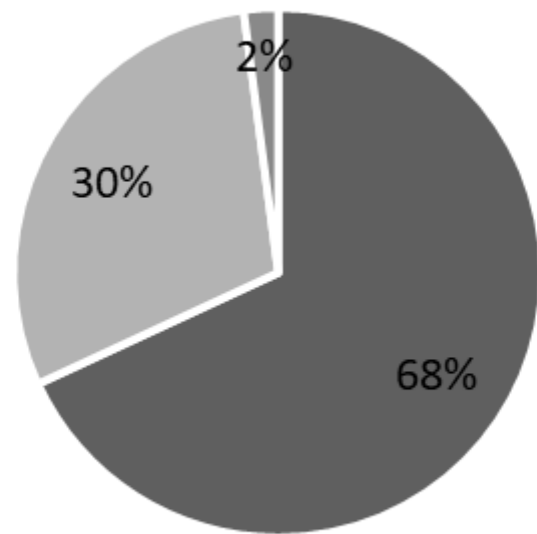
The second type of error that was committed the most by the students was the one related to the use of the definite article “the”, where 59.57% (n= 56) chose the correct answer. After analysing these errors, it was found that most of them are due to an overuse of the definite article in sentences where “the” cannot be used in English, but is certainly required in Spanish. In fact, most of the errors committed by the students make reference to the wrong use of “the” with plural nouns with general reference and with mass or uncountable nouns (López Pérez & Benali Taouis, 2018). These results indicate a clear interference of the learners’ NL (native language), which results in multiple interlingual errors (López Pérez & Benali Taouis, 2018).

The third type of error that was committed the most by the students refers to the use of inversion in non-direct questions (n=20). In this case, the learners made multiple mistakes when using certain question particles such as what, where and how when reported in a not direct speech (Castillo Rodríguez & Díaz Lage, 2018). This is since the students follow the same pattern that they use for a direct question, that is, wh-word + verb + subject, without taking into consideration that in reported non-direct questions the verb and subject must be inverted (Castillo Rodríguez & Díaz Lage, 2018).

Another error that was produced by the learners is the one related to capitalization (n=19). In this case, multiple errors with “I” and “English” were located as in most of the cases the students do not capitalize these words, which can be a result of language transfer, intralingual interference and the use of the digital medium communication (Torrado Cespón & Font Paz, 2016). However, when questioned about this specifically, most realized but they forgot the capitalisation of the word “university” in this context.

The other sentences in the questionnaire did not pose the same level of confusion, being the right answers the most frequent: Thus: verb to be uses, 90.42% (n= 85); collocation, 86.17% (n= 81); adverb of frequency, 86.17% (n= 81).

Are you really aware of these errors



■ Yes ■ Not always / not all ■ No

Figure 2. Error consciousness.

Finally, most students, 70% considering those who declared not to be aware of these errors ($n=2$) and those who not always are aware of them ($n=64$) considered these language issues as problematic (fig. 2). This is directly related to their level of sustained attention during writing as they were specifically mentioned that this questionnaire was about their online forums (Chen & Wang, 2017). So, it becomes relevant for the teacher to know how they solve their doubts. It is also interesting knowing who they look for information considering they are adults and the face-to-face contact with the teachers is not possible. According to figure 3, the most frequent way of solving doubts is searching for detailed explanations (42%) followed by googling for similar constructions (28%).

Where do you search for information

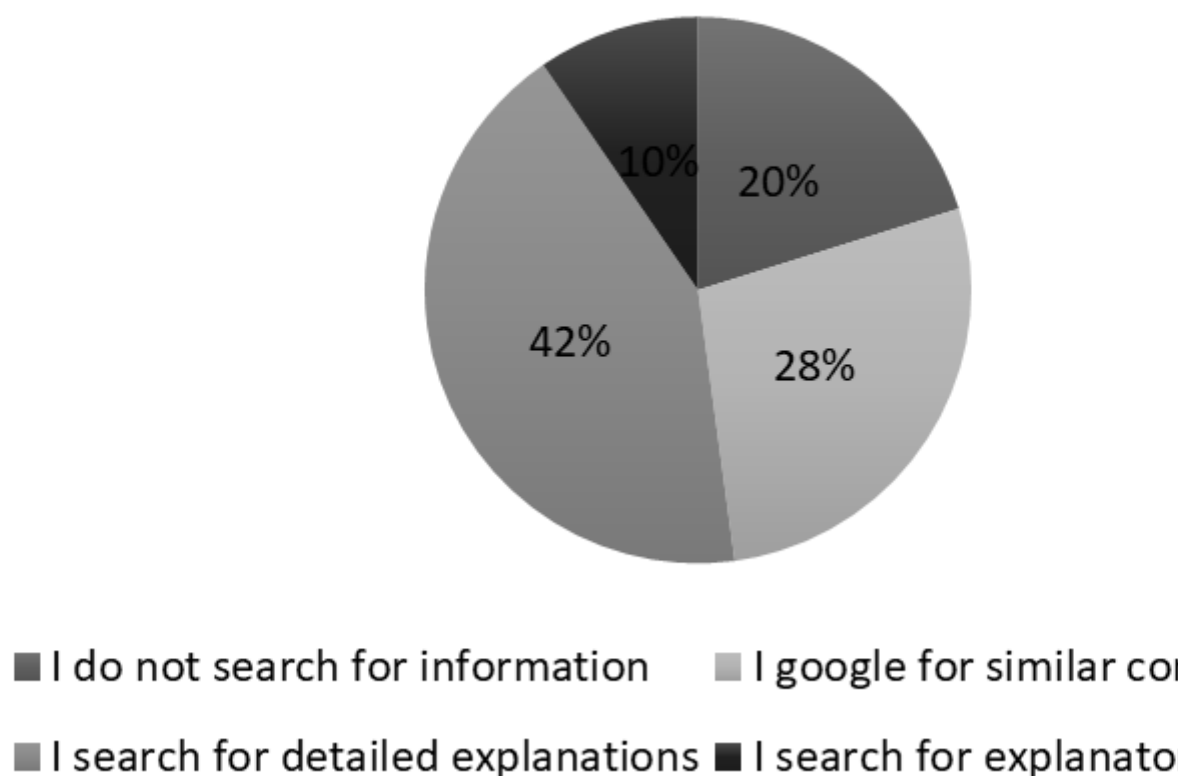


Figure 3. Information search.

The information provided in figure 3, helps teachers in their way of looking for the most suitable resources for their students. Following Baron (2017), Cilliers (2017), Firth *et al* (2019) or Lorca Abad (2015), shorter formats are the most convenient for the needs of online students. Thus, providing them with a tool with fulfils these needs will help both teachers and students. Following these recommendations and also those of Boyking and Noguera (2011) and Jongman (2017) about sustained attention, in this case, in e-learning, the researchers in this study, together with other members of their team, have created *CleverCookie. English Language Resources for Speakers of Spanish* (Torrado Cespón, 2021) This is an online tool which considers the needs of speakers of Spanish when writing online in English, based on the errors presented on this study and years of analysis of students written productions online.

Coming back to the research question, are students aware of the mistakes they commit when writing online? Although the numbers in figure 1 show that, except in a couple of case they are not, the other errors presented show that they are mostly aware. However, when question directly about this awareness, they explicitly manifest to have problems.

5. Limitations and further practice

The researchers are completely aware that the results can be considered as somehow biased due to the controlled nature of the experiment itself indicating the possibility of the so-called Hawthorne effect (see Oswald, Sherratt and Smith's (2014) definition for further clarification). Considering that sustained attention depends on factors such as the emotional state, the motivation and the immediate environment of the students, the fact of being conscious about participating in a study about performance influences directly in their level of attention which, otherwise would be unconscious. Chen & Wu (2015) signalled this as a drawback limitation for their experiment while Shiradkar, Rabelo, Alasim and Nagadi (2021) considered the artificial nature of the environment reduces the stress factor that a real situation could provoke in the participants. Measuring the attention response in an e-learning setting is difficult as if controlled the subject would be conscious of the process or should change the real nature of e-learning. This was also pointed out by Ilgaz, Altun & Aşkar (2014) considering the lack of stimuli as a limitation.

Thus, being aware that they were being tested on FL proficiency, involved extra pressure and extra level of attention. To avoid this, the authors propose an analysis of the students' online productions in a non-pressure environment. This study will analyse these errors considering different types of exposition to the mistakes. To compare the performance, a similar group will be chosen to analyse their written productions, in this case after being exposed to *CleverCookie* tool.

7. Conclusions

Online resources are a great tool for our students, providing them with immediate answers to suit their needs. However, not all web pages provide the same information nor are they adapted to the needs of speakers of Spanish as it is the case of these students. As teachers, we need to provide them enough guidance to solve their doubts, either preparing lists of tools they can find online (Moreno Fuentes & Risueño Martínez, 2018) or constructing our own (Torrado Cespón & Castillo Rodríguez, 2020). Moreover, being conscious of your errors implies an analysis of your written productions and this is not always done during online writing or even online instruction. The level of attention students pay to their written productions when computer mediated is not the same as that of handwriting. Teachers must further reflect upon the needs of this way of writing providing their students with resources, but also trying to calm down the frantic rhythm imposed by the hyperconnected society.

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