



Inverse Translation as a Pedagogical Tool in the English for Specific Purposes (ESP) Classroom

ENRIQUE CEREZO HERRERO* & CARMEN PÉREZ-SABATER

Universitat de València (Spain) & Universitat Politècnica de València (Spain)

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ABSTRACT

The aim of this paper is to analyse the potential of inverse translation as a pedagogical tool in the promotion of written expression skills in the English for Specific Purposes (ESP) classroom. Nowadays, we are witnessing a renaissance of translation in teaching practice. As a result, the number of studies trying to delineate the scope of translation in current FLT contexts has proliferated in the last two decades. With a view to adding to the existing literature, we have carried out a longitudinal study, for which a series of translations have been completed during a language course. A pre-study and post-study questionnaire have also been administered in order to gauge the participants' perspective regarding the use of translation in the language classroom. The results showcase that translation has been extremely beneficial in terms of enhancing written expression, drawing the students' attention to certain recurring mistakes, and creating metalinguistic awareness.

KEYWORDS: Pedagogical translation; Inverse translation; Written expression; Foreign Language Teaching (FLT); English for Specific Purposes (ESP).

1. INTRODUCTION

In an increasingly globalised world, learning foreign languages (FL) is undoubtedly an asset for the all-round training of any individual. The breaking down of barriers between societies and, consequently, the emergence of increasingly multilingual and multicultural societies, have heralded translation as a fundamental element at the personal, educational, social, and professional levels (Cook, 2010). It is for this reason that translation as a pedagogical tool in

**Address for correspondence:* Facultad de Filología, Traducción y Comunicación, Avenida Blasco Ibáñez, 32, 46010, Valencia, España; e-mail: enrique.cerezo@uv.es

the L2 classroom is gaining momentum (Laviosa, 2022; Pintado Gutiérrez, 2022). What is more, it has come to be regarded as a fifth language skill in foreign language teaching (FLT) (Leonardi, 2010; McLaughlin, 2022). Translation is currently conceived of as an ability or activity that complements all four main skills, namely written and listening comprehension and written and oral expression, which all learners must develop throughout the training process (Carreres et al., 2017). Given the plurilingual and pluricultural societies in which we live, foreign language users will most likely have to use translation in their personal or professional environments (*ibid.*). Therefore, it stands to reason that multilingual and intercultural practices should form part of FLT curricula.

However, translation has long been seen as a Cinderella in FL teaching contexts. Since the Reform Movement, and more specifically since the emergence of the Direct Method at the end of the 19th century, the use of translation in the FL classroom has been a burning issue amongst researchers and teachers (Lerma, 2020; Reverter, 2020). Criticism has been mostly motivated by the association of translation with classical language learning and the grammar-translation method, whose postulates are deeply rooted in a mechanistic use of the language, thus neglecting some methodological tenets that can be labelled as paramount for current foreign language learning, e.g. communication, and interaction. In such a context, fluency was prized over accuracy (Kelly & Bruen, 2014). In order to comply with this tenet, the use of L1 was strongly discouraged on the grounds that the L2 teaching process should resemble that of L1 acquisition. Students needed to be exposed to the FL for as long as possible, meaning that L2 provision should be the norm in the classroom. Additionally, L1 and L2 represented different systems and, as a result, they should be kept in differing watertight compartments of the brain (Cook, 2001). This inevitably led to the demise of translation in FLT contexts.

Notwithstanding, translation is currently making a comeback on the FLT scene (González-Davies, 2017; Carreres et al., 2018). This paradigm shift has been particularly felt since 2001 with the publication of the *Common European Framework of Reference for Languages* (CEFR), and even more prominently since the publishing of the *CEFR Companion Volume* in 2020. In fact, the latter takes up the notion of mediation and offers a thorough descriptive scheme of what it involves, an aspect which the first version of the CEFR failed to delineate. In said description, mediation is presented in three different groups which typically represent the way this *fifth linguistic skill* is approached in real communicative settings, namely: *mediating a text*, which often involves conveying and/or interpreting information embedded in a text; *mediating concepts*, especially when other people are unable to access them directly on their own; and *mediating communication*, which is intended to facilitate understanding between people who may not share a common linguistic and sociocultural code. Additionally, the information is complete with a set of activities that can be operationalised in the classroom, descriptors for all levels (from pre-A1 to C2) based the linguistic demands

imposed by each of the activities proposed, as well as a myriad of mediation strategies that help clarify meaning and facilitate understanding.

Thus, the two above-mentioned works have laid the foundations of what has come to be known as the *multilingual turn* in Educational Linguistics (Carreres et al., 2017). L2 teaching cannot be detached from L1 (Laviosa 2022), as students are not *tabula rasa*. They already have an L1 which determines, to a large extent, their own vision of the world. Indeed, the mother tongue is believed to be the learner's language of thought until very advanced levels (C1+) (Turnbull & Dailey-O'Cain, 2009). Students inevitably put into practice a type of *interior translation* (De Arriba García, 1996) to make sense of their L2 or additional languages, that is, they operationalise a series of cognitive strategies via which they translate utterances produced in the FL into their L1 in order to access the language and develop and structure their knowledge of the FL (Pintado Gutiérrez, 2021). This process often takes place instinctively without the student even becoming aware of it. Therefore, it can be argued that translation is an innate or natural ability to human beings (Harris & Sherwood, 1978).

This new scenario has thus led to a greater eclecticism at the methodological level (Torralba, 2019) and to a reshaping of the role of pedagogical translation in recent years (García Benito, 2019). Translation is currently being labelled as a communicative activity and its traditional role is giving way to a new conception of translation as a valuable resource that can greatly enhance foreign language competence (Pym et al., 2013; Pintado Gutiérrez, 2021).

As opposed to professional translation training, which is conceived as an end in itself, pedagogical translation refers to the use of translation in the L2 classroom with a view to improving linguistic competence in the target language (Hurtado, 2011). In other words, in professional translation training, what matters most is the final product or target text, and how the target text can help facilitate communication between people who do not share a common linguistic code (Delisle et al., 1999). Put differently, a functional-communicative rendering of the text is prioritised (Floros, 2020). This requires the implementation of what González-Davies and Enríquez-Raído (2016: 1) label *Situated Learning*, that is, “a context-dependent approach to translator and interpreter training under which learners are exposed to real-life and/or highly situated work environments and tasks.” Therefore, aspects such as the target readership, the context and culture in which the source text is embedded, and the translation commission become paramount when it comes to determining the translation strategies to be deployed in relation to the purpose of the source text. In pedagogical translation, however, greater emphasis is placed on the acquisition of the foreign language (Floros, 2020). The exercises designed for such a purpose are intended to broaden students' vocabulary, to help them assimilate new syntactic structures, to verify their degree of comprehension of a given text, and to assess the acquisition of new vocabulary (Delisle et al., 1999).

Despite pedagogical translation being a burgeoning area in FLT contexts, its use is still frowned upon due to the following three reasons: first, the pervading imperialism of

communicative methodologies (Soto, 2016) and, consequently, the desire to move away from the methodologies which were employed to teach classical languages (Sánchez Cuadrado, 2017b). The grammar-translation method has been severely criticised and ostracised in FLT contexts for a considerable period of time (Pintado Gutiérrez, 2021). What is more, the negative outlook that it engenders has trickled down to current teaching practices and translation is widely regarded as a source of interference between L1 and L2 (Carreres, 2006; González Davies, 2014); second, the immanent lack of teaching and pedagogical proposals that help shed light on how translation can systematically be integrated into the L2 curriculum (González-Davies, 2017; Pintado Gutiérrez, 2022); third, and, most importantly, the dearth of empirical data that help define the role of pedagogical translation in the FL classroom (Gasca, 2017; Sánchez Cuadrado, 2017b; Pintado Gutiérrez, 2021). The above-mentioned lack of research is even more prominent in the case of English for Specific Purposes (ESP). This is, in fact, the remit of the present study, which seeks to analyse the effect that the introduction of inverse translation into the ESP classroom can have on the enhancement of writing skills.

Inverse translation involves translating from one's own language to their foreign language. As opposed to direct translation, that is, translating from one's foreign language to the mother tongue, inverse translation has received scant attention and even been looked down research-wise in language education (Mraček, 2018). As Newmark (1988: 3) points out, translating into one's habitual language is the only way to guarantee that a translation can be done "naturally, accurately and with maximum effectiveness." Therefore, it could be argued that inverse translation is closely linked to the myth of the native speaker as an absolute authority whose linguistic competence in terms of correctness and style cannot be rivalled (Carreres et al., 2017). However, inverse translation can prove extremely useful in the process of acquiring a FL, since it can help reinforce previously learned structures, speed up the language learning process, and bring to the fore the differences between L1 and L2 at the lexical, grammatical, and cultural levels (Díaz Alarcón & Menor Campos, 2013).

On this basis, through our analysis, we seek to answer the following research questions:

- RQ1. Can the use of inverse translation in the ESP classroom help improve written skills in the target language?
- RQ2. Can the use of translation help draw students' attention towards their own errors when writing?
- RQ3. Can grammatical aspects be more positively impacted with the introduction of pedagogical translation?

1.1.A brief overview of prior research

Although there has been a revival of the importance of translation as a language learning resource since the last part of the 20th century (Carreres et al., 2018; Reverter, 2020), the

number of studies tapping into the role of pedagogical translation and featuring empirical data in FLT contexts is rather small.

In general, published studies show the effectiveness of translation as a means of language enhancement. Carreres (2006) highlights the pedagogical value of translation in learning vocabulary, grammar, writing skills, and register. Almeida (2018), for his part, highlights the value of pedagogical translation when contrasting two linguistic systems and understanding the similarities and differences between them, thus reducing the linguistic interference of one language over the other. Additionally, pedagogical translation has been found to be a practical activity which makes it possible to extract rules on how the language is structured and used (Díaz Alarcón & Menor Campos, 2013). In especially complex educational environments, it encourages social integration whilst accepting plurilingual identities, and promotes interculturality (Nord, 1991; Gasca, 2017; Pintado Gutiérrez, 2020; González-Davies, 2021).

Although the vast majority of scholars have focused on direct translation thus far, Sánchez Cuadrado (2017a) analyses the perceptions of students learning Spanish as a FL regarding the use of inverse translation. The results of the study evince that translation practice had a beneficial effect on language learning, with vocabulary, linguistic awareness and grammar being the categories that were more favourably impacted by this teaching practice.

The above-mentioned author also carried out a study regarding the benefits of pedagogical translation when it comes to grammatical competence and written expression in L2 (Sánchez Cuadrado, 2017b). The findings emerging from this study show that pedagogical translation effectively contributes to improving linguistic aspects and providing the necessary scaffolding for written expression enhancement when strategies geared towards language form and cooperative learning are implemented.

The perceptions of language teachers have also been analysed in various qualitative studies. The results of Kelly and Bruen's (2014) study bring to the fore that the language teachers interviewed harbour an overwhelmingly positive outlook regarding the use of translation in FLT contexts. In addition to the notion that translation leads to a more enjoyable learning experience, teachers also view translation as a stepping stone via which to acquire new vocabulary and gain a greater understanding of the context in which the terms are embedded. Additionally, it has been reported that translation is a potential lever for reading comprehension, acquisition of grammatical structures, increased awareness and understanding of cultural issues and for catering to different learning styles within the classroom. However, the above-mentioned authors acknowledged that translation must be used in conjunction with other approaches and activities. In a similar vein, Pym et al. (2013) surveyed a pool of 963 teachers and experts from different European countries and three other comparison countries (China, Austria, and the United States). The vast majority of the respondents conceded that

they favoured the use of translation, with this practice being particularly popular in higher education, followed by secondary, and least so at primary schools.

As for language enhancement, research conducted thus far has yielded positive outcomes. The results of a study conducted by Gasca (2017) reveal that the number of morphosyntactic errors tends to narrow down after a short period of instruction. The improvement is more noticeable in the use of prepositions, adjectives, and verbs tenses.

From the field of ESP, we can also find a few studies that feature pedagogical translation as a teaching resource. In an advanced group of learners of technical English in higher education, Dagilienè (2012) implemented daily integrated translation activities to enhance students' awareness of structure and grammatical differences between L1 and L2. Specifically, translation was intended to prompt the correction of common errors in L2 that might otherwise go unnoticed. By means of a survey, her students manifested that daily translation practice on this ESP course helped them develop and improve their reading, speaking, writing, grammar, and vocabulary.

Barbasán et al. (2018) report a great improvement of written expression skills through the translation of short sentences in two languages for specific purposes courses. The findings attest to the fact that specialised vocabulary and the use of articles are positively impacted by the introduction of translation. The constant use of translation also allows students to better apply linguistic rules and avoid the use of non-existent terms, false cognates, and misspellings. Additionally, students reported that their motivation increased and described translation as a useful resource that helps them to consolidate the linguistic structures practised in the classroom and to contrast their own language with the target language.

Conversely, other studies have questioned or ignored the use of translation for language learning because it is considered a boring activity that does not promote language learning; it is said to be mainly focused on the enhancement of written skills, with some teachers feeling that it should be restricted to professionals (Pym et al., 2013: 124). The use of translation for language learning is also said to imply a learning problem, since the L2 needs to be seen through the lens of the L1, which may cause interference between L1 and L2, thus creating dependency and obstructing production in L2, as summarised in Caballero Rodríguez (2010), Dagilienè (2012) and Reverter (2020). Most of these conceptions are borne out by the confusion between the use of translation as an activity in the language learning classroom and the application of the tedious grammar-translation method aimed at producing “perfect translations of stilted or literary prose” (Richards & Rodgers, 2014: 7).

2. THE STUDY

The overarching objective of this study is to assess the extent to which the introduction of inverse translation into the L2 English classrooms as a pedagogical tool can help to consolidate

the learners' written competence in English as a foreign language. To this end, the current study presents a mixed methodology through the collection of quantitative and qualitative data.

2.1. Participants

A total of 88 engineering students at a Spanish university from the School of Telecommunications Engineering, where they take the subject *Academic and Professional English* (Level B2), and the School of Computing, where they take the subject *Upper Intermediate English for Computing* (Level B2), participated in the study. All participants were of Spanish nationality. As is often the case with engineering degrees, men (88%) outnumbered their female counterparts (11%). Almost all of them were between 19 and 22 years old. Only two participants were between 23 and 30, and one was between 31 and 40. Although we can find varying English linguistic proficiencies in the classroom ranging from B1 to C1 according to the CEFR, only those students with a B1 or B2 level were selected to partake in the study. This selection criterion was also intended to homogenise the sample in terms of language proficiency.

The entire sample had previously studied English at both primary and secondary school, and 35% also admitted to having studied the language at private academies. Regarding the pedagogical methods that they have followed at school or in their private lessons, 60% claimed that their prior English teachers followed a monolingual approach without any recourse to translation, whereas 40% recognised that they had previously used translation in English classes. However, they acknowledged that its use was constrained to the acquisition and comparison of new vocabulary between their L1 and L2. As far as individual use of translation is concerned, the data showed that the large majority of the informants made use of it when studying English in order to understand the language better or translate their ideas from L1 to L2 when writing a composition.

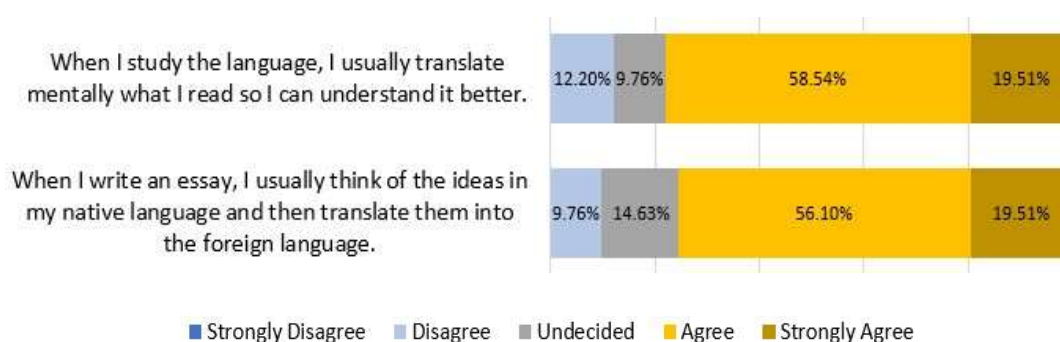


Figure 1. Use of interior translation.

In total, 78% of the sample conceded that they mentally translate what they read so that they can understand better. Likewise, 76% stated that they make use of interior translation

when writing; in other words, writing in L2 seems to be framed within a two-stage process: first, an inner brainstorming process in L1 by which they come up with ideas and, second, an inner translation process that involves conveying those ideas to L2.

2.2. Procedure and Instruments

Firstly, all participants signed a consent form in which they were informed about the nature of the study, the anonymous processing of the data gathered and their voluntary participation. Afterwards, a diagnostic test was administered to guarantee homogeneity in terms of language proficiency. This pre-test comprised two reading exercises, a 200-word writing task, and four additional vocabulary and grammar activities to gauge the students' knowledge in the L2. As already foregrounded, the sample was made up of students who demonstrated a B1 or B2 level in the diagnostic test. A total of 88 students divided into four groups participated in the study (two teaching groups in each of the schools previously alluded to) (see Table 1). For the sake of convenience, all participants belonging to the same teaching group in each school were assigned to one of the groups of analysis, whilst the students in the other teaching group were assigned to the second group of analysis.

Table 1. Number of participants per school and group of analysis.

School	Control	Experimental
School of Telecommunications	20	21
School of Computing	27	20
TOTAL	47	41

The control group worked exclusively with activities taken from the textbook and followed a communicative methodology, whilst the experimental group also completed a total of six inverse translations (Spanish to English) over a four-month period. For the translation practice, the research team selected and adapted six semi-specialised texts taken from different scientific journals and originally written in Spanish for the participants to translate. The topics selected matched the units covered in class. Each text was 200 words in length. All six translations were completed individually during class time. Although they were hand-written so as to avoid Word correcting some of their language errors, and to remove the need for the use of online automatic translators, the students were allowed to utilise all types of dictionaries and other necessary tools and resources. The participants were given one hour to complete each translation.

All translations were evaluated following a rubric designed by the researchers so that the errors could be categorised and the students' progression could be measured (see Annex). The rubric was tested and updated during the pilot study based on the type of errors made by the students in their translations. The participants were given back their translation with their

errors marked and categorised so that they could classify them in a translation report provided by the researchers (see Annex). They were also requested to self-correct their own errors, think of what prompted those errors, and provide new translation solutions in the report, which was handed back to the lecturer upon completion for evaluation.

Additionally, both the control and experimental groups completed three 200-word writing assignments during the second, third and fourth months of the teaching process in order to ascertain possible differences between both groups in the promotion of writing skills. The first writing assignment was undertaken prior to the experimental groups starting with the translations, whilst the second writing assignment took place after the first three translations had been completed, and the third at the end of the whole process, once all six translations had been completed.

On another note, the informants filled out an ad hoc pre-study and post-study questionnaire designed by the research team to gauge the students' prior perspectives regarding the use of translation as a pedagogical tool to enhance language proficiency, and to note possible differences after the teaching experience. In order to allow for comparability between the two questionnaires, both of them featured the same number of items and the questions were worded in the same manner. They consisted of closed questions and one open question at the end to allow participants to include any additional information they considered important and which had not been included in the questions. Both questionnaires underwent a thorough review by a panel of experts in applied linguistics and research methodology, as well as a piloting process in order to re-write possible ambiguously-worded questions that could later compromise the results. As a result of both of these processes, three of the questions were reworded for the sake of clarity.

Finally, two focus groups were conducted with the experimental group in each school with a view to discussing and exploring in depth issues observed in daily practice. All focus groups interventions were recorded and subsequently transcribed. Markers were used to highlight codable elements, each of which was identified as follows: GR-A/B/C/D (Group A/B/C/D) + minute: second (moment when the utterance is made in the recording).

2.2. Data Analysis

As regards statistical analysis, the following analyses were carried out:

- a. Descriptive analysis of the results gathered in both questionnaires. The data collected were analysed quantitatively using SPSS 25. To this end, measures of central tendency

(mean, median and mode) and dispersion (standard deviation and range) were calculated.

- b. In order to detect possible differences between the cohorts, the t-test and Levene's test were performed.
- c. Focus groups with the experimental groups so as to gain a deeper insight into the students' experience throughout the educational practice and to identify issues that may have been overlooked in the questionnaires. The analysis was carried out manually following the grounded theory.

3. RESULTS AND DISCUSSION

In the current section we shall report on the main findings of our study. As already foregrounded, the aim of this analysis is to take account of how the introduction of inverse translation (Spanish to English) into the ESP classroom can help improve writing skills.

RQ1. Can the use of inverse translation in the ESP classroom help improve written skills in the target language?

Regarding the average marks of both groups, Figure 2 shows that the control group obtained an average mark of 7.47 in the first writing task, which remained stable throughout the subsequent three exercises. On the contrary, in the experimental group, the average mark, despite being initially lower than in the control group (5.84), increased considerably in the second and third tasks. In the second task, the average was 6.87 – a one-point difference with respect to the first written expression task – and 7.59 in the third task – a difference of 0.72 points compared to the second task. Therefore, despite the difference being 1.63 in the first writing task in favour of the control group, the participants in the experimental group outperformed their counterparts in the control group in the third writing task.

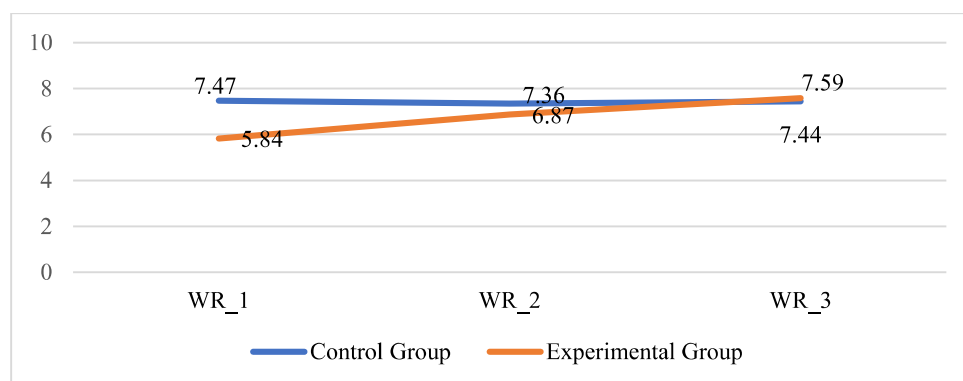


Figure 2. Average marks obtained in the written expression exercises.

Table 2 shows the difference in marks between the final and first writing tasks. It reveals that those participants in the experimental group improved their marks with respect to their first writing task. Indeed, 17.50% improved by at least three points, 47.50% by between 1.5 and 2.9 points, and 32.50% by between 0 and 1.4 points. Only one participant obtained a lower mark in the third task. Conversely, 31.11% of the participants in the control group saw their mark decrease by between -1.5 and -0.1 points from the first to the third task, and 68.89% increased their mark by up to 1.4 points or obtained the same result. These findings are tantamount to those of Sánchez Cuadrado (2017b), which also point to an overall improvement of written skills when the focus of the translation tasks is placed on form and cooperative learning.

At this point, it is worth highlighting that the difference between both groups in the average marks of the first writing exercise can be attributed to the *numerous clausus* required to access both degrees, being almost 1.5 points higher in the morning groups (control groups). This translates into different language proficiencies in the foreign language, and, therefore, varying initial conditions.

Table 2. Difference in marks between the third and first written expression tasks.

	From -1.5 to -0.1		From 0 to 1.4		From 1.5 to 2.9		3 or more		Total
	Absolute value	Percentage	Absolute value	Percentage	Absolute value	Percentage	Absolute value	Percentage	
Control	14	31.11%	31	68.89%					45
Experimental	1	2.50%	13	32.50%	19	47.50%	7	17.50%	40
Total	15	17.65%	44	51.76%	19	22.35%	7	8.24%	85

As shown in Table 3, the t-test for independent samples corroborates that there are statistically significant differences between the experimental and control groups.

Table 3. Independent samples test between the first and the third writing task.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	p-value	t	d.f.	2-tailed p-value	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Improvement	Equal variances assumed	23.819	.000	-9.656	83	.000	-1.73847	.18004	-2.09656	-1.38038
	Equal variances not assumed			-9.221	47.798	.000	-1.73847	.18854	-2.11759	-1.35935

As can be observed, Levene's test shows a p-value below 0.05 (0.00), and so equal variances are not assumed. The t-test yields a 2-tailed p-value (bilateral) below 0.05 (0.00), and so the difference in means is also significant.

If we look at the results obtained by the experimental group in the translations (Figure 3), a general improvement can also be observed throughout the process. As can be seen in Figure 3, the participants went from an average mark of 6.47 in the first translation to an average of 7.78 in the sixth translation – a difference of 1.31 points. Such a pattern illustrates the positive impact which this practice has had on the development of written expression.

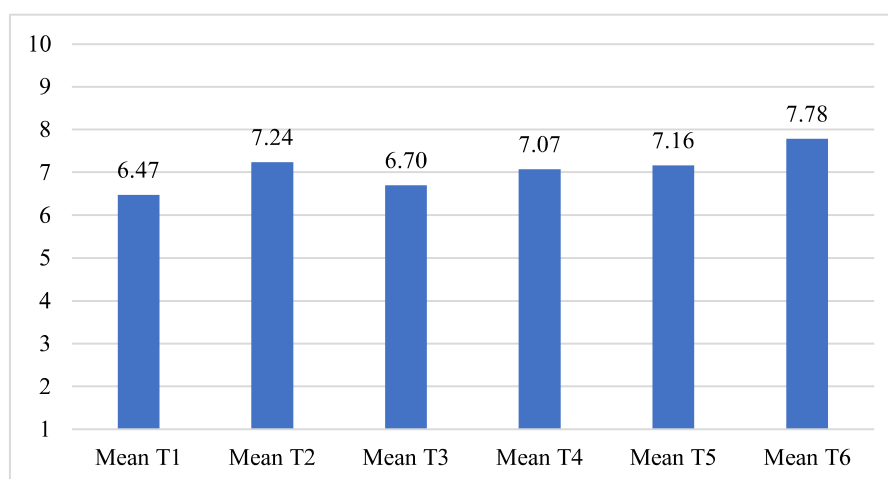


Figure 3. Average marks in translation tasks (experimental group).

RQ2. Can the use of translation help draw students' attention towards their own errors when writing?

As shown in Table 4, the most common types of errors were the use of articles (the, Ø, a, an) and lexis. However, it is worth noting that almost all errors improved between the first and the sixth translation. In fact, it is in the category of articles that the improvement was most noticeable, followed by the use of adjectives (e.g. adjectives used in plural). These results match those generated by Barbasán et al. (2018), who report on a remarkable improvement in the use of articles for general reference and vocabulary in the case of Spanish students learning English as a FL, or Sánchez Cuadrado (2017b), who also informs of a noteworthy reduction in the incorrect use of linguistic aspects.

Although to a lesser extent, this improvement is also evident in the use of verb tenses in general, especially the use of the third person plural of the simple present tense and in punctuation. These findings are also broadly consistent with those of Gasca (2017), which show that translation practice has a positive effect on the use of prepositions, adjectives, and verb tenses. There were only two categories which did not progress as favourably: the use of plurals (0.10) and register (0.20), although both obtained rather moderate values. There was

more stagnation in the grammatical category of gerunds and infinitives (0.55). However, it is worth pointing out here that this grammatical section was explicitly addressed at the end of the course, which may account for the aforementioned lack of progression.

Table 4. Mean (M) of the number of errors in translations.

CATEGORY	M-T1	M-T2	M-T3	M-T4	M-T5	M-T6	DIF (T6-T1)
GR-Articles	2.97	2.59	3.72	3.03	2.00	1.96	-1.01
GR-Adjectives	1.80	1.00	1.13	1.09	1.00	1.00	-0.80
GR-Prepositions	1.97	1.87	1.65	1.53	1.86	1.57	-0.39
GR-Tenses	2.00	1.67	1.62	1.64	1.93	1.50	-0.50
GR-3rd person	1.60	1.88	1.75	1.63	1.40	1.00	-0.60
GR-Word order	1.33	1.00	1.45	1.73	2.00	1.13	-0.20
GR-Plural	1.00	1.00	1.20	1.67	1.43	1.10	0.10
GR-Relatives	1.30	1.33	1.13	1.33	1.33	1.09	-0.21
GR-Gerund/infinitive	1.13	1.25	1.11	1.33	1.64	1.68	0.55
GR-Subjects	1.00	1.00	1.25	1.20	1.26	1.00	0.00
GR-Quantifiers	1.00	1.20	1.00	1.50	1.00	1.00	0.00
GR-Verbs	1.33	1.67	1.00	1.46	1.44	1.00	-0.33
GR-Category	1.00	1.00	1.23	1.62	1.47	1.00	0.00
GR-Comparatives	-	1.33	1.25	1.00	1.25	1.00	-0.33
Spelling	1.75	2.32	2.29	1.90	2.22	1.52	-0.23
Structures	1.67	1.95	1.84	1.78	1.50	1.50	-0.17
Lexis	2.57	3.12	3.13	2.28	2.88	1.97	-0.60
Punctuation	1.90	1.38	1.31	1.43	1.35	1.32	-0.58
Omission	1.07	1.00	1.25	1.13	1.30	1.00	-0.07
Register	1.00	-	-	1.00	1.00	1.20	0.20

At this point, it is important to highlight that a comparison between the errors in the writing tasks and the translation tasks could not be made due to two main reasons: firstly, the evaluation rubric was different for the translation and writing exercises (see Annexes), as the writing rubric was shared with lecturers teaching other groups that did not partake in this study; secondly, as opposed to translation tasks, students tend to use circumvention strategies in free writing tasks, which minimises the number of errors they make. With translations, they are compelled to use certain structures, grammatical aspects and words they might be unsure of so as to render the same message as in the source text. Therefore, writing conditions between both practices are determined by the nature of the two tasks. However, the general positive progression of errors shown in our results suggests that translation helped draw students' attention towards those errors and move towards accuracy in L2.

RQ3. Can grammatical aspects be more positively impacted with the introduction of pedagogical translation?

No statistically significant differences could be observed in any of the items between the pre-study and the post-study questionnaire. Therefore, this practice corroborates the students' own previous perspective on the use of translation for foreign language learning. Their perceptions are explained below.

Almost the entire sample, i.e. 94.87%, *agreed* or *strongly agreed* that the practice of translation in the ESP classroom helps to consolidate the language. It is for this reason that 84.62% felt language courses should incorporate translation, as a pedagogical tool, into their classroom practice. Such positive reactions are in agreement with the bulk of research conducted thus far from the perspective of different stakeholders, e.g. students (Carreres 2006; Sánchez Cuadrado 2017a; Barbasán et al. 2018), lecturers (Kelly and Bruen 2014) and teachers (Pym et al. 2013).

In line with the findings of Barbasán et al. (2018), but in contrast with those of Dagilienè (2012), almost two-thirds of our sample, i.e. 64.1%, stated that they found the translation exercises enjoyable, although 48.72% admitted that they found them challenging. Finally, as for the contrastive perspective offered by translation between L1 and L2, 33.33% agreed that the use of translation has a negative influence on foreign language learning. Only 5.13% concurred with the notion that translation is a source of negative interference between L1 and L2.

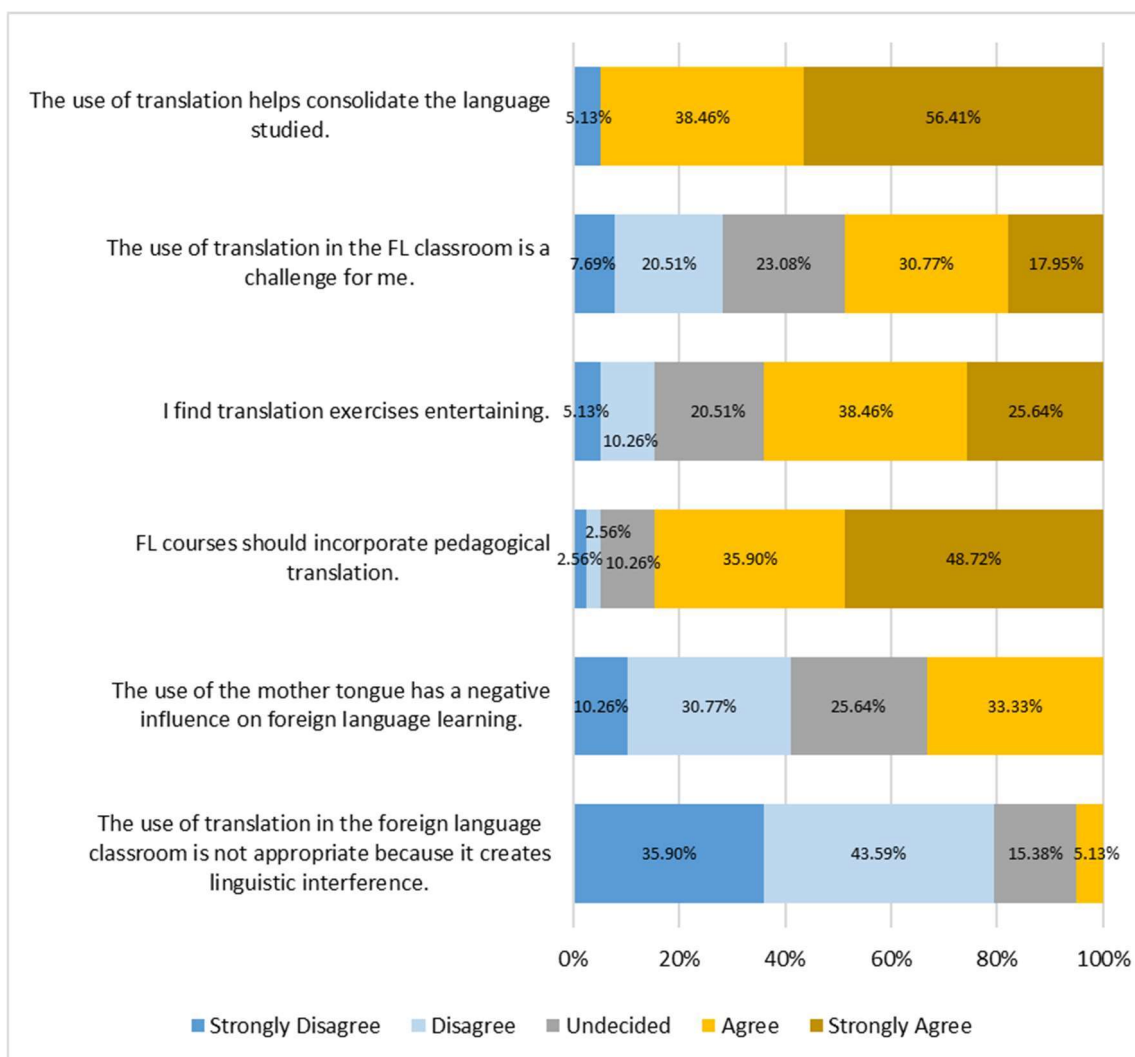


Figure 4. Perceptions on translation issues (I).

In a second group of items also taken from the post-study questionnaire, a high degree of agreement could be observed in all of the items analysed, which demonstrates the positive effect that translation has had on the learning process. If we look at the items with the highest percentages in the categories *agree* and *strongly agree*, 97.56% declared that the use of translation helps to understand how the sentence is structured in the foreign language. Moreover, 92.68% agreed that translation enables learners to be aware of their errors in the use of the foreign language, and so it could be said that it promotes metalinguistic awareness, which is essential in the language learning process. There was also a high degree of agreement that the use of translation in the classroom has a positive influence on the acquisition of grammar (90.25%) and lexis (89.74%), as in Barbasán et al. (2018) and Pérez-Sabater et al. (2019), as well as on the role of short sentence translation in improving L2 grammar and vocabulary. These results are also akin to those produced by Dagilienè (2012) on vocabulary acquisition, but with much higher agreement rates than her low numbers on grammar.

Albeit with slightly lower values, the respondents also highlighted the usefulness of translation for improving written expression (87.18%) (similar to Barbasán et al. 2018, but unlike Dagilienè 2012, with a poor 35% of students' positive attitude towards the use of translation to improve writing skills), although not so much fluency, as the latter was the item that obtained the lowest value in this group of items (76.92%). Likewise, 84.62% of the sample stressed the convenience of alternating translation exercises with writing exercises. The notion that pedagogical translation should be complementary to other communicative approaches has also been endorsed by different researchers (*cf.* Cook, 2010; Carreres et al., 2018).

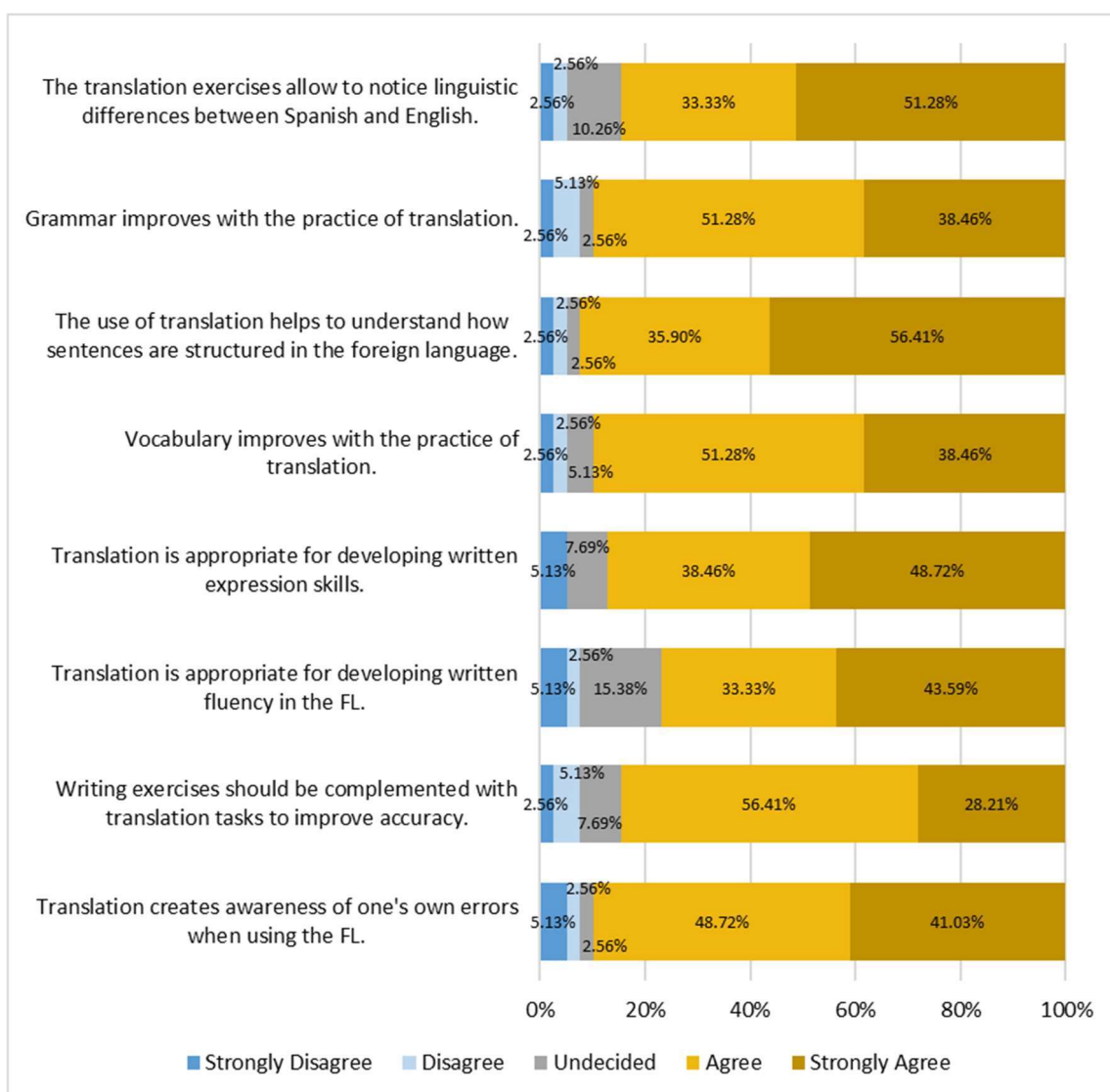


Figure 5. Perceptions on translation issues (II).

This opinion prevailed when the respondents were asked about the impact that translation has had on their different language skills. As shown in Table 5, writing skills, especially written expression, have naturally outpaced both oral and aural expression.

Table 5. Improvement of language skills.

Skill	Absolute value	%
Oral expression	10	11.11%
Written comprehension	33	36.67%
Aural comprehension	10	11.11%
Written expression	37	41.11%
Total	90	100.00%

3.1. Focus Groups

The data obtained through the focus groups complemented the results gathered from the questionnaires. First, there was consensus amongst the participants on the potential of translation as a lever for linguistic enhancement. In line with the above-mentioned results, translation was described as an ideal tool with which to contrast both linguistic systems, promote error awareness, and avert circumlocution strategies.

It has helped me use connectors and link words and phrases. It has been a useful practice to become aware of some underlying differences between L1 and L2 and, therefore, to use the language more naturally. (GR-B 6:36)

It has helped me a lot to learn about word order and focus my attention on the errors that I made once and again. (GR-A 3:48)

In a writing assignment you are not compelled to use new constructions and vocabulary; rather, you always use the vocabulary you already know, which does not happen when you translate a text. (GR-D 10:22)

In this respect, all focus groups mentioned the translation report as an essential element in creating metalinguistic awareness, as it was this activity, whereby the students corrected their own errors and identified the source of the error, through which they claim to have internalised the correct grammatical structures and patterns.

As for the challenges, it is worth highlighting that this practice was described as demanding and challenging by the participants, especially in terms of vocabulary, as it required continuous use of dictionaries. However, they acknowledged that it is indeed this arduous task which has broadened their vocabulary knowledge.

It was tiring and demanding, especially because of the subject matter of the texts, as you have to look up a lot of words. But, in the end, it pays off, as the vocabulary appears contextualised and can be learned better. (GR-C 11:41)

An additional drawback which was identified is the lack of creative writing associated with translation practice, since all the ideas are provided in the source text and the task becomes less creative.

In a translation you are given a text that contains all the ideas, so you don't need to think, but in a writing assignment you have to come up with your own ideas and start writing a whole text from scratch. (GR-D 7:14)

4. CONCLUSIONS

The current paper sought to focus in on the role of pedagogical translation within ESP contexts, and particularly how this teaching practice impacted writing skills. For such a purpose, six translation tests, three writing assignments, a pre-study and post-study questionnaire and focus groups were employed in order to collect data and gauge the effects of translation in enhancing writing competence in English as an L2.

Our results have adduced sound reasons in favour of translation as an L2 booster. A hard-and-fast fact is that inverse translation has helped improve L2 language competence. Not only did the experimental group outstrip the control group in general writing competence, but the practice of translation also helped to promote metalinguistic awareness and improve language accuracy, as all of the errors factored in improved over the four-month period.

The administration of the post-study questionnaire also helped unearth some positive reactions. An overall appraisal of inverse translation as a pedagogical tool is that it helps to consolidate the language in the ESP classroom, especially grammar and lexis –a perspective which also concurs with our qualitative data. Interestingly, our results refute the idea that translation is a source of interference, and that the use of the L1 can hinder L2 learning on the basis that students use the L2 through the eyes of their L1. Consequently, support is lent to translation as a pedagogical tool when it comes to discerning differences between both linguistic systems and promoting accuracy. This can be particularly useful in ESP contexts in which students are to make a professional use of the language and learn specific vocabulary and grammatical points. In fact, the vast majority of our sample agreed that ESP courses should incorporate translation.

Although based on our results high hopes can be pinned on inverse translation as a pedagogical resource, research is still at an embryonic stage. Further studies need to be carried out in order to ascertain whether these results continue to bear out in other contexts, especially if it is borne in mind that the educational contexts in which inverse translation can take place are wide-ranging and that training needs might be different. At this point, however, it is worth mentioning that we do not endorse a sole use of translation in the FL classroom. Rather, we deem that it should be used alongside reading, writing, listening and speaking skills for the sake of language competence enhancement.

This study opens up new research avenues which are worth exploring. It would be interesting to establish whether oral direct translation can yield similar results when promoting listening comprehension skills, or whether oral inverse translation can enhance speaking skills. Further studies featuring written direct translation could also shed light on the kinds of reading strategies most commonly employed when getting to grips with specialised text genres and the degree of understanding when compared to other more traditional reading comprehension exercises.

Last but not least, several shortcomings need to be acknowledged, amongst which is the fact that the sample is limited and corresponds only to a specific educational context. It is thus necessary to investigate other educational settings to ascertain whether the results continue to bear out in these contexts. Notwithstanding, the present study has contributed to continuing to generate a vibrant discussion around translation as a pedagogical tool when learning a FL and can serve as a stepping stone for future research.

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APPENDICES

Appendix 1. Evaluation rubric: *Categorisation of errors.*

Category	Penalty	Description
GR (Articles)	0.25	Incorrect use of articles (the, Ø, a, an)
GR (Adjective)	0.5	Incorrect use of adjectives, e.g. adjectives in plural
GR (Preposition)	0.25	Incorrect use or lack of prepositions
GR (Tense)	0.25	Incorrect use or structure of verb tenses
GR (3 rd person)	0.5	Missing or extra -s/-es of 3 rd person
GR (Word order)	0.25	Incorrect order of the sentence, e.g. noun + adjective
GR (Plural)	0.25	Irregular plurals (*persons, *childrens), demonstratives, etc.
GR (Relative)	0.25	Incorrect use of the relative pronoun or the subject after the relative pronoun
GR (Gerund/Infinitive)	0.25	Verb error in <i>-ing</i> or <i>infinitive</i> with and without <i>to</i>
GR (Subject)	0.5	Subject of the sentence missing
GR (Quantifier)	0.25	Incorrect use of quantifiers, e.g. countable and non-countable nouns
GR (Verb)	0.25	Incorrect verb usage, e.g. using past irregular verbs or participles as regular <i>*leaded</i> instead of <i>led</i> .
GR (Category)	0.25	Incorrect use of pronouns. e.g. <i>their</i> for singular, <i>it's</i> instead of <i>its</i> or use of nouns in front of another noun when an adjective should be used, e.g. <i>communication</i> situation
GR (Comparative)	0.25	Incorrect use or structure of comparatives/superlatives
Spelling	0.1	Words misspelt
Structure	0.25	The sentence has an unidiomatic structure
Lexis	0.2	Incorrect use of a word, e.g. collocations, connotation, semantics, etc.
Punctuation	0.1	Incorrect use of punctuation marks
Omission	0.2	A word in the original has been left untranslated
Register	0.1	Inappropriate register

Appendix 2. Translation report

TEXTO 1: El correo electrónico			
MISTAKE/ERROR	CATEGORY	CORRECTION	CAUSE OF MISTAKE/ERROR