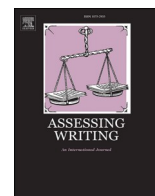


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## The assessment of metadiscourse devices in English as a foreign language

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### ABSTRACT

The objectives of this paper are to identify the metadiscourse devices used by English learners at the different levels of language acquisition established by the Common European Framework of Reference and to categorise them to facilitate the assessment and learning of textual and interpersonal devices. First, a learner corpus of essays written by English learners was compiled. Then, the metadiscourse devices were classified in different levels and categories. The results showed the lists and frequencies of metadiscourse devices. The examples aim to make additional and explicit connections between levels of language proficiency and assessment of metadiscourse devices. It can be stated, as a conclusion, that metadiscourse devices portray specific ways of argumentation in essay writing in different levels of EFL proficiency.

### 1. Introduction

This study focuses on the metadiscourse devices used by foreign language learners to communicate effectively, from a pragmatic perspective, with readers. Specifically, I pay attention to the metadiscourse devices used in different language proficiency levels. Metadiscourse devices can be defined as elements that play a fundamental role in discourse interaction. Sometimes these devices are difficult to use as they have no apparent meaning decontextualised or grammatical ascription (Romero Trillo, 2002, p. 774). Foreign language learners, “[...] who previously confronted writing as co-constructed meaning but as a way to get something ‘right’ in secondary writing assessments” (Aull, 2019, p. 267) should be competent in the appropriate use of metadiscourse devices.

The acquisition of pragmatic knowledge by foreign language learners has been the focus of many researchers (Bardovi-Harlig, 1999, 2013; Barron, 2003; Kasper, 2001). All these studies have shown different ways to motivate language learners and instruct them in pragmatics, but none of them have focused on the metadiscourse devices used in the different language proficiency levels and their assessment. In this paper I pay attention to the metadiscourse devices that learners of English as a foreign language (EFL) should acquire as part of their pragmatic proficiency.

In this vein, the main focus of this research is on the way foreign language learners use metadiscourse devices on their learning path and how these devices can be assessed while identifying pragmatic proficiency patterns in the different stages of language learning. The findings of this study may therefore help learners to become aware of the metadiscourse devices to be acquired on their learning path, as well as assisting teachers in the assessment and teaching of metadiscourse devices. The use of metadiscourse devices should be specifically included in English teaching curricula because that will increase learners’ argumentation and persuasion knowledge.

In this sense, this study aims to fill this gap and to provide a detailed list of the devices that should be assessed at the different language proficiency levels of learners of English. It is based on a corpus-based analysis to help learners to progress in their learning.

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Accordingly, the objectives of this paper are, first, to identify and classify the different metadiscourse devices associated with the levels of proficiency in language acquisition established by the Common European Framework of Reference for Languages (CEFR, [Council of Europe 2001, 2018](#)). Following this, the second objective is to propose assessment patterns that help learners focus on the pragmatic devices at each level of language proficiency, thus enabling them to take responsibility for their own learning and to plan how they could move forward. This objective may facilitate the assessment of the pragmatic strategies used in English as a foreign language and also connect assessment and learning. Based on all the above, the research questions of this study are the following:

1. Which metadiscourse devices are used more frequently at different language proficiency levels?
2. Should metadiscourse devices be learnt depending on proficiency levels? If true, which devices should be assessed at A1, A2, B1, B2, C1 and C2 proficiency levels?
3. Then, which metadiscourse devices should not be assessed in the different language proficiency levels?

In order to meet the objectives and answer the research questions, this paper is structured as follows. This first section identifies the focus of this paper and establishes the objectives and research questions. In the second and third sections, I describe the theoretical background associated with language assessment, the CEFR and metadiscourse devices. In the following section, the corpus compiled for the study composed of six sub-corpora is described and details are given of the method followed. Then, the results of the analysis are shown and discussed and, finally, the conclusions are drawn.

## 2. Pragmatic assessment and the CEFR

Concerning language assessment, [Cummings \(2002, p. 80\)](#) referred to the difficulty of assessing foreign language acquisition, bearing in mind that “[...] nearly all types of performance assessments produce enormous contextual variability” and also [Rea-Dickins \(2007\)](#) highlighted the possibilities and pitfalls of classroom-based assessment. In this paper, I focus on establishing the patterns to assess metadiscourse devices.

When assessing learners of a foreign language, it seems that most instructors agree that learners should not only be assessed in grammar and lexical aspects, but also in pragmatics. Some researchers ([Cummings, 2010, 2002](#); [Jianda, 2006](#); [Roeyers, 2007, 2014](#); [Timpe-Laughlin & Choi, 2017](#)) have investigated how to assess pragmatic knowledge considering interlanguage pragmatic knowledge, speech acts, implicature, culture-dependent lexical differences and routine formulas. These authors also outlined challenges for future pragmatic assessment development, including problems of test practicality, L2 pragmatics test validation and the effect of the test situation on performance.

The importance of pragmatics has been defended in studies conducted by researchers such as [Bardovi-Harlig and Dörnyei \(1998\)](#), [Kasper \(2001\)](#), [Kasper and Rose \(2001\)](#), [Alcón Soler and Martínez-Flor \(2008\)](#), [Xu, Case, and Wang \(2009\)](#), [Martín-Laguna and Alcón-Soler \(2018\)](#) and [Carrió-Pastor & Martín Marchante \(2018\)](#). These authors demanded an increase of pragmatic instruction as traditional foreign language teaching approaches have focused on grammar and lexis.

Conversely, other researchers consider that pragmatic knowledge may be acquired alongside grammatical and lexical knowledge ([Eslami-Rasekh, 2005](#)). I consider that more research on this topic is still necessary, given that, as stated by [Carrió-Pastor & Casas-Gómez \(2015, p. 208\)](#), “the difference between grammar, lexis and pragmatics may not have been resolved yet, [...] language acquisition involves pragmatic aspects, but language interaction, reader engagement and the use of strategies to communicate may not be taught if pragmatic skills are not learnt”. Thus, to propose the inclusion of specific pragmatic knowledge (i.e. metadiscourse devices) in the assessment of different EFL proficiency levels is the key aspect of this research.

In this paper, I have taken into account the different language proficiency levels established by the Common European Framework of Reference for Languages ([Council of Europe, 2001](#)) and its companion volume, with new descriptors, published in 2018. These documents include sections devoted to communicative language competences such as linguistics, sociolinguistics and pragmatics, but the different pragmatic strategies and devices are not detailed enough in the descriptors that specify progressive mastery of each skill. The skills are graded on a six-level scale (A1- beginner, A2- elementary, B1- pre-intermediate, B2- intermediate, C1- advanced, C2- proficiency). It can be observed in the descriptors of the CEFR ([Council of Europe, 2001, p. 19](#)) that the assessment of the pragmatic strategies used by learners has not been studied in depth in the field of writing assessment:

Three main ways in which the Framework can be used [in relation to the assessment of language proficiency]:

1. for the specification of the content of tests and examinations.
2. for stating the criteria for the attainment of a learning objective, both in relation to the assessment of a particular spoken or written performance, and in relation to continuous teacher-, peer- or self-assessment.
3. for describing the levels of proficiency in existing tests and examinations thus enabling comparisons to be made across different systems of qualifications.

In fact, some researchers are very critical with the use of the CEFR ([Council of Europe, 2001](#)) in language testing; for example, [Weir \(2005\)](#) commented that it fails to explain the contextual and theory-based validity parameters and [Mestre-Mestre & Carrió-Pastor \(2013, p. 240\)](#) concluded that “the CEFR does not detail the way in which pragmatic competence could be improved in Higher Education”.

Beyond the use of the CEFR for testing, my interest lies more in the assessment of metadiscourse devices than on testing them. There are three concepts fundamental to assessment, *validity*, *reliability* and *feasibility*, that are mentioned in the CEFR ([Council of Europe, 2001, pp. 177–178](#)):

*Validity* is the concept with which the Framework is concerned. A test or assessment procedure can be said to have validity to the degree that it can be demonstrated that what is actually assessed (the construct) is what, in the context concerned, should be assessed, and that the information gained is an accurate representation of the proficiency of the candidate(s) concerned.

*Reliability*, on the other hand, is a technical term. It is basically the extent to which the same rank order of candidates is replicated in two separate (real or simulated) administrations of the same assessment. What is in fact more important than reliability is the accuracy of decisions made in relation to a standard. If the assessment reports results as pass/fail or Levels A2+/B1/B1+, how accurate are these decisions?

An assessment procedure also needs to be practical, to be feasible. *Feasibility* is particularly an issue with performance testing. Assessors operate under time pressure. They are only seeing a limited sample of performance and there are definite limits to the type and number of categories they can handle as criteria.

I focus in this study on metadiscourse devices from an assessment for learning perspective, a formative assessment perspective which considers the concepts of validity, reliability and feasibility and classifies metadiscourse devices in the different EFL proficiency levels. The identification and classification of metadiscourse devices may create feedback that allows teachers and students to refine and develop pragmatic knowledge through the identification of the devices that should be included in assessment at different levels of language proficiency.

Some authors, such as Carrió-Pastor, 2013a, Carrió-Pastor & Casas-Gómez, 2015; Carrió-Pastor & Martín Marchante, 2016; Mestre-Mestre & Carrió-Pastor, 2013; Moya & Carrió-Pastor, 2018, also proposed different ways of assessing and becoming aware of pragmatic strategies in written English. But not a lot of interest has been shown in identifying the metadiscourse devices associated with the different levels of language proficiency (Mestre-Mestre, 2011; Romero Trillo, 2002; Tasso, 2017) and in assessing the rhetorical functions of a foreign language (Liu & Stapleton, 2018).

### 3. Metadiscourse devices in foreign language learning

Metadiscourse is defined by Hyland (2004, p. 134) as.

[...] typically employed as an umbrella term to include a heterogeneous array of features which help relate a text to its context by assisting readers to connect, organise, and interpret material in a way preferred by the writer and with regard to the understandings and values of a particular discourse community.

Metadiscourse devices therefore refer to both textual and interpersonal aspects used by the speakers of a language to convey non-propositional content, and to organise discourse and engage readers in the topic from a rhetorical point of view. Hyland (2005), Martín-Laguna and Alcón-Soler (2018) and Aull (2015, 2019) proposed different classifications to identify and categorise metadiscourse devices, which are frequently divided into two types: textual and interpersonal (Hyland, 2005). Textual devices help language learners to communicate in a coherent way and endow discourse with greater fluency. In this paper, as it is studied the written production of learners with different levels of pragmatic proficiency and some of them have limited EFL resources, the textual strategies are classified into logical devices (i.e. that make the relationship of propositions explicit, e.g. *however, therefore*), code glosses (i.e. that provide examples or explanations, e.g. *that is, for instance*) and frame devices (i.e. that guide readers, e.g. *first, in sum*). Interpersonal devices are those strategies that take into account the fact that discourse is addressed to readers and are thus used to transmit the writer's opinion or intention to the readers. In this study, interpersonal strategies are divided into hedges (i.e. mitigation strategies and expressions of full commitment, e.g. *may, slightly, possible, probable*), boosters (i.e. to highlight the conviction of the writer, e.g. *show, confirm*) and attitude devices (i.e. to express the affective evaluation of a proposition, e.g. *important, interesting*).

In this vein, some studies have focused on similar aspects, paying special attention to the use of certain metadiscourse devices used in students' writing (Aull, 2015, 2019; Aull & Lancaster, 2014; Carrió-Pastor & Casas-Gómez, 2015; Martín-Laguna & Alcón-Soler, 2018; Nureddeen, 2008; Wiechmann & Kerz, 2013). But none of these studies have paid attention to the metadiscourse devices used in the different stages of written EFL proficiency. Consequently, this study tries to fill this gap.

## 4. Methods

### 4.1. Corpus

The first step was to collect a learner corpus of essays written by L1 Spanish learners of English enrolled in different degrees at the Universitat Politècnica de València in Spain (LCEUPV from now on). The essays were written by students with different levels of proficiency in English (A1, A2, B1, B2, C1 and C2) and were gathered between 2014 and 2017. The prompts met the conditions recommended in the literature (Liu & Stapleton, 2015, 2018) for their content, i.e., to be contextualised, authentic, and accessible. In this study, the prompts were a part of the language proficiency exams taken by students applying for a grant at the Universitat Politècnica de València (Spain). The language learners first had to complete a placement test (The Oxford Placement Test), then write an essay on a general topic that ranged from 250 to 300 words and, finally, do an oral exam. The aim of these examinations was to identify the language level of the students who were applying for a grant awarded by an American company. The prompts designed for these examinations were timed (students were allowed 30 min), short and extemporaneous writing task on a general topic.

The exams were then marked and the participants were classified into different levels of English language proficiency following the levels of the CEFR (2001, 2018). We selected 360 students from those who had passed the tests at different levels, disregarding those who obtained marks above or below the level they were sitting.

Each essay was assigned a code with the mark and it was observed that participants with lower English proficiency levels (A1-A2)

wrote shorter written texts and participants with higher English proficiency levels wrote longer texts. All the participants were Spanish learners of English, both male and female, and their ages ranged from 20 to 31 years.

Sixty essays were collected from each level of language proficiency, with a total of 360 essays (since 360 language learners were involved in the survey), which together contained a total of 71,696 tokens. The data was then converted to electronic text in order to facilitate mechanical data analysis, resulting in six sub-corpora. The tokens per language proficiency level can be seen in [Table 1](#):

A corpus-based approach was adopted with the aim of detecting meaningful differences in the six sets of scripts. The LCEUPV was saved in a text format as written in the exam, and also broken down into the constituent words so as to be able to identify the frequencies of the metadiscourse devices used by English language learners at different levels of language proficiency. Furthermore, only appropriate devices were included in the study, inaccurate ones were disregarded by the raters.

#### 4.2. Corpus analysis

Once the corpus of scripts had been compiled in six sub-corpora, the metadiscourse devices used in all six English language proficiency levels (A1, A2, B1, B2, C1 and C2) were identified and classified. The particular devices were identified taking into account those found in previous studies ([Carrió-Pastor & Martín Marchante, 2016](#); [Hyland, 2005](#); [Mur-Dueñas, 2011](#)).

The methodology followed was based on a corpus-based approach. In this study, data analysis comprised two stages. In the first stage, preliminary text analysis was performed using an automated text analyser (METOOL) to identify frequencies and then a manual analysis of the LCEUPV in word format was also carried out to identify devices whose classification was dependent on content. [Fig. 1](#) shows a screenshot of the tool:

It can be seen in the upper part of the figure that METOOL identifies 'know' as an eligible booster in "that you can get to know many people of your own age". Then, as this verb does not function as a booster in this context, the rater should click on the option 'Not metadiscourse marker'. In the lower part of the figure, the verb 'know' is tagged as a metadiscourse device in "children play at home, as everybody knows" as the writer pretends to express certainty with this verb, indicating that this is an obvious and well-known fact.

This text analyser is part of the research project "Identification and analysis of metadiscourse strategies in research articles in English and Spanish", composed by researchers from Universitat Politècnica de València, Universitat Jaume I, Universidad de Las Palmas de Gran Canaria and University of Wolverhampton and funded by the Spanish Ministry of Economy (Reference FFI2016-77941-P). At the moment, the tool is in an extensive testing phase and it has proved to be very useful to analyse and identify metadiscoursal elements in context ([Carrió-Pastor & Martín Marchante, 2016, 2018](#)). Initially, the tool was designed to analyse academic discourse, but it has also proved to be useful for the analysis of learner corpora or digital discourse.

The scripts were coded by three raters and disagreements were then resolved through discussion and with the guidance of experts on metadiscourse. Inter-reader reliability was gained with the following procedure. First, two of the raters identified the metadiscourse devices used appropriately, then, a third rater supervised the annotation and spotted the disagreements. Finally, disagreements were discussed by the three raters, annotating the decisions made and, if necessary, discussing it with other researchers involved in the project. Specifically, the raters studied the use of metadiscourse devices in students' scripts to gain a better understanding of the context of pragmatic writing in an iterative process.

The metadiscourse devices were included in the two categories of metadiscourse strategies, i.e. textual metadiscourse devices and interpersonal metadiscourse devices. Next, textual metadiscourse devices were classified in the following subcategories: logical, frame, code glosses, endophoric and evidential, and interpersonal devices were divided into boosters, attitude devices, hedges, self-mentions and engagement on the basis of their meaning and function in the corpus.

When the LCEUPV was analysed, very low frequencies were found of the subcategories of self-mentions and engagement devices as well as of the subcategories of endophoric devices and evidential devices. They are mainly used in academic research papers as noted by some researchers ([Hyland, 2005](#); [Mur-Dueñas, 2011](#)), so I decided not to include them in the analysis and focused on the other six categories. The main aim of this study was to identify the metadiscourse devices used by foreign language learners in their different levels of language proficiency, establishing relationships between assessment standards and metadiscourse devices use, thus some considerations such as the ones posed by [Aull and Lancaster \(2014\)](#) and [Aull \(2015, 2019\)](#) were not included in this research as the corpus analysed (those authors studied native speakers of English) and the aims were different.

Under the textual metadiscourse category, I chose the three subcategories that were more frequent in the LCEUPV, i.e. logical devices, frame devices and code glosses. Under the interpersonal categories, three subcategories were chosen for this study taking also into consideration their frequency in the LCEUPV, i.e. hedges, boosters and attitude devices. The textual devices identified in the corpus were the following ones:

**Table 1**  
Number of tokens included in the LCEUPV.

Level of language proficiency	Tokens
A1	8753
A2	8954
B1	10,985
B2	11,449
C1	13,635
C2	17,920
Total	71,696

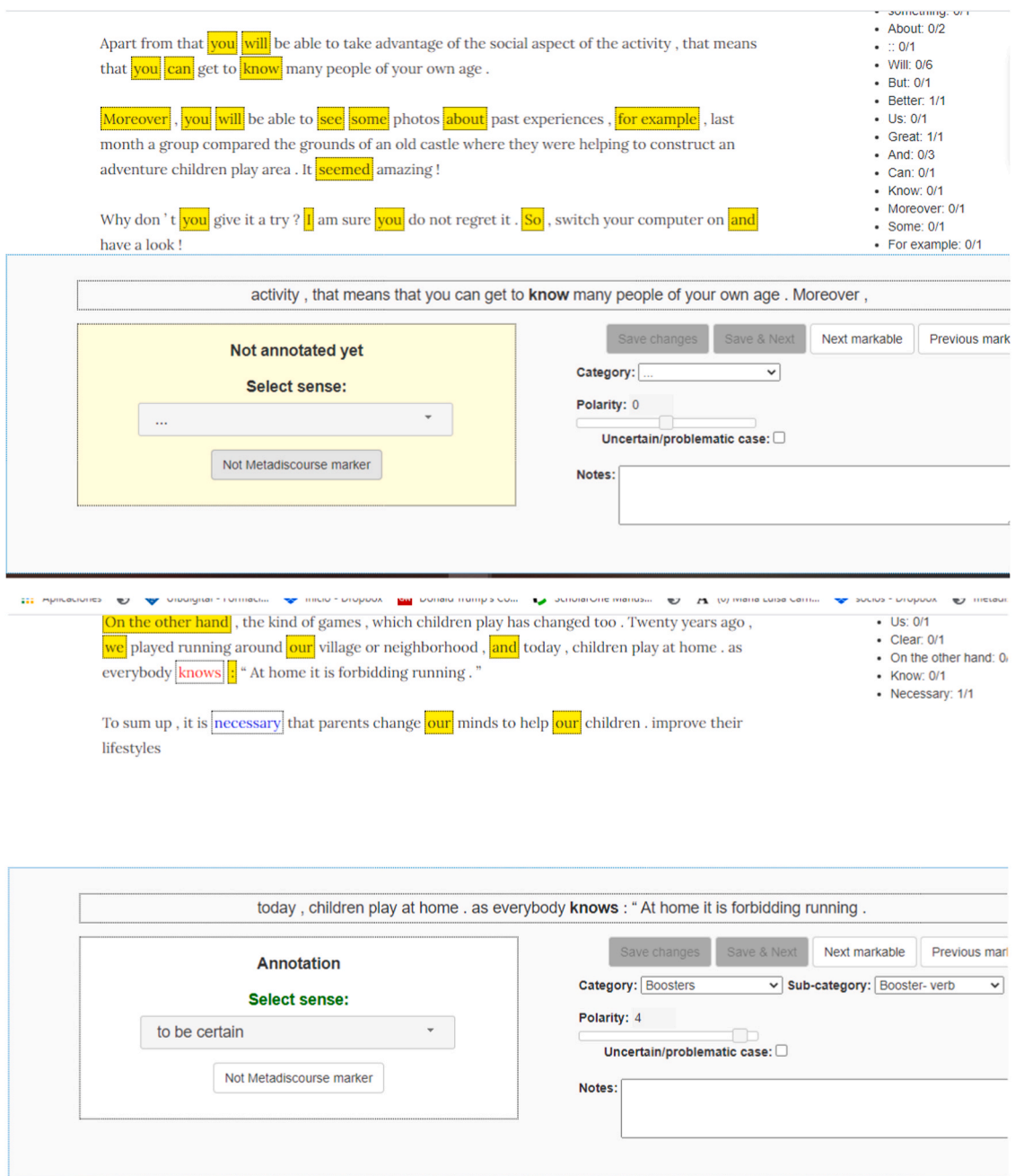


Fig. 1. Analysis of the corpus with METOOL.

Logical devices (items that make explicit the cohesion of a text, guiding readers): *in addition, furthermore, moreover, also, similarly, further, furthermore, however, as such, in contrast, but, yet, rather, nevertheless, instead, still, thus, therefore, then, consequently.*

Code glosses (devices that present examples or explanations): *that is, for example, for instance.*

Frame devices (items that connect parts of the text in a linear way): *first, firstly, second, secondly, third, thirdly, finally, to begin with, beginning, next, on the one hand, regarding, concerning, turning to, in terms of, thus far, in sum, in brief, briefly, aim to, seeking.*

The interpersonal metadiscourse devices spotted in the LCEUPV and classified, taking into account their function and meaning in the corpus, were the following ones:

Attitude devices (items that show the writers' critical evaluation of a fact or idea): *critical, exact, fundamental, important, key, limited, main, major, new, relevant, robust, significant, sufficient, unique, valuable, have to, dramatically, only, support, consistency, improvement, significance, fail, ensure, expand.*

Boosters (devices that exemplify the writers' certainty about some facts or ideas, showing conviction about certain facts or ideas):



determine, show, demonstrate, reveal, highlight, confirm, emphasize, conclude, establish, assert, prove, know, clearly, significantly, generally, indeed, highly, primarily, consistently, strongly, actually, especially, entirely, always, fully, clear, majority.

Hedges (devices that mitigate the proposition and protect the face of writers): *may, maybe, would, can, might, could, seem, suggest, believe, feel, think, argue, almost, theoretically, partly, almost, perhaps, quite, unclear, idea, theory, partially, approximately, probable.*

Upon completing the coding of the metadiscourse devices, frequencies and results normalised to 1000 words were generated. The normalisation of frequencies was used to be able to compare the results in the different levels of language proficiency, as the number of words in each sub-corpora was different. A chi-square analysis was performed to extend the logic of binomial procedures to cover situations where there were more than two possible outcome categories and to calculate the relevance of the results.

Finally, the results were shown in tables and graphs and examples were discussed in order to identify differences at each stage of English proficiency, and then conclusions were drawn.

## 5. Results and discussion

After analysing the LCEUPV, metadiscourse devices were found to have been used 2768 times. The raw data extracted from the analysis of the six sub-corpora were divided into the different pragmatic strategies, and the overall results can be seen below, in Fig. 2. The figure shows the raw frequencies of the textual markers (the three bars on the left side of the graph, a total of 1111 markers) and the interpersonal markers (the three bars on the right side, a total of 1657 markers). It can be observed that the most frequent metadiscourse markers used by Spanish learners of English are hedges, followed by logical markers and attitude markers.

Then, following the analysis of the texts, the raw occurrences of the textual and interpersonal devices used by English learners at the different proficiency levels were also extracted. The global results can be seen in Fig. 3:

In Fig. 3 it can be observed that non-native speakers of English increase the use of textual and interpersonal devices as they progress along the path of English proficiency. If we look at the overall raw frequencies of the LCEUPV, it seems that Spanish learners of English acquire gradually pragmatic knowledge, thereby progressively improving their ability to communicate. This data contradicts Romero Trillo (2002, p. 770) when he stated that “non-native speakers follow a ‘form-to-function’ process based on the learning of certain items which are usually contextualised at different subsequent stages”. If we consider the raw occurrences extracted from the analysis of the LCEUPV, it seems that English learners incorporate pragmatic devices gradually. At that stage, I considered it important to study the results taking a closer look at the different metadiscourse devices used, the levels of language proficiency and the examples in the LCEUPV. The raw occurrences shown by the six levels of language proficiency and the six subcategories can be seen in Table 2 below:

In Table 2 it can be observed that the least frequently used subcategory was code glosses, which was an expected result taking into account the number of devices that may be used in this subcategory. It can be observed that there is a correspondence between the range of devices that can be used in a subcategory and the occurrences found. Thus, the wider the variety of hedges is, the more frequent their use will be. For example, there are many metadiscourse devices that act as logical devices, hedges and attitude devices, and so those are the subcategories with higher frequencies. In this regard, I think teachers should pay special attention to those subcategories that have many devices, giving examples and explaining the pragmatic implications of the use of these metadiscourse devices.

The chi-square value was 3.21 and the P value was equal to 0.07, which meant that, being higher than 0.05, most of the data extracted after the analysis of the LCEUPV were quite close to being significant, although some values were lower than expected.

In the following step, the results were normalised to 1000, as the total number of words in each sub-corpora was different because participants with lower levels of grammar and lexis proficiency wrote shorter assignments. The total number of examples of metadiscourse devices found in the LCEUPV was 2768, and the frequency normalised to 1000 was 38.60. The normalised results can be observed in Tables 3 and 4.

Table 3 shows the normalised results of the textual devices extracted from the LCEUPV:

In Table 3 it can be seen that there is a progressive increase in the use of textual devices at the different levels of language proficiency, but it should be noticed that learners with A1, A2 and B1 proficiency levels almost double the frequencies of the previous level

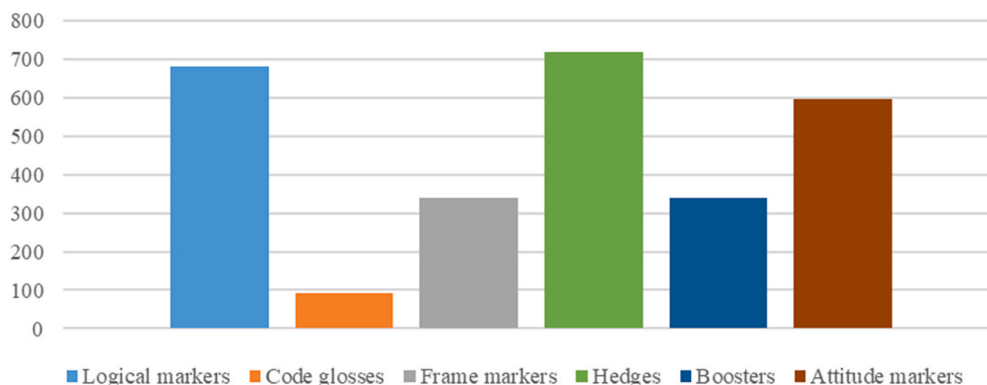


Fig. 2. Total occurrences found.

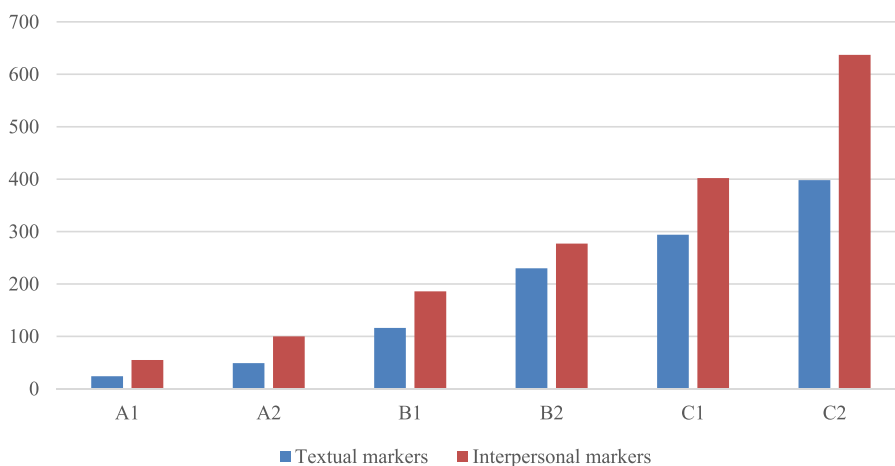


Fig. 3. Raw occurrences found in LCEUPV shown per English proficiency level and by textual and interpersonal devices.

Table 2

Total raw occurrences extracted from the analysis of the LCEUPV.

Metadiscourse devices	A1 Occurrences	A2 Occurrences	B1 Occurrences	B2 Occurrences	C1 Occurrences	C2 Occurrences	Total Occurrences
Logical devices	10	30	73	148	198	221	680
Code glosses	6	6	6	18	14	41	91
Frame devices	8	13	37	64	82	136	340
Hedges	17	32	80	129	181	280	719
Boosters	12	26	39	46	77	141	341
Attitude devices	26	42	67	102	144	216	597
Total occurrences	79	149	302	507	696	1035	2768

(i.e. 2.74–5.47–10.55), but if we look at proficiency levels B2, C1 and C2, the increase is not so pronounced. The CEFR (Council of Europe, 2018, pp. 173–174), includes in the written assessment grid the following descriptors of coherence in written English:

A1: “Can link words or groups of words with very basic linear connectors like “and” and “then”.”

A2: “Can link groups of words with simple connectors like “and”, “but” and “because”.”

B1: “Can link a series of shorter discrete elements into a connected, linear text.”

B2: “Can use a number of cohesive devices to link his/her sentences into clear, coherent text, though there may be some “jumpiness” in a longer text.”

C1: “Can produce clear, smoothly flowing, well-structured text, showing controlled use of organisational patterns, connectors and cohesive devices.”

C2: “Can create coherent and cohesive texts making full and appropriate use of a variety of organisational patterns and a wide range of connectors and other cohesive devices.”

The results extracted in this analysis confirmed that coherence, mainly expressed with textual devices, was acquired gradually, but a closer look at the results showed some differences that should be taken into account to instruct and assess EFL learners. Additionally, in this study, the devices that confer coherence in each level of language proficiency were identified and divided into subcategories. A detailed analysis that could indicate in more detail the validity, reliability and feasibility of assessing textual devices is included below.

In terms of the different subcategories of textual devices, logical devices (9.48) are the most commonly used in the LCEUPV, followed by frame devices (4.74). These devices are used by English learners at all levels of language proficiency and they have also been spotted as the most frequent devices in postgraduate dissertations by Hyland (2004). The most frequent logical devices found in the LCEUPV were ‘also’, ‘however’ and ‘but’ and the least frequent were ‘yet’, ‘rather’, ‘similarly’ and ‘further’. Some logical devices, such as ‘further’, ‘rather’, ‘nevertheless’ and ‘similarly’, were only used by learners with C1 and C2 proficiency levels. The logical marker ‘and’ was also an interesting case: although it was found in all the sub-corpora, it was seldom used as a marker because learners preferred to use another additive marker. Some examples of the use of logical devices can be seen in examples [1], [2] and [3]:

[1] “It isn’t only a way to spend your time *but also* a page that allows you to know how our society is”. (B2tx21).

[2] “You know how to eat healthy. *However* you have just ignored it”. (B1tx11).

[3] “We are what we eat” and eating a healthy diet is very important for keeping our health and prevents future cardiovascular diseases. *Nevertheless*, it is necessary to carry out the proper measures in order to get a healthier lifestyle”. (C2tx52).

The examples show how learners with different levels of proficiency in English use logical devices. One aspect that became clear after the analysis of the different subcorpora was the fact that learners used metadiscourse devices in a progressive way, incorporating

**Table 3**

Normalised frequencies of the results of textual devices by English proficiency level found in the LCEUPV.

Textual devices	A1 Normalised frequencies	A2 Normalised frequencies	B1 Normalised frequencies	B2 Normalised frequencies	C1 Normalised frequencies	C2 Normalised frequencies	Total normalised frequencies
Logical devices	1.14	2.23	6.64	12.92	14.52	12.33	9.48
Code glosses	0.68	0.67	0.54	1.57	1.02	2.28	1.26
Frame devices	0.91	1.45	3.36	5.59	6.01	7.58	4.74
Total	2.74	5.47	10.55	20.08	21.56	22.20	15.49



**Table 4**

Normalised frequencies of the results of interactional devices by English proficiency level found in LCEUPV.

Interpersonal devices	A1 Normalised frequencies	A2 Normalised frequencies	B1 Normalised frequencies	B2 Normalised frequencies	C1 Normalised frequencies	C2 Normalised frequencies	Total normalised frequencies
Hedges	1.94	3.57	7.28	11.26	13.27	11.60	10.02
Boosters	1.37	2.90	3.55	4.01	5.64	7.86	4.75
Attitude devices	2.97	4.69	6.09	8.90	10.56	12.05	8.32
Total	6.28	11.16	16.93	24.19	29.48	35.54	23.11

new devices at the same pace than linguistic and sociolinguistic knowledge, as stated in the CEFR (Council of Europe, 2018).

The frame devices most frequently used by all the learners were ‘*first*’, ‘*firstly*’, ‘*finally*’ and ‘*on the one hand*’. The least used were ‘*concerning*’, ‘*turning to*’, ‘*in terms of*’, ‘*brief*’, ‘*briefly*’ and ‘*seeking*’. Some examples can be seen in [4], [5] and [6]:

[4] “I want to start this essay with some sentences. *The first one* is that we don’t know that we eat”. (A2tx9).

[5] “Many people think they could do nothing about improving the environment problems they say we are having and that governments are the only ones responsible for that issue. *Concerning to* transport planning, Valencia is owner of an extensive net of public transport”. (C1tx58).

[6] “*On the one hand*, I think that, nowadays, children between 8 and 12 are free to go different places without their parents. *On the other hand*, so many people say that on the past children were always at home”. (B2tx14).

I think teachers should be conscious of the most frequently used textual devices so as to be aware of the ones that should be taught and assessed at the different levels of language proficiency. In this sense, teachers may assess and form students’ pragmatic learning and look ahead to see what metadiscourse devices could be learnt next, following the results of this analysis. Following Lee (2007, p. 182), “feedback has a crucial role to play” and, in this research, feedback on assessment is considered crucial as a means to help learners understand and adopt different strategies to improve their future performance. With respect to textual devices, in the LCEUPV the following devices were identified. It can be observed that the devices do not coincide with those identified in the CEFR (Council of Europe, 2018) and indicated above:

*Logical devices.*

A1: *also, however, but, and, then.*

A2: *in addition, furthermore, also, however, but, then.*

B1: *in addition, furthermore, moreover, also, however, as such, in contrast, but, rather, nevertheless, instead, therefore, then.*

B2: *in addition, furthermore, moreover, also, however, as such, in contrast, but, rather, nevertheless, instead, thus, therefore, then.*

C1: *in addition, furthermore, moreover, also, further, however, as such, in contrast, but, yet, rather, nevertheless, instead, still, thus, therefore, then.*

C2: *in addition, furthermore, moreover, also, further, similarly, however, as such, in contrast, but, yet, rather, nevertheless, instead, still, thus, therefore, then, consequently.*

*Code glosses.*

A1: *for example.*

A2: *for example.*

B1: *for example.*

B2: *that is, for example, for instance.*

C1: *that is, for example, for instance.*

C2: *that is, for example, for instance.*

*Frame devices.*

A1: *first, firstly, finally, next, on the one hand.*

A2: *first, firstly, second, finally, next, on the one hand.*

B1: *first, firstly, second, secondly, third, thirdly, finally, beginning, next, on the one hand.*

B2: *first, firstly, second, secondly, thirdly, finally, to begin with, beginning, on the one hand, regarding.*

C1: *first, firstly, second, secondly, third, thirdly, finally, to begin with, beginning, next, on the one hand, regarding, concerning, turning to, in terms of, thus far, in sum, aim to, seeking.*

C2: *first, firstly, second, secondly, third, thirdly, finally, to begin with, beginning, next, on the one hand, regarding, concerning, turning to, in terms of, thus far, in sum, in brief, briefly, aim to, seeking.*

Table 4 shows the normalised results per 1000 occurrences of interpersonal devices. It can be observed that interpersonal devices (23.11) were used in the LCEUPV more frequently than textual devices (15.49). This is mainly due to the learners with C1 and C2 levels and these results are in line with Hyland (2004) analysis of postgraduate dissertations. EFL advanced learners prefer the use of interpersonal strategies to transmit their opinion to readers, as they are aware of the persuading power of metadiscourse devices. In the analysis of the essays it was noticed that the higher their linguistic knowledge was, the more interpersonal devices were used.

Table 4 shows that learners increase their use of interpersonal devices at the same pace as they increase their grammatical and lexical knowledge. It can also be observed that the increase in the six levels of language proficiency is progressive, as also indicated in the written assessment grid of the CEFR (Council of Europe, 2018, pp. 173–4) in the descriptors of ‘Range’, ‘Description’ and ‘Argument’. For example, it is indicated that “Range, C1: The flexibility in style and tone is somewhat limited./ C2: Shows great flexibility in formulating ideas in differing linguistic forms to convey finer shades of meaning precisely” or “Argument, B1: Can

summarise, report and give his/her opinion about accumulated factual information on a familiar routine and non-routine matters./ B2: Can write an essay or report that develops an argument systematically with appropriate highlighting of some significant points and relevant supporting detail". There is no mention to the specific use of certain devices to obtain the descriptors in the CEFR (Council of Europe, 2018), but interpersonal devices are used to give opinions, highlight, support, show flexibility, etc. In this study, it was also noticed an increase in the use of descriptive, argumentative and persuasive strategies in the different proficiency levels. A detailed analysis that could indicate in more detail the validity, reliability and feasibility of assessing interpersonal devices is included below.

The most frequently used subcategory of interpersonal devices were hedges (10.02), followed by attitude devices (8.32). The most frequently used hedges were 'think', 'can', 'believe', 'could' and 'may' and the least frequently used were 'perhaps', 'unclear', 'partly', 'approximately' and 'probable'. Some samples can be seen in examples [7], [8] and [9]:

[7] "Children have not a healthy lifestyle because they eat so much fast food. A few days ago, I heard an expert saying that children tent to eat unhealthy food because their parents want. Children nowadays have less healthy lifestyles, and I *think* that this must change". (B2tx37).

[8] "Society has changed a lot since last decades. People work lots of hours a day because they want to earn much money, women are not at their houses taking care of their children, young students have over abroad looking for an opportunity and technology has emerged controllng the world of all these changes above have created a new generation with different opinions. In view of the above I *believe* it is difficult sometimes to separate work from free time nowadays". (C1tx42).

[9] "Nowadays children are more stressed, they have a lot of homework to do and then, they also activities. *Perhaps* teenagers aren't kind with their parents". (B1tx8).

The most frequently used attitude devices were 'only', 'important', 'main', 'new' and the least used were 'unique', 'major', 'relevant', 'limited' 'valuable' and 'fundamental'. Some of the attitude devices were seldom used by learners with lower levels of language proficiency, i.e. A1, A2 and B1 (e.g. *major, relevant, exact, fundamental*). Example [10] shows a frequently used attitude marker and [11] a rarely used one:

[10] "There is no doubt that we are living in a *new* era ruled by massive trends, technology and work". (C2tx51).

[11] "From my point of view, there are three aspects that I consider *fundamental* if we want to get this aim". (C1tx6).

The interpersonal devices associated with the different levels of language proficiency found in the analysis were the following:  
*Hedges.*

A1: *can, could, think, feel.*

A2: *may, can, could, believe, feel, think.*

B1: *may, maybe, would, can, could, suggest, believe, perhaps, feel, think, idea, approximately.*

B2: *may, maybe, would, can, could, seem, suggest, believe, feel, think, argue, partly, idea, approximately.*

C1: *may, maybe, would, can, might, could, seem, suggest, believe, feel, think, argue, almost, perhaps, quite, idea.*

C2: *may, maybe, would, can, might, could, seem, suggest, believe, feel, think, argue, almost, theoretically, partly, perhaps, quite, unclear, idea, probable.*

*Boosters.*

A1: *show, know, always.*

A2: *show, know, especially, always, clear.*

B1: *show, know, generally, especially, always, majority.*

B2: *show, conclude, know, generally, actually, especially, always, clear, majority.*

C1: *show, demonstrate, highlight, emphasize, conclude, establish, prove, know, clearly, generally, indeed, highly, strongly, actually, especially, always, fully, clear, majority.*

C2: *show, demonstrate, highlight, confirm, emphasize, conclude, establish, prove, know, clearly, generally, indeed, highly, actually, especially, entirely, always, fully, clear, majority.*

*Attitude devices.*

A1: *important, main, new, only.*

A2: *important, main, new, only.*

B1: *important, main, have to, new, only, support, improvement.*

B2: *important, key, main, have to, new, only, support, improvement.*

C1: *exact, fundamental, important, key, main, major, sufficient, valuable, have to, new, only, support, improvement, expand.*

C2: *critical, exact, fundamental, important, key, limited, relevant, significant, unique, main, major, sufficient, valuable, have to, new, only, support, improvement, expand.*

Some attitude devices identified in academic English, such as 'significance', 'ensure', 'fail' or 'dramatically', were not found in the LCEUPV as they are typical of a formal context. Since, in this study, the devices identified are used by English language learners, the results should be interpreted accordingly.

The findings of the study suggest that in fact there are different metadiscourse devices associated with different levels of language proficiency. Teachers can take these findings into account and use them in teaching and assessment, thereby contributing to students' learning by providing them with the pragmatic knowledge that learners are expected to acquire. Thus, this study aims at unpacking the pragmatic competence described at the CEFR (Council of Europe, 2001, p. 13) as "it concerns the mastery of discourse, cohesion and coherence, the identification of text types and forms, irony, and parody". Here I describe in detail the use of metadiscourse devices in different proficiency levels that may be used for teaching and assessing EFL learners, drawing attention to their specific construct that may illustrate the validity, reliability and feasibility of the CEFR (Council of Europe, 2001) descriptors.

## 6. Conclusions

In this paper, my intention has been to shed some light on both pragmatic teaching and assessment of written language and on the assessment of metadiscourse at the different levels of language proficiency. This study makes a case for added attention to metadiscourse and so the findings could be helpful to specifically identify the metadiscourse devices that may be taken into account in foreign language assessment and teaching at different proficiency levels.

Regarding the objectives of this paper, first the metadiscourse devices associated with the linguistic proficiency levels of EFL acquisition established by the CEFR (Council of Europe, 2001, 2018) were identified and classified in the subcategories of metadiscourse devices that were detected after analysing the LCEUPV, taking into account Hyland's taxonomy (2005) and adapting it to the corpus under study. Second, the most frequent devices of each subcategory were identified, which made it possible to delimit the specific use of metadiscourse devices at the different EFL proficiency levels. This could help teachers to assess learners and also be of use to learners to self-assess themselves and advance in the acquisition of pragmatic knowledge while acquiring linguistic and sociolinguistic knowledge. In this way, this study can help learners focus on different metadiscourse devices at every level of language proficiency, thereby enabling them to take responsibility for their own learning and to plan how they could move forward. Answering the research questions, I think that metadiscourse devices should be learnt depending on proficiency levels and in the results section a list of devices has been provided to identify the metadiscourse devices that should or not be included in the assessment of each proficiency level.

Finally, after analysing the metadiscourse devices associated with the different levels of language proficiency, it can be said that metadiscourse is used with different frequencies at each level. It seems that metadiscourse devices were incorporated into foreign language acquisition at the same rate as linguistic and sociolinguistic elements, as stated in the CEFR (Council of Europe, 2001). The findings of the study suggest that Spanish learners of English acquire metadiscourse devices as a discourse-pragmatic continuum that may be divided into different language proficiency levels.

Other researchers who have studied metadiscourse in postgraduate writing have stressed the importance of identifying the pragmatic knowledge of language (Carrió-Pastor & Casas-Gómez, 2015; Hyland, 2004), but none of them have identified the metadiscourse devices associated with different levels of language proficiency. The cause of the dissimilar use of these devices at different stages of language proficiency may be the semantic complexity of some devices, which implies that they are used when the knowledge (which may be social or cultural) learners acquire from the target language matures. As an example, the attitude marker 'valuable' is only used by learners with C1 and C2 levels of language proficiency, the rest of the learners preferring to use instead another attitude marker: 'important'.

When assessing pragmatic knowledge, it seems that teachers are in shifting sands, which is why analyses based on corpus studies are necessary to identify the devices associated with pragmatic knowledge.

The lists of devices and the examples included aim to make additional and explicit connections between levels of language proficiency and assessment of metadiscourse devices. My aim is to contribute to language teaching and assessment as the metadiscourse devices portray specific ways of argumentation in essay writing in different levels of EFL proficiency and, therefore, language teachers could consider assessment levels in light of recurring patterns extracted from learner corpora. As Aull (2015, p. 71) indicates "Rather than the often tacit connection between successful writing and assessment expectations, we can do more to draw explicit attention to the ways that writers manipulate language for rhetorical ends". This research might highlight the need for continued research in rhetoric on the relationship between assessment standards and existing patterns in writing.

Finally, I am aware of the limitations of the study, such as the need to analyse a larger corpus or to include learners with different mother tongues. Furthermore, in future studies, the findings of this study will be contrasted with the pragmatic knowledge associated with other languages such as Spanish, German or French at their different levels of language proficiency in order to identify whether different languages follow similar patterns.

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## References

- Alcón Soler, E., & Martínez-Flor, A. (Eds.). (2008). *Investigating pragmatics in foreign language learning, teaching and testing*. Bristol: Multilingual Matters.
- Aull, L. (2015). Connecting writing and language in assessment: Examining style, tone, and argument in the U.S. Common core standards and in exemplary student writing. *Assessing Writing*, 24, 59–73.
- Aull, L. (2019). Linguistic markers of stance and genre in upper-level student writing. *Written Communication*, 29, 267–295.
- Aull, L., & Lancaster, C. I. Z. (2014). Linguistic markers of stance in early and advanced academic writing: A corpus-based comparison. *Written Communication*, 31, 151–183.
- Bardovi-Harlig, K. (1999). Exploring the interlanguage of interlanguage pragmatics: A research agenda for acquisitional pragmatics. *Language Learning*, 49, 677–713.
- Bardovi-Harlig, K. (2013). Developing L2 pragmatics. *Language Learning*, 63, 68–86.
- Bardovi-Harlig, K., & Dörnyei, Z. (1998). Do language learners recognise pragmatic violations? Pragmatic versus grammatical awareness in instructed L2 learning. *TESOL Quarterly*, 32, 233–259.
- Barron, A. (2003). *Acquisition in interlanguage pragmatics: Learning how to do things with words in a study abroad context*. Amsterdam: John Benjamins.
- Carrió-Pastor, M. L., & Mestre-Mestre, E. (2013a). A proposal for the tagging of grammatical and pragmatic errors. *Research in Corpus Linguistics*, 1, 7–18.
- Carrió-Pastor, M. L., & Casas-Gómez, M. (2015c). The Use of Corpora to Identify the Pragmatic Knowledge Associated with Different Levels of Language Proficiency. In S. Gesuato, F. Bianchi, & W. Cheng (Eds.), *Teaching, Learning and Investigating Pragmatics: Principles, Methods and Practices*. Cambridge: Cambridge: Scholars.
- Carrió-Pastor, M. L., & Martín Marchante, B. (2016). Identificación de errores pragmáticos en un test adaptativo de inglés como lengua extranjera. *ELIA*, 16, 79–102.

- Carrió-Pastor, M. L., & Martín Marchante, B. (2018). Analysis of pragmatic items in an ESL online adaptive placement test. *International Journal of English Studies*, 18(2), 97–117.
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.
- Council of Europe. (2018). *Common European framework of reference for languages: Learning, teaching, assessment. Companion volume with new descriptors*. Strasbourg: Council of Europe.
- Cummings, A. (2002). Assessing L2 writing: Alternative constructs and ethical dilemmas. *Assessing Writing*, 8, 73–83.
- Cummings, L. (Ed.). (2010). *The Routledge pragmatics encyclopedia*. London: Routledge.
- Eslami-Rasekh, Z. (2005). Raising the pragmatic awareness of language learners. *ELT Journal*, 59(3), 199–208.
- Hyland, K. (2004). Disciplinary interactions: Metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13, 133–151.
- Hyland, K. (2005). *Metadiscourse: Exploring interaction in writing*. London: Bloomsbury.
- Jianda, L. (2006). Assessing EFL learners' interlanguage pragmatic knowledge: Implications for testers and learners. *Reflections on English Language Teaching*, 5(1), 1–22. Retrieved from (<https://pdfs.semanticscholar.org/95cd/956e4486405846a2744d19849257999080a3.pdf>. Accessed 12/01/2020).
- Kasper, G. (2001). Four perspectives on L2 pragmatic development. *Applied Linguistics*, 22–4, 502–530.
- Kasper, G., & Rose, K. R. (2001). Preface to pragmatics in language teaching. In K. R. Rose, & G. Kasper (Eds.), *Pragmatics in language teaching*. Cambridge: Cambridge University Press.
- Lee, I. (2007). Feedback in Hong Kong secondary writing classroom: Assessment for learning or assessment of learning? *Assessing Writing*, 12, 180–198.
- Liu, F., & Stapleton, P. (2015). Writing prompt convergence in high-stakes tests: Exploring rhetorical functions and objects of enquiry. *Studies in Educational Evaluation*, 47, 68–75.
- Liu, F., & Stapleton, P. (2018). Connecting writing assessment with critical thinking: An exploratory study of alternative rhetorical functions and objects of enquiry in writing prompts. *Assessing Writing*, 38, 10–20.
- Martín-Laguna, S., & Alcón-Soler, E. (2018). Development of discourse-pragmatic markers in a multilingual classroom: A mixed method research approach. *System*, 75, 68–75.
- Mestre-Mestre, E. (2011). *Error in the learning and teaching of English as a second language at higher education level*. Valencia: Universitat Politècnica de València.
- Mestre-Mestre, E., & Carrió-Pastor, M. L. (2013). A pragmatic perspective to leverage English for specific purposes. *RESLA*, 26, 107–120.
- Moya, P., & Carrió-Pastor, M. L. (2018). Análisis comparativo de los marcadores de compromiso en los comentarios sobre noticias digitales en España y Chile. *Onomázein. Revista de lingüística, filología y traducción*, 4, 26–48.
- Mur-Dueñas, P. (2011). An intercultural analysis of metadiscourse features in research articles written in English and in Spanish. *Journal of Pragmatics*, 43, 3068–3079.
- Nureddeen, F. A. (2008). Cross cultural pragmatics: Apology strategies in Sudanese Arabic. *Journal of Pragmatics*, 40, 279–306.
- Rea-Dickins, P. (2007). Classroom-based assessment: Possibilities and pitfalls. In J. Cummins, & C. Davison (Eds.), *International handbook of english language teaching. Springer international handbooks of education* (Vol. 15). Boston: Springer.
- Roevers, C. (2007). DIF in the assessment of second language pragmatics. *Language Assessment Quarterly*, 4(2), 165–189.
- Roevers, C. (2014). Assessing pragmatics. In A. J. Kunnan (Ed.), *The companion to language assessment, volume I*. Wiley: London.
- Romero Trillo, J. (2002). The pragmatic fossilization of discourse markers in non-native speakers of English. *Journal of Pragmatics*, 34, 769–784.
- Tasso, C. (2017). *Estudio comparativo de la competencia gramatical y metadiscursiva en la escritura en inglés en estudiantes españoles con niveles lingüísticos B2 y C1 del MCER*. Valencia: Universitat Politècnica de València.
- Timpe-Laughlin, V., & Choi, I. (2017). Exploring the validity of a second language intercultural pragmatics assessment tool. *Language Assessment Quarterly*, 14(1), 19–35.
- Weir, C. J. (2005). Limitations of the Common European Framework for developing comparable examinations and tests. *Language Testing*, 22(3), 281–300.
- Wiechmann, D., & Kerz, E. (2013). The positioning of concessive adverbial clauses in English: Assessing the importance of discourse-pragmatic and processing-based constraints. *English Language and Linguistics*, 17(1), 1–23.
- Xu, W., Case, R. E., & Wang, Y. (2009). Pragmatics and grammatical competence, length of residence, and overall L2 proficiency. *System*, 37(2), 205–216.

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